DASSAULT SYSTEMES | The 3DEXPERIENCE® Company

Course Catalog

3DExperience eLearning Course Catalog

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3D

V+R

3DEXPERIENCE®

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3DEXCITE

Marketing Content Creation

Explore the 3D Render Role	
Course Code	3DX-en-DPA-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	0.58 hours
Course Material	
Level	Fundamental
Audience	
Description	Discover how to use xStudio to create photo-realistic rendered images from your designs in the 3DEXPERIENCE platform.
Objectives	Objectives of the course include: - Create xStudio experiences from physical products on the 3DEXPERIENCE Platform. - Apply materials to make your designs feel lifelike. - Use ambiences to envision how your products will look and behave in the real world. - Capture the moment with scenes. - Render images on server computers to free up your time and resources.
Prerequisites	N/A
Available Online	Yes

Explore the Product Communicator Role	
Course Code	3DX-en-XPR-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	1.42 hours
Course Material	
Level	Fundamental
Audience	
Description	Product Communicator provides you with the xHighlight application for interactive storytelling and technical illustrations as well as the xStudio application to create photorealistic product shots.
Objectives	Objectives include: - Getting started with xStudio and xHighlight - Using materials and ambiences in xStudio - Adding annotations and performing transformations in xHighlight - Publishing media from xHighlight
Prerequisites	
Available Online	Yes

3DEXPERIENCE platform

3DEXPERIENCE Platform User Experiences

Explore the Collaborative Business Innovator Role	
Course Code	CRB-en-IFW-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	1.67 hours
Course Material	
Level	Fundamental
Audience	Users of the 3DEXPERIENCE platform
Description	In this module, you will learn how to collaborate using the platform's various applications to deploy a single source of truth collaborative environment for better decision making and operations excellence.
Objectives	Upon completion of this module, you will be able to: - Update your profile and manage your notifications settings - Create user groups - Work with 3DDrive - Create and manage a community - Add post, question, idea, and media to a community - Exchange ideas and view through Conversations - Create and manage a dashboard by adding and configuring various widgets - Become an artist with 3DSketch - Become a story maker with 3DStory
Prerequisites	- Knowledge prequisites: There are no prerequisites for this module. - - 3DEXPERIENCE Role: Collaborative Business Innovator (IFW-OC)
Available Online	Yes

CATIA

Creative Design & Styling

Collaborate to Create and Review Product in Virtual Reality	
Course Code	CAT-en-CCRP-F-15-221
Available Release	3DEXPERIENCE R2022x
Duration	2.50 hours
Course Material	
Level	Fundamental
Audience	Creative Designers and Product Reviewers
Description	In this learning module, you will learn how to leverage the Virtual Reality capabilities on the 3DEXPERIENCE platform. You will learn to create sketches in VR, review and modify them. In addition you will learn to create multiple product variants in product perception experience. You will also review products in collaborative virtual environment.
Objectives	Upon the completion of this module, you will be able to: - Create sketches in Virtual Reality (VR) - Review and compare designs in VR - Create product variants - Co-review product design in VR
Prerequisites	- Knowledge: User attending this learning module should have completed the Explore the Business Innovator Role module, Explore the Visual Experience Designer Role module and Explore the Creative Designer module. - 3DEXPERIENCE Roles: User attending this learning module should have access to Collaborative Business Innovator Role, Collaborative Industry Innovator Role, Creative Designer Role, Virtual Reality Reviewer Role,

Collaborate to Create and Review Product in Virtual Reality	
	Product Experience Presenter Role, and Immersive Collaborative Experience Role.
Available Online	Yes

Explore the Creative Designer Role	
Course Code	CAT-en-CCS-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	3 hours
Course Material	
Level	Fundamental
Audience	Creative Designers
Description	This learning module provides you with a guided and systematic approach to learn about the Creative Designer role. It will teach you how to import the 2D sketch and explore ideas by sketching in 3D. It will also teach you, how to sculpt in 3D with ultra-fast virtual clay modelling using the subdivision surface technology. It will also teach you how to create precise shapes with NURBS surface modeling and direct solid modeling.
Objectives	Upon the completion of this module, you will be able to: - Create 3D Concept sketches using the Natural Sketch app - Sculpt the concept shapes using the subdivision surface technology - Add technical details on the concept designs - Assemble and modify parts using direct modeling methods - Create high quality rendering images for life like experience
Prerequisites	- Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module.

Explore the Creative Designer Role	
	- 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Creative Designer
Available Online	Yes

Master CATIA Assembly Design	
Course Code	CAT-en-ASD-A-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	11.50 hours
Course Material	
Level	Advanced
Audience	Mechanical Designers
Description	This module will introduce you to complex assembly modeling techniques. You will learn how to design a product architecture and manage complex assembly structures. You will also learn how to use advanced features to design parts within an assembly environment and how to analyze interferences.
Objectives	Upon the completion of this module you will be able to: - Analyze interferences - Analyze component links and relations - Design complex products - Design new parts within a product - Manage complex product structures
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and be familiar with the CATIA Part Design and Assembly Design fundamentals.
Available Online	Yes

Master CATIA Drafting	
Course Code	CAT-en-GDR-A-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	12 hours
Course Material	
Level	Advanced
Audience	Draftsmen
Description	This module will teach you how to manage drawing sheets and views in the Drafting app. You will also learn how to use advanced tools to dress-up, annotate views and customize the Drafting app.
Objectives	Upon completion of this module you will be able to: - Finalize the drawing sheet - Work with large assemblies - Customize the drafting app - Perform administrative tasks - Add Bill of Material
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. Additionally, they should be familiar with Part Design and Assembly Design in CATIA.
Available Online	Yes

Master CATIA Part Design	
Course Code	CAT-en-PDG-A-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	7 hours
Course Material	
Level	Advanced
Audience	Mechanical and Sheet Metal Designers
Description	This module will introduce you to complex 3D modeling techniques, using advanced sketch-based and surface-based features. You will learn how to manage complex part structures and how to improve productivity by reusing existing features. Finally, you will learn how to use parameters and tables to drive the design of a model.
Objectives	Upon completion of this module you will be able to: - Design parts with complex geometries - Create and manage robust part structures - Create fully parameterized models - Create re-usable features
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and be familiar with CATIA Part Design fundamentals.
Available Online	Yes

Practice CATIA 2D Layout for 3D Design	
Course Code	CAT-en-LO1-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	In this module you will learn how to create 2D layout views in a 3D model and use them to design the part in the 3D environment.
Objectives	Upon completion of this module you will be able to: - Create 2D layout views in a 3D environment - Export 2D geometry into a 3D environment - Create drawings using the 2D layout views
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with CATIA Part and Assembly Design.
Available Online	Yes

Practice CATIA 3D Printing Preparation	
Course Code	CAT-en-TLE-F-15-221
Available Release	3DEXPERIENCE R2022x
Duration	2 hours
Course Material	
Level	Fundamental
Audience	Reverse Engineers, Virtual and Physical Prototypers
Description	In this module, you will learn how to create an output for 3D printing. You will also learn how to improve the characteristics of a mesh.
Objectives	Upon the completion of this module, you will be able to: - Import a cloud of points - Prepare a mesh for 3D Printing - Create an output for 3D Printing
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Assembly Design (ASD)	
Course Code	CAT-en-ASD-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	This module will teach you how to create a simple product structure and add components and position them correctly. You will also learn how to analyze the weight distribution, create new component revisions and replace components.
Objectives	Upon completion of this course you will be able to: - Upon the completion of this module, you will able to: - Create a new product and add components - Position components within a product - Modify a product structure - Analyze weight distribution - Replace components
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and be familiar with the CATIA Part Design fundamentals
Available Online	Yes

Practice CATIA Assembly Design - Added Exercises	
Course Code	CAT-en-ASD-X-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	6 hours
Course Material	
Level	Exercise
Audience	Mechanical Designers
Description	This module provides you with exercises for additional practice on the 3DEXPERIENCE Assembly Design app. The exercises have been created based on Industry practices. You will practice creating assembly structure, positioning components, constraining components using engineering connections and modifying parts in assembly context.
Objectives	Upon the completion of this module you will be able to: - Practice your Assembly Design skills using selected scenarios - Apply the recommended methodology in various scenarios
Prerequisites	Students attending this learning module should be familiar with Part Design and Assembly Design.
Available Online	Yes

Practice CATIA Drafting	
Course Code	CAT-en-GDR-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	6 hours
Course Material	
Level	Fundamental
Audience	Draftsmen
Description	This module will teach you how to create drawings using the Drafting app. You will learn how to create projection views and section views of a 3D model or an assembly and add the required dimensions.
Objectives	Upon completion of this module you will be able to: - Create simple projection views and section views of 3D parts and assemblies - Position the views on a drawing sheet - Add dimensions and annotations to the views
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. Additionally, they should be familiar with Part Design and Assembly Design in CATIA.
Available Online	Yes

Practice CATIA Engineering Templates Reuse	
Course Code	CAT-en-KT1-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	0.50 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	In this module, you will learn how to create customized features by reusing the power copy and user feature.
Objectives	Upon completion of this module you will be able to: - Create customized features using templates.
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA FreeStyle Shape Design	
Course Code	CAT-en-FSS-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	12 hours
Course Material	
Level	Fundamental
Audience	Industrial Designers and Creative Designers
Description	In this module, you will learn how to create flawless, styled shapes from scratch using 3D free-form curves and surfaces or using digitized data. You will also learn how to analyze and enhance the quality of existing curves and surfaces.
Objectives	Upon the completion of this module, you will be able to: - - Create styled shapes using digitized data - Create surfaces using the curve-based and the surface-based approaches - Analyze and enhance the quality of curves and surfaces
Prerequisites	Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. Additionally, they should be familiar with Generative Surface Design in CATIA.
Available Online	Yes

Practice CATIA Generative Shape Design	
Course Code	CAT-en-GSD-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	Surface Designers
Description	This module will teach you how to use the Generative Shape Design app to create curves and surfaces. You will learn how to assemble, re-limit, and connect the geometries smoothly. You will also learn how to analyze the wireframe and the surface quality and rectify the detected defects.
Objectives	Upon the completion of this module, you will be able to: - - Create curves and improve the quality of the imported wireframes - - Create surfaces based on the wireframe geometries - - Assemble, re-limit and connect the surfaces smoothly to achieve the topology - - Analyze the surface quality and heal the defects
Prerequisites	- Knowledge: Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. - - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Mechanical and Shape Designer
Available Online	Yes

Practice CATIA Generative Shape Design - Added Exercises	
Course Code	CAT-en-GSD-X-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	16 hours
Course Material	
Level	Exercise
Audience	Mechanical Designers and Surface Designers
Description	This module provides you with an extensive database of exercises for additional practice on advanced topics of Surface Design. The exercises have been created based on the Industry practices.
Objectives	Upon completion of this module you will be able to: - Create wireframes features - Create surfaces using existing wireframes - Create advanced and parameterized swept surfaces - Perform advanced surface analysis and gap correction - Create advanced blend features - Improve the quality and stability of created geometries
Prerequisites	Students attending this module should know the basic and advanced features of Surface Design.
Available Online	Yes

Practice CATIA Generative Shape Develop	
Course Code	CAT-en-DL1-F-15-221
Available Release	3DEXPERIENCE R2022x
Duration	1.83 hours
Course Material	
Level	Fundamental
Audience	Surface Designers
Description	This module will teach you how to use CATIA Generative Shape Develop app functionalities to create unfolded surfaces from a ruled surface. You will learn how to develop wires and points onto a revolution surface.
Objectives	Upon completion of this module, you will be able to: - Create unfolded surfaces from a ruled surface using the CATIA Generative Shape Develop app functionalities - Develop wires and points onto a revolution surface
Prerequisites	Students attending this module should have completed the Gateway to the 3DEXPERIENCE platform course. They should also be familiar with Surface Design in CATIA.
Available Online	Yes

Practice CATIA Generative Wireframe and Surface	
Course Code	CAT-en-GS1-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	19 hours
Course Material	
Level	Fundamental
Audience	Surface Designers
Description	This module will teach you how to use the Generative Wireframe and Surface app to create curves and surfaces. You will learn how to assemble, re-limit and connect the geometries smoothly. You will also learn how to analyze the wireframe and the surface quality and rectify the detected defects.
Objectives	Upon completion of this module, you will be able to: - Create curves and improve the quality of the imported wireframes - Create surfaces based on the wireframe geometries - Assemble, re-limit and connect the surfaces smoothly to achieve the topology - Analyze the surface quality and heal the defects
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Natural Assembly	
Course Code	CAT-en-LCP-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	Mechanical Engineers and Designers, and Design Architects
Description	In this module, you will learn how to create and manage product structures. You will explore a product and modify its structure by adding new products and exploding existing products. You will then scan the structure to activate a working product level, search for and add existing parts and use constraints to position the parts. You will also create a new sub-product from a components list and use it to complete the product.
Objectives	Upon the completion of this module you will be able to: - Explore a product and modify its structure using Natural Assembly - Select the product levels using the Ladder functionality - Search for a product and insert it in an existing assembly - Position the parts using constraints - Create a new sub-product from a component's list and use it to complete the product
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.

Practice CATIA Natural Assembly

Available Online	Yes

Practice CATIA Natural Shape	
Course Code	CAT-en-LSP-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	7 hours
Course Material	
Level	Fundamental
Audience	Conceptual Designers, Stylists, Simulation and Manufacturing Engineers
Description	This module will introduce you to the CATIA Natural Shape app and its unique working environment. You will learn how to use the app to conceptualize, create and modify mechanical parts and shapes. The course features short-duration demos followed by exercises which will allow you to practice. You will also learn the related theory, tips and recommendations while performing the exercises.
Objectives	Upon the completion of this module you will be able to: - Create a conceptual design directly in 3D - Use the hybrid design environment to conceptualize your designs - Work on the structure to create the 3D parts - Navigate through the structure and position the parts - Reuse the existing designs in the 3D models
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Natural Sketch	
Course Code	CAT-en-NTS-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	7 hours
Course Material	
Level	Fundamental
Audience	Creative Designers
Description	This module contains both videos and exercises. After a short introduction to the app and the user interface, videos will be used to demonstrate the sketching techniques and the use of the sketch tools. You will use the exercises that follow the videos to practice what you have learned and familiarize yourself with the available tools.
Objectives	Upon completion of this module you will be able to: - Sketch curves or primitives in 2D and 3D - Trace and refine vector or primitive curves - Sketch on a surface - Import and edit images - Transform curves and images
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. They should also be familiar with basic sketching techniques.
Available Online	Yes

Practice CATIA Part Design	
Course Code	CAT-en-PDG-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	17 hours
Course Material	
Level	Fundamental
Audience	Mechanical and Sheet Metal Designers
Description	This module will teach you how to create a 3D model using the CATIA Part Design app. You will learn how to use different feature-based tools to build a 3D model. You will also learn how to add parameters, then review, measure and modify a model.
Objectives	Upon the completion of this module you will be able to: - Create new parts - Create and constrain 2D sketches - Complete a 3D model using basic features - Parameterize a model - Review and measure a model - Reuse existing features
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Part Design - Added Exercises	
Course Code	CAT-en-PDG-X-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	12.75 hours
Course Material	
Level	Exercise
Audience	Mechanical Designers
Description	This module provides you with an exercise database for additional practice on the 3DEXPERIENCE Part Design app. The exercises have been arranged in increasing order of difficulty. The fundamental exercises will check and refresh your basic Part Design skills before you move on to more complex topics. The advanced exercises will make you practice the recommended design methodologies using realistic parts.
Objectives	Upon completion of this module you will be able to: - Apply your Mechanical skills in selected scenarios. - Employ the recommended methodology in various situations and efficiently use the Mechanical workbenches.
Prerequisites	Students attending this learning module should be familiar with CATIA Part Design.
Available Online	Yes

Practice CATIA Quality Rules Reuse	
Course Code	CAT-en-KE1-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	5 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	In this module, you will learn how to share corporate knowledge stored in the rule bases and leverage it across the company to ensure design compliance with the established standards. You will also learn to create reports and manage their template.
Objectives	Upon completion of this module you will be able to: - Automate the design modifications - Analyze and create reports
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Surface Design - Added Exercises	
Course Code	CAT-en-GS1-X-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	8 hours
Course Material	
Level	Exercise
Audience	Mechanical Surface Designers
Description	This module provides you with an exercise database for additional practice on 3DEXPERIENCE Surface Design. The exercises have been created based on Industry practices. You will get to practice skills such as creating wireframes and surfaces, creating surfacic shells and solid parts, and working with multiple parts that are referencing a common part.
Objectives	These exercises will allow you to put your Shape skills into practice on selected scenarios. - You will apply the recommended methodology in various situations. - You will enhance your understanding and usage of the Shape apps.
Prerequisites	Students attending this course should be familiar with Surface Design.
Available Online	Yes

Transition to the 3DEXPERIENCE platform for Mechanical Designers	
Course Code	CAT-en-3DMT-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	12 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	In this module, you will learn how to design a new part with the 3DEXPERIENCE platform. You will also learn how to compute weight, create a new part version, replace the original and create a drawing. Finally, you will learn how to manage complex product structures, create product features, manage catalogs and analyze assemblies.
Objectives	Upon completion of this module, you will be able to: - Create new products and parts - Insert a part in a product and position it - Apply materials to parts - Calculate the weight of a product - Insert and complete a drawing - Create a new part version - Replace a part and update a product - Design parts in context - Create assembly features and catalogs - Analyze the assemblies
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. They should also be familiar with CATIA V5 Mechanical Design.

Transition to the 3DEXPERIENCE platform for Mechanical Designers

Available Online	Yes

Transition to the 3DEXPERIENCE platform for Surface Designers	
Course Code	CAT-en-3DST-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	7 hours
Course Material	
Level	Fundamental
Audience	Designers who need to work with styled parts.
Description	In this module, you will learn how to design a new part with the 3DEXPERIENCE platform. It addresses the needs of Surface Designers. You will also learn how to create a new part version, replace the original part and update the product.
Objectives	Upon completion of this module you will be able to: - Create new products and parts - Create a new part version - Replace a part and update a product
Prerequisites	- Knowledge: Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. They should also be familiar with CATIA V5 Mechanical Design and Surface Design. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Mechanical and Shape Designer
Available Online	Yes

CATIA

Cyber Physical Systems

Discover the Modelica Libraries	
Course Code	CAT-en-MSL-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	1 hours
Course Material	
Level	Fundamental
Audience	Dynamic Systems Engineers
Description	This module will introduce you to the basics of Modelica libraries and dynamic modeling concepts. You will also explore different Modelica libraries used for dynamic modeling as a source of ready-to-use components.
Objectives	Upon completion of this module, you will learn about: - Equation-based modeling - Component-based modeling - Different Modelica libraries
Prerequisites	Students attending this learning module should have basic knowledge of mathematical modeling.
Available Online	Yes

Explore the Dynamic Systems Engineer Role	
Course Code	CAT-en-SNK-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	2 hours
Course Material	
Level	Fundamental
Audience	Dynamic Systems Engineers
Description	In this module, you will explore the key capabilities of the Dynamic Systems Engineer Role. You will learn about the complete process of modeling dynamic behavior, simulating model and analyzing results. You will also learn how to use the behavior model in the component architecture.
Objectives	Upon completion of this module, you will be able to: - Define the component architecture - Create a new requirement - Create the dynamic model using Modelica libraries - Simulate the model and analyze the results
Prerequisites	- Knowledge: Students attending this learning module should have completed the Explore the Business Innovator Role module. - 3DEXPERIENCE Roles: Students attending this learning module should have access to Collaborative Business Innovator, Collaborative Industry Innovator, Dynamic Systems Engineer (It is a commercial role composed two technical roles, Dynamic Systems Designer and Dynamic Systems Specifier to be assigned to the users.), Systems Battery Library and Systems Electrified Power Train Library roles.

Explore the Dynamic Systems Engineer Role	
Available Online	Yes

Explore the Systems Traceability Analyst Role	
Course Code	CAT-en-TRY-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	2 hours
Course Material	
Level	Fundamental
Audience	Systems Traceability Analyst
Description	The Systems Traceability Analyst role empowers the system architect to synthesize the system by maintaining end-to-end traceability and analyzing impacts in a collaborative environment. This capability enables system architects and engineers to break engineering silos, comply with customer or marketing needs, regulatory or safety standards and ensure high quality with high productivity.
Objectives	Upon completion of this module, you will be able to: - Navigate through heterogeneous data - Create work scope - Create links and analyze traceability - Create review with text and annotations - Compare models for differences
Prerequisites	- Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. They should be familiar with the basics of systems engineering. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator, Systems Traceability Analyst, Requirement Engineer, Systems Solution Architect

Explore the Systems Traceability Analyst Role	
Available Online	Yes

Explore the Systems Traceability Engineer Role	
Course Code	CAT-en-TRG-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	0.50 hours
Course Material	
Level	Fundamental
Audience	Systems Traceability Engineer
Description	The Systems Traceability Engineer role supports collaboration in the extended enterprise through openness with different products and applications. It empowers all stakeholders to synthesize the system by reviewing end-to-end traceability and analyzing impacts in a collaborative environment.
Objectives	Upon completion of this module, you will be able to: - Navigate through the heterogeneous data - Analyze the traceability - Reply to the review
Prerequisites	Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator, Systems Traceability Engineer
Available Online	Yes

Master CATIA Assembly Design	
Course Code	CAT-en-ASD-A-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	12 hours
Course Material	
Level	Advanced
Audience	Mechanical Designers
Description	This module will introduce you to complex assembly modeling techniques. You will learn how to design a product architecture and manage complex assembly structures. You will also learn how to use advanced features to design parts within an assembly environment and how to analyze interferences.
Objectives	Upon completion of this module you will be able to: - Analyze interferences - Analyze component links and relations - Design complex products - Design new parts within a product - Manage complex product structures
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and be familiar with the CATIA Part Design and Assembly Design fundamentals.
Available Online	Yes

Master CATIA Drafting	
Course Code	CAT-en-GDR-A-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	12 hours
Course Material	
Level	Advanced
Audience	Draftsmen
Description	This module will teach you how to manage drawing sheets and views in the Drafting app. You will also learn how to use advanced tools to dress-up, annotate views and customize the Drafting app.
Objectives	Upon completion of this module you will be able to: - Finalize the drawing sheet - Work with large assemblies - Customize the drafting app - Perform administrative tasks - Add Bill of Material
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. Additionally, they should be familiar with Part Design and Assembly Design in CATIA.
Available Online	Yes

Master CATIA Dymola Behavior Modeling	
Course Code	CAT-en-DBD-A-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	1 hours
Course Material	
Level	Advanced
Audience	Dynamic Systems Engineers
Description	This module teaches you about the data exchange capabilities of the Dymola Behavior Modeling app. It also teaches you how to automate the simulations of behavior models and do the trade-off study for selecting the most appropriate product design.
Objectives	Upon completion of this module, you will be able to: - Generate behavior models from the piping system - Use the knowledgeware objects with the Dymola Behavior Modeling app - Optimize the simulation of behavior models using the Optimization Process Composer app - Trade-off the optimized simulation results - Access the traceability of behavior models using the Systems Traceability app - Export behavior models for use in other simulation environments - Export a behavior model as a Functional Mock-up Unit - Automate simulations of behavior model using Python and Javascript interfaces
Prerequisites	- Knowledge: Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and

Master CATIA Dymola Behavior Modeling	
	the Practice CATIA Dymola Behavior Modeling module. - Students should also be familiar with the apps that can be collaborated with the Dymola Behavior Modeling app. - - - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Dynamic Systems Engineer
Available Online	Yes

Master CATIA Part Design	
Course Code	CAT-en-PDG-A-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	7 hours
Course Material	
Level	Advanced
Audience	Mechanical and Sheet Metal Designers
Description	This module will introduce you to complex 3D modeling techniques, using advanced sketch-based and surface-based features. You will learn how to manage complex part structures and how to improve productivity by reusing existing features. Finally, you will learn how to use parameters and tables to drive the design of a model.
Objectives	Upon completion of this module you will be able to: - Design parts with complex geometries - Create and manage robust part structures - Create fully parameterized models - Create re-usable features
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and be familiar with CATIA Part Design fundamentals.
Available Online	Yes

Practice CATIA 2D Layout for 3D Design	
Course Code	CAT-en-LO1-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	In this module you will learn how to create 2D layout views in a 3D model and use them to design the part in the 3D environment.
Objectives	Upon completion of this module you will be able to: - Create 2D layout views in a 3D environment - Export 2D geometry into a 3D environment - Create drawings using the 2D layout views
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with CATIA Part and Assembly Design.
Available Online	Yes

Practice CATIA Assembly Design - Added Exercises	
Course Code	CAT-en-ASD-X-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	6 hours
Course Material	
Level	Exercise
Audience	Mechanical Designers
Description	This module provides you with exercises for additional practice on the 3DEXPERIENCE Assembly Design app. The exercises have been created based on Industry practices. You will practice creating assembly structure, positioning components, constraining components using engineering connections and modifying parts in assembly context.
Objectives	Upon completion of this module you will be able to: - Practice your Assembly Design skills using selected scenarios - Apply the recommended methodology in various scenarios
Prerequisites	Students attending this learning module should be familiar with Part Design and Assembly Design.
Available Online	Yes

Practice CATIA Dymola Behavior Modeling	
Course Code	CAT-en-DBD-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	12 hours
Course Material	
Level	Fundamental
Audience	Dynamic Systems Designers
Description	This module will teach you how to model and simulate the dynamic behavior of a multi-engineering system. You will learn how to search, open and manage the Dymola Behavior libraries. You will also learn how to manage the link between a logical component and a Dymola model.
Objectives	Upon the completion of this module, you will be able to: - Search and open the Dymola behavior library - Edit and simulate an existing dynamic behavior model - Create a new dynamic model - Insert the model into a functional or logical component - Generate the Dymola model from the mechanism - Simulate the logical component with a behavior in the Functional & Logical Design app
Prerequisites	- Knowledge: Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with Functional & Logical Design fundamentals. - - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator, and

Practice CATIA Dymola Behavior Modeling	
	Dynamic Systems Designer (It is a commercial role composed of two technical roles, Dynamic Systems Designer and Dynamic Systems Specifier to be assigned to the users.)
Available Online	Yes

Practice CATIA Engineering Templates Reuse	
Course Code	CAT-en-KT1-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	0.50 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	In this course, you will learn how to create customized features by reusing the power copy and user feature.
Objectives	Upon completion of this course you will be able to: - Create customized features using templates.
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Functional Plastic Parts	
Course Code	CAT-en-FMP-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	6 hours
Course Material	
Level	Fundamental
Audience	Plastic Part Designers and Molded Part Designers
Description	This module will teach you how to use the Functional Plastic Parts app to create molded parts. You will also learn how to create a core and a cavity using styling data. You will be able to create a detailed design by adding holes, stiffening ribs, bosses and additional fixtures. You will also be able to modify the design and complete the final part with additional draft and fillet features.
Objectives	Upon completion of this module you will be able to: - Create a molded plastic part - Add holes and protected areas - Add ribs and bosses
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with the Part Design app.
Available Online	Yes

Practice CATIA Generative Wireframe and Surface	
Course Code	CAT-en-GS1-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	20 hours
Course Material	
Level	Fundamental
Audience	Surface Designers
Description	This module will teach you how to use the Generative Wireframe and Surface app to create curves and surfaces. You will learn how to assemble, re-limit and connect the geometries smoothly. You will also learn how to analyze the wireframe and the surface quality and rectify the detected defects.
Objectives	Upon completion of this module, you will be able to: - Create curves and improve the quality of the imported wireframes - Create surfaces based on the wireframe geometries - Assemble, re-limit and connect the surfaces smoothly to achieve the topology - Analyze the surface quality and heal the defects
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Mechanical Systems Experience	
Course Code	CAT-en-KIN-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	9 hours
Course Material	
Level	Fundamental
Audience	Mechanical Design Engineers
Description	This module will teach you how to define a behavior by manually recording an animation and by using laws. You will also learn how to include the analysis of measurements and accelerations. Furthermore, you will learn how to generate traces, swept volumes and snapshots which can be used while reviewing the simulation results.
Objectives	Upon completion of this module, you will be able to: - Create a scenario manually or by using laws - Include measurement and interference analyses - Generate results - Create snapshots for a review - Export the final simulation
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and be familiar with Mechanical Systems Design in CATIA.
Available Online	Yes

Practice CATIA Natural Assembly	
Course Code	CAT-en-LCP-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	Mechanical Engineers and Designers, and Design Architects
Description	This module will teach you how to create and manage product structures. You will explore a product and modify its structure by adding new products and exploding existing products. You will then scan the structure to activate a working product level, search for and add existing parts and use constraints to position the parts. Finally, you will create a new sub-product from a components list and use it to complete the product.
Objectives	Upon completion of this module you will be able to: - Explore a product and modify its structure using Natural Assembly - Select the product levels using the Ladder functionality - Search for a product and insert it in an existing assembly - Position the parts using constraints - Create a new sub-product from a component's list and use it to complete the product
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.

Practice CATIA Natural Assembly

Available Online	Yes

Practice CATIA Natural Shape	
Course Code	CAT-en-LSP-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	7 hours
Course Material	
Level	Fundamental
Audience	Conceptual Designers, Stylists, Simulation and Manufacturing Engineers
Description	This module will introduce you to the CATIA Natural Shape app and its unique working environment. You will learn how to use the app to conceptualize, create and modify mechanical parts and shapes. The course features short-duration demos followed by exercises which will allow you to practice. You will also learn the related theory, tips and recommendations while performing the exercises.
Objectives	Upon completion of this module you will be able to: - Create a conceptual design directly in 3D - Use the hybrid design environment to conceptualize your designs - Work on the structure to create the 3D parts - Navigate through the structure and position the parts - Reuse the existing designs in the 3D models
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Part Design - Added Exercises	
Course Code	CAT-en-PDG-X-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	13 hours
Course Material	
Level	Exercise
Audience	Mechanical Designers
Description	This module provides you with an exercise database for additional practice on the3DEXPERIENCE Part Design app. The exercises have been arranged in increasing order of difficulty. The fundamental exercises will check and refresh your basic Part Design skills before you move on to more complex topics. The advanced exercises will make you practice the recommended design methodologies using realistic parts.
Objectives	Upon completion of this module you will be able to: - Apply your Mechanical skills in selected scenarios. - Employ the recommended methodology in various situations and efficiently use the Mechanical workbenches.
Prerequisites	Students attending this learning module should be familiar with CATIA Part Design.
Available Online	Yes

Practice CATIA Quality Rules Reuse	
Course Code	CAT-en-KE1-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	5 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	This module will show you how to share corporate knowledge stored in the rule bases and leverage it across the company to ensure design compliance with the established standards. You will also learn to create reports and manage their template.
Objectives	Upon completion of this module you will be able to: - Automate the design modifications - Analyze and create reports
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Surface Design - Added Exercises	
Course Code	CAT-en-GS1-X-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	8 hours
Course Material	
Level	Exercise
Audience	Mechanical Surface Designers
Description	This module provides you with an exercise database for additional practice on 3DEXPERIENCE Surface Design. The exercises have been created based on Industry practices. You will get to practice skills such as creating wireframes and surfaces, creating surfacic shells and solid parts, and working with multiple parts that are referencing a common part.
Objectives	These exercises will allow you to put your Shape skills into practice on selected scenarios. - You will apply the recommended methodology in various situations. - You will enhance your understanding and usage of the Shape apps.
Prerequisites	Students attending this course should be familiar with Surface Design.
Available Online	Yes

Understand Systems Thinking and Model-Based Systems Engineering Approach	
Available Release	3DEXPERIENCE R2021x
Duration	2.67 hours
Course Material	
Level	Fundamental
Audience	Systems Engineer, Systems Architect, Mechatronic Systems Designer, Project Manager, Quality Assurance, Requirements Manager, Software Developer and Student
Description	In this module, you will learn the concepts of Systems Engineering and Model-Based Systems Engineering including how to articulate the Cyber MagicGrid methodology in a Process-Methods-Tools approach.
Objectives	Upon the completion of this learning module, you will be able to: - Discover what is Systems Engineering and learn about its key concepts and the benefits - Realize the importance of Model-Based Systems Engineering (MBSE) in successful implementation of projects - Discover critical industrial challenges and the value proposition of the 3DEXPERIENCE platform to overcome them - Learn about the Cyber MagicGrid methodology and explore the Cyber Systems Portfolio on 3DEXPERIENCE platform - Articulate the value of a tooled-up Systems Engineering approach within the framework of Cyber MagicGrid methodology
Prerequisites	

Understand Systems Thinking and Model-Based Systems Engineering Approach	
Available Online	Yes

CATIA

Electrical & Fluids Engineering

Explore the Electrical 3D Systems Designer Role	
Course Code	CAT-en-ELG-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	1.50 hours
Course Material	
Level	Fundamental
Audience	Electrical 3D Systems Designers
Description	This learning module provides you with a guided and systematic approach to learn about the use of the Electrical 3D Systems Designer role. It will teach you how to synchronize and place electrical components using logical design. It will also teach you how to route branch geometries and wires through them.
Objectives	Upon the completion of this module, you will be able to: - Place Electrical components in the Physical design using Logical to Physical capabilities - Create and manage branch geometries to connect the electrical devices and equipment - Check network connectivity between the branches and connectors - Route wires through the branch geometries and assign electrical properties to them
Prerequisites	Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Electrical 3D Systems Designer
Available Online	Yes

Explore the Fluid 3D Systems Designer Role	
Course Code	CAT-en-FLG-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	2 hours
Course Material	
Level	Fundamental
Audience	Fluid 3D System Designers, Piping & Tubing Designers and Fluid Designers
Description	Fluid 3D Systems Designer role provides an integrated 3D environment for the physical design of tubing, piping and HVAC systems in the context of the Digital Mockup. Users can take advantage of generative and specification driven design and automated part placement capabilities to ensure compliance with industry standards. In addition, its tools make it possible to quickly query design information and generate reports based on any component parameters.
Objectives	Upon completion of this module you will be able to - Create and manage the fluidic system - Place the parts manually and automatically - Validate the fluidic design using various tools - Prepare the data for manufacturing
Prerequisites	Knowledge: Students attending this learning module should have completed the Explore the Business Innovator Role module. 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Fluid 3D Systems Designer
Available Online	Yes

Explore the Systems Schematic Engineer Role	
Course Code	CAT-en-TIC-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	2.17 hours
Course Material	
Level	Fundamental
Audience	Systems Schematic Engineers
Description	In this learning module you will leverage the 3DEXPERIENCE platform capabilities to design an Electrical Schematic System in the context of an EV battery management system.
Objectives	Upon completion of this learning module, you will be able to: - Manage and utilize the resources - Create and modify the electrical schematic diagrams - Analyze the schematic diagrams
Prerequisites	Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Systems Schematic Engineer
Available Online	Yes

Master CATIA Assembly Design	
Course Code	CAT-en-ASD-A-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	11.50 hours
Course Material	
Level	Advanced
Audience	Mechanical Designers
Description	This module will introduce you to complex assembly modeling techniques. You will learn how to design a product architecture and manage complex assembly structures. You will also learn how to use advanced features to design parts within an assembly environment and how to analyze interferences.
Objectives	Upon the completion of this module you will be able to: - Analyze interferences - Analyze component links and relations - Design complex products - Design new parts within a product - Manage complex product structures
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and be familiar with the CATIA Part Design and Assembly Design fundamentals.
Available Online	Yes

Master CATIA Drafting	
Course Code	CAT-en-GDR-A-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	12 hours
Course Material	
Level	Advanced
Audience	Draftsmen
Description	This module will teach you how to manage drawing sheets and views in the Drafting app. You will also learn how to use advanced tools to dress-up, annotate views and customize the Drafting app.
Objectives	Upon completion of this module you will be able to: - Finalize the drawing sheet - Work with large assemblies - Customize the drafting app - Perform administrative tasks - Add Bill of Material
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. Additionally, they should be familiar with Part Design and Assembly Design in CATIA.
Available Online	Yes

Master CATIA Part Design	
Course Code	CAT-en-PDG-A-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	7 hours
Course Material	
Level	Advanced
Audience	Mechanical and Sheet Metal Designers
Description	This module will introduce you to complex 3D modeling techniques, using advanced sketch-based and surface-based features. You will learn how to manage complex part structures and how to improve productivity by reusing existing features. Finally, you will learn how to use parameters and tables to drive the design of a model.
Objectives	Upon completion of this module you will be able to: - Design parts with complex geometries - Create and manage robust part structures - Create fully parameterized models - Create re-usable features
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and be familiar with CATIA Part Design fundamentals.
Available Online	Yes

Practice CATIA 2D Layout for 3D Design	
Course Code	CAT-en-LO1-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	In this module you will learn how to create 2D layout views in a 3D model and use them to design the part in the 3D environment.
Objectives	Upon completion of this module you will be able to: - Create 2D layout views in a 3D environment - Export 2D geometry into a 3D environment - Create drawings using the 2D layout views
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with CATIA Part and Assembly Design.
Available Online	Yes

Practice CATIA 3D Annotation Insight	
Course Code	CAT-en-LFT-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	Design, Quality and other such departments where interrogating and annotating the 3D model is a frequent or occasional requirement.
Description	In this module, you will learn how to use the 3D Annotation Insight app to review and filter 3D annotations information contained within part and assembly documents. You will also learn how to hide / show annotations and captures, use the dimensioning and tolerancing annotations to enhance understanding and improve the decision making.
Objectives	Upon completion of this module you will be able to: - Access and visualize the view, capture and annotation review features - Query and filter 3D annotations - Show/Hide individual as well as all annotations of a given type - Display FTA captures - Remove the FTA clipping plane of a capture - Filter 3D annotations
Prerequisites	Students attending this learning module should have taken the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA 3D Tolerancing and Annotation	
Course Code	CAT-en-FTA-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	12 hours
Course Material	
Level	Fundamental
Audience	3D Master Designers
Description	In this module, you will learn how to annotate a 3D part. You will learn how to create annotation planes and how to add and manage 3D annotations on these planes. You will also learn how to create 3D views and use them to create 2D drawing views. You will also be able to create annotations on assemblies.
Objectives	Upon completion of this module you will be able to: - - Add 3D annotations to a part - - Manage and position the annotations - - Manage the 3D geometry associated to the annotations
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with CATIA Knowledgeware and basic CATIA Solid and Surface Design.
Available Online	Yes

Practice CATIA Assembly Design - Added Exercises	
Course Code	CAT-en-ASD-X-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	6 hours
Course Material	
Level	Exercise
Audience	Mechanical Designers
Description	This module provides you with exercises for additional practice on the 3DEXPERIENCE Assembly Design app. The exercises have been created based on Industry practices. You will practice creating assembly structure, positioning components, constraining components using engineering connections and modifying parts in assembly context.
Objectives	Upon the completion of this module you will be able to: - Practice your Assembly Design skills using selected scenarios - Apply the recommended methodology in various scenarios
Prerequisites	Students attending this learning module should be familiar with Part Design and Assembly Design.
Available Online	Yes

Practice CATIA Bent Part Design	
Course Code	CAT-en-SMB-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	6 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designer and Sheetmetal Designer
Description	This module will teach you how to use the Bent Part Design app to create and modify a sheetmetal part. You will learn how to define the sheetmetal parameters and create features such as walls, bends, cutouts and corners. You will also learn different techniques for multi-selecting the objects and constraining the parts.
Objectives	Upon completion of this module you will be able to: - Define and modify the sheetmetal parameters - Create a sheetmetal part using the wall and bend features - Manage the folded and unfolded views of parts - Create cutouts, chamfers and corners - Constrain the parts
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Drafting	
Course Code	CAT-en-GDR-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	6 hours
Course Material	
Level	Fundamental
Audience	Draftsmen
Description	This module will teach you how to create drawings using the Drafting app. You will learn how to create projection views and section views of a 3D model or an assembly and add the required dimensions.
Objectives	Upon completion of this module you will be able to: - Create simple projection views and section views of 3D parts and assemblies - Position the views on a drawing sheet - Add dimensions and annotations to the views
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. Additionally, they should be familiar with Part Design and Assembly Design in CATIA.
Available Online	Yes

Practice CATIA Electrical 3D Design	
Course Code	CAT-en-EHI-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	24 hours
Course Material	
Level	Fundamental
Audience	Electrical Engineers new to Electrical Physical System Design using the 3DEXPERIENCE platform.
Description	This module will teach you how to create electrical geometry in the 3DEXPERIENCE platform and thereby help you in designing the electrical physical systems. You will work with electrical catalogs to place the components from electrical libraries. You will learn the routing of branches for creating electrical branch geometries, managing the electrical geometry content, and routing conductors through the electrical geometry.
Objectives	Upon completion of this module you will be able to: - Create and use an Electrical Library using Data Setup - Create an Electrical Geometry - Route Conductors through the Electrical Geometry
Prerequisites	- Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. - They should also be familiar with Part Design and should know how to use an electrical catalog.
Available Online	Yes

Practice CATIA Engineering Templates Reuse	
Course Code	CAT-en-KT1-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	0.50 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	In this module, you will learn how to create customized features by reusing the power copy and user feature.
Objectives	Upon completion of this module you will be able to: - Create customized features using templates.
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Functional Plastic Parts	
Course Code	CAT-en-FMP-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	6 hours
Course Material	
Level	Fundamental
Audience	Plastic Part Designers and Molded Part Designers
Description	This module will teach you how to use the Functional Plastic Parts app to create molded parts. You will also learn how to create a core and a cavity using styling data. You will be able to create a detailed design by adding holes, stiffening ribs, bosses and additional fixtures. You will also be able to modify the design and complete the final part with additional draft and fillet features.
Objectives	Upon completion of this module you will be able to: - Create a molded plastic part - Add holes and protected areas - Add ribs and bosses
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with the Part Design app.
Available Online	Yes

Practice CATIA Generative Wireframe and Surface	
Course Code	CAT-en-GS1-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	19 hours
Course Material	
Level	Fundamental
Audience	Surface Designers
Description	This module will teach you how to use the Generative Wireframe and Surface app to create curves and surfaces. You will learn how to assemble, re-limit and connect the geometries smoothly. You will also learn how to analyze the wireframe and the surface quality and rectify the detected defects.
Objectives	Upon completion of this module, you will be able to: - Create curves and improve the quality of the imported wireframes - Create surfaces based on the wireframe geometries - Assemble, re-limit and connect the surfaces smoothly to achieve the topology - Analyze the surface quality and heal the defects
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Natural Assembly	
Course Code	CAT-en-LCP-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	Mechanical Engineers and Designers, and Design Architects
Description	This module will teach you how to create and manage product structures. You will explore a product and modify its structure by adding new products and exploding existing products. You will then scan the structure to activate a working product level, search for and add existing parts and use constraints to position the parts. Finally, you will create a new sub-product from a components list and use it to complete the product.
Objectives	Upon completion of this module you will be able to: - Explore a product and modify its structure using Natural Assembly - Select the product levels using the Ladder functionality - Search for a product and insert it in an existing assembly - Position the parts using constraints - Create a new sub-product from a component's list and use it to complete the product
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.

Practice CATIA Natural Assembly

Available Online	Yes

Practice CATIA Natural Shape	
Course Code	CAT-en-LSP-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	7 hours
Course Material	
Level	Fundamental
Audience	Conceptual Designers, Stylists, Simulation and Manufacturing Engineers
Description	This module will introduce you to the CATIA Natural Shape app and its unique working environment. You will learn how to use the app to conceptualize, create and modify mechanical parts and shapes. The course features short-duration demos followed by exercises which will allow you to practice. You will also learn the related theory, tips and recommendations while performing the exercises.
Objectives	Upon the completion of this module you will be able to: - Create a conceptual design directly in 3D - Use the hybrid design environment to conceptualize your designs - Work on the structure to create the 3D parts - Navigate through the structure and position the parts - Reuse the existing designs in the 3D models
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Part Design - Added Exercises	
Course Code	CAT-en-PDG-X-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	12.75 hours
Course Material	
Level	Exercise
Audience	Mechanical Designers
Description	This module provides you with an exercise database for additional practice on the 3DEXPERIENCE Part Design app. The exercises have been arranged in increasing order of difficulty. The fundamental exercises will check and refresh your basic Part Design skills before you move on to more complex topics. The advanced exercises will make you practice the recommended design methodologies using realistic parts.
Objectives	Upon completion of this module you will be able to: - Apply your Mechanical skills in selected scenarios. - Employ the recommended methodology in various situations and efficiently use the Mechanical workbenches.
Prerequisites	Students attending this learning module should be familiar with CATIA Part Design.
Available Online	Yes

Practice CATIA Piping and Tubing 3D Design	
Course Code	CAT-en-PIP-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	16 hours
Course Material	
Level	Fundamental
Audience	Piping or Tubing Designers
Description	This module will teach you how to route a pipe or a tube, and place the piping components. You will learn how to detail the design and modify the network. You will also learn how to validate the design and prepare it for manufacturing. The module also features exercises that enable you to practice creating a piping system design.
Objectives	Upon completion of this module you will be able to: - Route straight pipes or tubes - Position piping or tubing parts - Adjust the design of a piping or a tubing network - Validate the piping and tubing design - Prepare the piping and tubing design for manufacturing
Prerequisites	Students attending this module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Piping and Tubing Setup	
Course Code	CAT-en-PTS-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	24 hours
Course Material	
Level	Fundamental
Audience	Fluid Systems Solution Administrators
Description	This module will teach you how to set up fluid systems resources and create piping components. You will learn how to manage component catalogs, design validation rules, and global naming conventions. You will also learn how to customize the generative view style file for drawings and standards for P&ID.
Objectives	Upon completion of this module you will be able to: - Create and manage resources for fluid systems design - Build equipment, supports, and components - Reuse the piping standard data for design setup - Create and manage component catalogs - Define the global naming conventions - Create the checks and rules for design validation - Create templates for generating reports - Customize the drafting standards and settings - Define symbols and annotations for piping and instrumentation diagrams
Prerequisites	Students attending this module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Quality Rules Reuse	
Course Code	CAT-en-KE1-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	5 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	This module will show you how to share corporate knowledge stored in the rule bases and leverage it across the company to ensure design compliance with the established standards. You will also learn to create reports and manage their template.
Objectives	Upon completion of this module you will be able to: - Automate the design modifications - Analyze and create reports
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Surface Design - Added Exercises	
Course Code	CAT-en-GS1-X-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	8 hours
Course Material	
Level	Exercise
Audience	Mechanical Surface Designers
Description	This module provides you with an exercise database for additional practice on 3DEXPERIENCE Surface Design. The exercises have been created based on Industry practices. You will get to practice skills such as creating wireframes and surfaces, creating surfacic shells and solid parts, and working with multiple parts that are referencing a common part.
Objectives	These exercises will allow you to put your Shape skills into practice on selected scenarios. - You will apply the recommended methodology in various situations. - You will enhance your understanding and usage of the Shape apps.
Prerequisites	Students attending this course should be familiar with Surface Design.
Available Online	Yes

Transition to the 3DEXPERIENCE platform for Mechanical Designers	
Course Code	CAT-en-3DMT-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	12 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	In this module, you will learn how to design a new part with the 3DEXPERIENCE platform. You will also learn how to compute weight, create a new part version, replace the original and create a drawing. Finally, you will learn how to manage complex product structures, create product features, manage catalogs and analyze assemblies.
Objectives	Upon completion of this module, you will be able to: - Create new products and parts - Insert a part in a product and position it - Apply materials to parts - Calculate the weight of a product - Insert and complete a drawing - Create a new part version - Replace a part and update a product - Design parts in context - Create assembly features and catalogs - Analyze the assemblies
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. They should also be familiar with CATIA V5 Mechanical Design.

Transition to the 3DEXPERIENCE platform for Mechanical Designers	
Available Online	Yes

CATIA

Mechanical Engineering

Explore the 3D Tolerancing and Annotation Designer Role	
Course Code	CAT-en-TAD-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	2 hours
Course Material	
Level	Fundamental
Audience	3D Master Designer, Reviewer, Project Manager
Description	This learning module provides you with a guided and systematic approach to learn about the 3D Tolerancing & Annotation Designer role. You will explore how to add the annotations using Tolerancing Advisor which are standard compliant. You will also learn to review the annotations and generate 2D representations.
Objectives	Upon the completion of this module you will be able to: - Add dimensions and tolerances using Tolerancing Advisor - Add assembly specifications - Validate the annotations in non-authoring context - Generate 2D representations and drawings - Review Annotations using 3DPlay
Prerequisites	- Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. - Essential 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and 3D Tolerancing & Annotation Designer
Available Online	Yes

Explore the Function Driven Generative Designer Role (GDE)	
Course Code	CAT-en-GDE-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	3.50 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers or Structure Engineers
Description	In this module, you will learn how to generate optimized conceptual parts from a functional specification and also to generate multiple variations to compare and analyze.
Objectives	Upon the completion of this module, you will be able to: - Capture a set of functional specifications for conceptual exploration - Generate conceptual shapes on target and constraints - Manage concept variants and perform trade-off study - Design and validate the detailed design for additive layer manufacturing
Prerequisites	- Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. They must be familiar with the CATIA Part Design, and the CATIA Imagine and Shape apps. - - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Function Driven Generative Designer

Explore the Function Driven Generative Designer Role (GDE)	
Available Online	Yes

Explore the Mechanical and Shape Designer Role	
Course Code	CAT-en-MES-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	6.67 hours
Course Material	
Level	Fundamental
Audience	Mechanical and Shape Designers
Description	In this module, you will discover and practice the key capabilities of the Mechanical & Shape Designer role. You will also learn how to create and manage a complete mechanical project.
Objectives	Upon the completion of this module, you will be able to: - Leverage the 3DEXPERIENCE platform collaboration capabilities - Create parts using various methods - Design surface geometries - Build sheet metal parts - Import and modify external CAD models - Construct and modify assemblies - Animate and validate kinematic simulations - Validate the manufacturability of parts - Generate part and assembly drawings
Prerequisites	- Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. They must be familiar with the basic mechanical engineering concepts. - - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Mechanical and Shape Designer

Explore the Mechanical and Shape Designer Role

Available Online	Yes

Explore the Mechanical and Shape Engineer Role	
Course Code	CAT-en-M3S-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	5 hours
Course Material	
Level	Fundamental
Audience	
Description	In this learning module, you will learn the key capabilities of the Mechanical and Shape Engineer role to create and easily manage a complex mechanical engineering project
Objectives	Upon the completion of this module, you will be able to: - Create assembly symmetry - Design a sheet metal part - Design parts using advanced Part and Surface modeling capabilities - Perform a static study - Create 3D Annotations - Create Kinematic Simulations
Prerequisites	Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. They must be familiar with the basic mechanical engineering concepts. 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Mechanical & Shape Engineer.
Available Online	Yes

Explore the Mechanical Engineer Role	
Course Code	CAT-en-M3K-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	4.50 hours
Course Material	
Level	Fundamental
Audience	
Description	In this learning module, you will learn the key capabilities of the Mechanical Engineer role to create, annotate, simulate and easily manage a complex mechanical engineering design.
Objectives	Upon completion of this module, you will be able to: - Create assembly symmetry - Design a sheet metal part - Perform a static study - Create 3D Annotations - Create Kinematic Simulations
Prerequisites	- Knowledge: Students attending this module should have completed the Explore the Business Innovator Role module. They must be familiar with the basic mechanical engineering concepts. - - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Mechanical Engineer.
Available Online	Yes

Explore the Mechanical Motion Designer Role	
Course Code	CAT-en-MOM-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	2.50 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designer
Description	In this learning module, you will learn the key capabilities of the Mechanical Motion Designer Role to create and manage mechanisms. You will also learn to perform the static study analysis of the components.
Objectives	Upon the completion of this module, you will be able to: - Leverage the 3DEXPERIENCE platform collaboration capabilities - Create assemblies using engineering connections - Create and modify simple and macro mechanisms - Create kinematics scenarios using excitations - Animate kinematics simulations - Detect and remove clashes between components - Plot results of kinematics motions - Perform the static study analysis under the static conditions
Prerequisites	- Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. They must be familiar with the basic mechanical engineering concepts. - - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Mechanical Motion Designer

Explore the Mechanical Motion Designer Role

Available Online	Yes

Explore the SheetMetal Designer Role	
Course Code	CAT-en-SMW-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	3 hours
Course Material	
Level	Fundamental
Audience	Sheet Metal Designer
Description	In this module, you will explore the key capabilities of the Sheet Metal Designer Role. You will learn complete process of sheet metal design from conceptual design to detailed design. You will also learn how to prepare the sheet metal part for manufacturing.
Objectives	Upon completion of this module, you will be able to: - Explore and Modify the product structure - Design a sheet metal part - Create conceptual design of a sheet metal part - Create detailed design of the sheet metal part - Prepare the sheet metal part for manufacturing
Prerequisites	- Knowledge: Students attending this learning module should have completed the Explore the Business Innovator Role module. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and SheetMetal Designer
Available Online	Yes

Lightweight Engineering for Sustainable Innovations	
Course Code	CAT-en-LESI-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	0.33 hours
Course Material	
Level	Fundamental
Audience	
Description	In this module,you will discover how the lightweight engineering domain is becoming the key to sustainable innovation enabling new ways for industry transformation
Objectives	Upon completion of this learning module, you will learn: - The Need for Lightweight Engineering in the Industry Renaissance - Lightweight Engineering Challenges imposed by the Industry Renaissance - Dassault Systèmes Value Proposition in Lightweight Engineering
Prerequisites	
Available Online	Yes

Master CATIA Drafting	
Course Code	CAT-en-GDR-A-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	12 hours
Course Material	
Level	Advanced
Audience	Draftsmen
Description	This module will teach you how to manage drawing sheets and views in the Drafting app. You will also learn how to use advanced tools to dress-up, annotate views and customize the Drafting app.
Objectives	Upon completion of this module you will be able to: - Finalize the drawing sheet - Work with large assemblies - Customize the drafting app - Perform administrative tasks - Add Bill of Material
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. Additionally, they should be familiar with Part Design and Assembly Design in CATIA.
Available Online	Yes

Master CATIA Part Design	
Course Code	CAT-en-PDG-A-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	7 hours
Course Material	
Level	Advanced
Audience	Mechanical and Sheet Metal Designers
Description	This module will introduce you to complex 3D modeling techniques, using advanced sketch-based and surface-based features. You will learn how to manage complex part structures and how to improve productivity by reusing existing features. Finally, you will learn how to use parameters and tables to drive the design of a model.
Objectives	Upon completion of this module you will be able to: - Design parts with complex geometries - Create and manage robust part structures - Create fully parameterized models - Create re-usable features
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and be familiar with CATIA Part Design fundamentals.
Available Online	Yes

Practice CATIA 2D Layout for 3D Design	
Course Code	CAT-en-LO1-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	In this module you will learn how to create 2D layout views in a 3D model and use them to design the part in the 3D environment.
Objectives	Upon completion of this module you will be able to: - Create 2D layout views in a 3D environment - Export 2D geometry into a 3D environment - Create drawings using the 2D layout views
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with CATIA Part and Assembly Design.
Available Online	Yes

Practice CATIA 3D Annotation Insight	
Course Code	CAT-en-LFT-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	Design, Quality and other such departments where interrogating and annotating the 3D model is a frequent or occasional requirement.
Description	In this module, you will learn how to use the 3D Annotation Insight app to review and filter 3D annotations information contained within part and assembly documents. You will also learn how to hide / show annotations and captures, use the dimensioning and tolerancing annotations to enhance understanding and improve the decision making.
Objectives	Upon completion of this module you will be able to: - Access and visualize the view, capture and annotation review features - Query and filter 3D annotations - Show/Hide individual as well as all annotations of a given type - Display FTA captures - Remove the FTA clipping plane of a capture - Filter 3D annotations
Prerequisites	Students attending this learning module should have taken the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA 3D Printing Preparation	
Course Code	CAT-en-TLE-F-15-221
Available Release	3DEXPERIENCE R2022x
Duration	2 hours
Course Material	
Level	Fundamental
Audience	Reverse Engineers, Virtual and Physical Prototypers
Description	In this module, you will learn how to create an output for 3D printing. You will also learn how to improve the characteristics of a mesh.
Objectives	Upon the completion of this module, you will be able to: - Import a cloud of points - Prepare a mesh for 3D Printing - Create an output for 3D Printing
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA 3D Tolerancing and Annotation	
Course Code	CAT-en-FTA-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	12 hours
Course Material	
Level	Fundamental
Audience	3D Master Designers
Description	In this module, you will learn how to annotate a 3D part. You will learn how to create annotation planes and how to add and manage 3D annotations on these planes. You will also learn how to create 3D views and use them to create 2D drawing views. You will also be able to create annotations on assemblies.
Objectives	Upon completion of this module you will be able to: - - Add 3D annotations to a part - - Manage and position the annotations - - Manage the 3D geometry associated to the annotations
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with CATIA Knowledgeware and basic CATIA Solid and Surface Design.
Available Online	Yes

Practice CATIA Assembly Design (ASD)	
Course Code	CAT-en-ASD-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	This module will teach you how to create a simple product structure and add components and position them correctly. You will also learn how to analyze the weight distribution, create new component revisions and replace components.
Objectives	Upon completion of this course you will be able to: - Upon the completion of this module, you will able to: - Create a new product and add components - Position components within a product - Modify a product structure - Analyze weight distribution - Replace components
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and be familiar with the CATIA Part Design fundamentals
Available Online	Yes

Practice CATIA Assembly Design - Added Exercises	
Course Code	CAT-en-ASD-X-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	6 hours
Course Material	
Level	Exercise
Audience	Mechanical Designers
Description	This module provides you with exercises for additional practice on the 3DEXPERIENCE Assembly Design app. The exercises have been created based on Industry practices. You will practice creating assembly structure, positioning components, constraining components using engineering connections and modifying parts in assembly context.
Objectives	Upon the completion of this module you will be able to: - Practice your Assembly Design skills using selected scenarios - Apply the recommended methodology in various scenarios
Prerequisites	Students attending this learning module should be familiar with Part Design and Assembly Design.
Available Online	Yes

Practice CATIA Bent Part Design	
Course Code	CAT-en-SMB-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	6 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designer and Sheetmetal Designer
Description	This module will teach you how to use the Bent Part Design app to create and modify a sheetmetal part. You will learn how to define the sheetmetal parameters and create features such as walls, bends, cutouts and corners. You will also learn different techniques for multi-selecting the objects and constraining the parts.
Objectives	Upon completion of this module you will be able to: - Define and modify the sheetmetal parameters - Create a sheetmetal part using the wall and bend features - Manage the folded and unfolded views of parts - Create cutouts, chamfers and corners - Constrain the parts
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Drafting	
Course Code	CAT-en-GDR-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	6 hours
Course Material	
Level	Fundamental
Audience	Draftsmen
Description	This module will teach you how to create drawings using the Drafting app. You will learn how to create projection views and section views of a 3D model or an assembly and add the required dimensions.
Objectives	Upon completion of this module you will be able to: - Create simple projection views and section views of 3D parts and assemblies - Position the views on a drawing sheet - Add dimensions and annotations to the views
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. Additionally, they should be familiar with Part Design and Assembly Design in CATIA.
Available Online	Yes

Practice CATIA Engineering Templates Reuse	
Course Code	CAT-en-KT1-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	0.50 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	In this module, you will learn how to create customized features by reusing the power copy and user feature.
Objectives	Upon completion of this module you will be able to: - Create customized features using templates.
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Functional Plastic Parts	
Course Code	CAT-en-FMP-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	6 hours
Course Material	
Level	Fundamental
Audience	Plastic Part Designers and Molded Part Designers
Description	This module will teach you how to use the Functional Plastic Parts app to create molded parts. You will also learn how to create a core and a cavity using styling data. You will be able to create a detailed design by adding holes, stiffening ribs, bosses and additional fixtures. You will also be able to modify the design and complete the final part with additional draft and fillet features.
Objectives	Upon completion of this module you will be able to: - Create a molded plastic part - Add holes and protected areas - Add ribs and bosses
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with the Part Design app.
Available Online	Yes

Practice CATIA Generative Shape Design	
Course Code	CAT-en-GSD-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	Surface Designers
Description	This module will teach you how to use the Generative Shape Design app to create curves and surfaces. You will learn how to assemble, re-limit, and connect the geometries smoothly. You will also learn how to analyze the wireframe and the surface quality and rectify the detected defects.
Objectives	Upon the completion of this module, you will be able to: - - Create curves and improve the quality of the imported wireframes - - Create surfaces based on the wireframe geometries - - Assemble, re-limit and connect the surfaces smoothly to achieve the topology - - Analyze the surface quality and heal the defects
Prerequisites	- Knowledge: Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. - - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Mechanical and Shape Designer
Available Online	Yes

Practice CATIA Generative Shape Design - Added Exercises	
Course Code	CAT-en-GSD-X-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	16 hours
Course Material	
Level	Exercise
Audience	Mechanical Designers and Surface Designers
Description	This module provides you with an extensive database of exercises for additional practice on advanced topics of Surface Design. The exercises have been created based on the Industry practices.
Objectives	Upon completion of this module you will be able to: - Create wireframes features - Create surfaces using existing wireframes - Create advanced and parameterized swept surfaces - Perform advanced surface analysis and gap correction - Create advanced blend features - Improve the quality and stability of created geometries
Prerequisites	Students attending this module should know the basic and advanced features of Surface Design.
Available Online	Yes

Practice CATIA Generative Wireframe and Surface	
Course Code	CAT-en-GS1-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	19 hours
Course Material	
Level	Fundamental
Audience	Surface Designers
Description	This module will teach you how to use the Generative Wireframe and Surface app to create curves and surfaces. You will learn how to assemble, re-limit and connect the geometries smoothly. You will also learn how to analyze the wireframe and the surface quality and rectify the detected defects.
Objectives	Upon completion of this module, you will be able to: - Create curves and improve the quality of the imported wireframes - Create surfaces based on the wireframe geometries - Assemble, re-limit and connect the surfaces smoothly to achieve the topology - Analyze the surface quality and heal the defects
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Mechanical Systems Design	
Course Code	CAT-en-KIM-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	This module will teach you how to create the architecture of a mechanism using simple wireframe elements and then complete the mechanism by adding 3D representations. You will also learn how to create a more complex mechanism using existing mechanisms, and finally how to animate the result.
Objectives	Upon completion of this module you will be able to: - Create a new mechanism - Manage the mechanism behavior - Include alternative representations to complete the mechanism - Create a new macro mechanism from existing sub-mechanisms - Animate the mechanism
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with the Assembly Design app.
Available Online	Yes

Practice CATIA Mechanical Systems Experience	
Course Code	CAT-en-KIN-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	9 hours
Course Material	
Level	Fundamental
Audience	Mechanical Design Engineers
Description	In this module, you will learn how to define behaviors by manually recording an animation and by using laws. You will also learn how to include the analysis of measurements and accelerations. Furthermore, you will learn how to generate traces, swept volumes and snapshots which can be used while reviewing the simulation results.
Objectives	Upon the completion of this module, you will be able to: - Create a scenario manually or by using laws - Include measurement and interference analyses - Generate results - Create snapshots for a review - Export the final simulation
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and be familiar with Mechanical Systems Design in CATIA.
Available Online	Yes

Practice CATIA Natural Assembly	
Course Code	CAT-en-LCP-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	Mechanical Engineers and Designers, and Design Architects
Description	In this module, you will learn how to create and manage product structures. You will explore a product and modify its structure by adding new products and exploding existing products. You will then scan the structure to activate a working product level, search for and add existing parts and use constraints to position the parts. You will also create a new sub-product from a components list and use it to complete the product.
Objectives	Upon the completion of this module you will be able to: - Explore a product and modify its structure using Natural Assembly - Select the product levels using the Ladder functionality - Search for a product and insert it in an existing assembly - Position the parts using constraints - Create a new sub-product from a component's list and use it to complete the product
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.

Practice CATIA Natural Assembly	
Available Online	Yes

Practice CATIA Natural Shape	
Course Code	CAT-en-LSP-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	7 hours
Course Material	
Level	Fundamental
Audience	Conceptual Designers, Stylists, Simulation and Manufacturing Engineers
Description	This module will introduce you to the CATIA Natural Shape app and its unique working environment. You will learn how to use the app to conceptualize, create and modify mechanical parts and shapes. The course features short-duration demos followed by exercises which will allow you to practice. You will also learn the related theory, tips and recommendations while performing the exercises.
Objectives	Upon the completion of this module you will be able to: - Create a conceptual design directly in 3D - Use the hybrid design environment to conceptualize your designs - Work on the structure to create the 3D parts - Navigate through the structure and position the parts - Reuse the existing designs in the 3D models
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Part Design	
Course Code	CAT-en-PDG-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	17 hours
Course Material	
Level	Fundamental
Audience	Mechanical and Sheet Metal Designers
Description	This module will teach you how to create a 3D model using the CATIA Part Design app. You will learn how to use different feature-based tools to build a 3D model. You will also learn how to add parameters, then review, measure and modify a model.
Objectives	Upon the completion of this module you will be able to: - Create new parts - Create and constrain 2D sketches - Complete a 3D model using basic features - Parameterize a model - Review and measure a model - Reuse existing features
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Part Design - Added Exercises	
Course Code	CAT-en-PDG-X-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	12.75 hours
Course Material	
Level	Exercise
Audience	Mechanical Designers
Description	This module provides you with an exercise database for additional practice on the 3DEXPERIENCE Part Design app. The exercises have been arranged in increasing order of difficulty. The fundamental exercises will check and refresh your basic Part Design skills before you move on to more complex topics. The advanced exercises will make you practice the recommended design methodologies using realistic parts.
Objectives	Upon completion of this module you will be able to: - Apply your Mechanical skills in selected scenarios. - Employ the recommended methodology in various situations and efficiently use the Mechanical workbenches.
Prerequisites	Students attending this learning module should be familiar with CATIA Part Design.
Available Online	Yes

Practice CATIA Quality Rules Reuse	
Course Code	CAT-en-KE1-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	5 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	In this module, you will learn how to share corporate knowledge stored in the rule bases and leverage it across the company to ensure design compliance with the established standards. You will also learn to create reports and manage their template.
Objectives	Upon completion of this module you will be able to: - Automate the design modifications - Analyze and create reports
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Weld Design	
Course Code	CAT-en-WDG-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	3.75 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers and Structural Designers
Description	This module will teach you how to create a welded assembly. You will learn how to join parts using appropriate weld features and how to generate associative weld drawings and weld reports. This course will teach you how to define the welding resource in the Data Setup app and use it to create welds.
Objectives	Upon completion of this module, you will be able to: - Define the welding resource - Create and manage welded assemblies - Generate weld reports - Create welding drawings
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with Assembly Design.
Available Online	Yes

Transition to the 3DEXPERIENCE platform for Mechanical Designers	
Course Code	CAT-en-3DMT-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	12 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	In this module, you will learn how to design a new part with the 3DEXPERIENCE platform. You will also learn how to compute weight, create a new part version, replace the original and create a drawing. Finally, you will learn how to manage complex product structures, create product features, manage catalogs and analyze assemblies.
Objectives	Upon completion of this module, you will be able to: - Create new products and parts - Insert a part in a product and position it - Apply materials to parts - Calculate the weight of a product - Insert and complete a drawing - Create a new part version - Replace a part and update a product - Design parts in context - Create assembly features and catalogs - Analyze the assemblies
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. They should also be familiar with CATIA V5 Mechanical Design.

Transition to the 3DEXPERIENCE platform for Mechanical Designers

Available Online	Yes

Transition to the 3DEXPERIENCE platform for Surface Designers	
Course Code	CAT-en-3DST-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	7 hours
Course Material	
Level	Fundamental
Audience	Designers who need to work with styled parts.
Description	In this module, you will learn how to design a new part with the 3DEXPERIENCE platform. It addresses the needs of Surface Designers. You will also learn how to create a new part version, replace the original part and update the product.
Objectives	Upon completion of this module you will be able to: - Create new products and parts - Create a new part version - Replace a part and update a product
Prerequisites	- Knowledge: Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. They should also be familiar with CATIA V5 Mechanical Design and Surface Design. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Mechanical and Shape Designer
Available Online	Yes

Understand Lightweight Engineering	
Course Code	CAT-en-OLE-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	2.25 hours
Course Material	
Level	Fundamental
Audience	
Description	In this module, you will understand various domains of lightweight engineering that help the designers to make the right decisions on the adoption of lightweight technologies.
Objectives	Upon the completion of this module, you will be able to: - Optimize parts with Cognitive Augmented Design approach - Understand the CATIA Composites Design approach - Design parts with Reverse Engineering - Design Sheetmetal parts for the Hydro-forming process - Create Stamping Die Face design for sheetmetal parts
Prerequisites	- Knowledge: Learners attending this module should have completed the Explore the Collaborative Business Innovator role module. Additionally, they must be familiar with the basics of mechanical design and engineering. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator, Function Driven Gen. Designer, Simulation Collaborator, Composites Designer, Hydroformed

Understand Lightweight Engineering	
	SheetMetal Designer, Reverse Engineer and Stamping Die Designer.
Available Online	Yes

CATIA

Mechanical Engineering

Discover Composite Materials	
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	2 hours
Course Material	
Level	Fundamental
Audience	
Description	In this module , you will discover the basics of composites -Defining the term 'Composite' -The Properties of fibres and resins -Different types of resin system and reinforcements -Room and elevated temperature resin systems -Identifying and comparing weave styles -The benefits of using composites to build components -Types of manufacturing processes -Fibre orientation and core materials
Objectives	Define the term composite - State 2 properties of fibre and resin - Compare 4 resin systems - Compare 4 fibre reinforcements - Explain the difference between room and elevated temperature resin systems - Identify and compare 3 weave styles - Explain the terms warp and weft - List 4 benefits of using composites to build components - Identify 3 composite manufacturing processes - Explain the terms Thermoplastic and Thermoset
Prerequisites	
Available Online	Yes

Explore the 3D Innovator Role	
Course Code	CAT-en-CXD-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	3.58 hours
Course Material	
Level	Fundamental
Audience	
Description	3D Innovator is a role on the 3DEXPERIENCE platform that contains the xDesign app for 3D modeling. You can quickly get started with creating a new physical product, sketching, adding features, creating reference geometry, using patterns, editing models, and creating assemblies. In addition, you can learn about the flexibility of super features, working with multibody parts, and using direct editing tools.
Objectives	The objectives of the course include: - Get familiar with the basics of xDesign. - Save and access content on the 3DEXPERIENCE Platform. - Create sketches and features in xDesign. - Use direct editing and Design Guidance to enhance your models. - Mate parts together to create assemblies.
Prerequisites	
Available Online	Yes

Explore the Mechanical and Shape Designer Role	
Course Code	CAT-en-MES-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	6.67 hours
Course Material	
Level	Fundamental
Audience	Mechanical and Shape Designers
Description	In this module, you will discover and practice the key capabilities of the Mechanical & Shape Designer role. You will also learn how to create and manage a complete mechanical project.
Objectives	Upon the completion of this module, you will be able to: - Leverage the 3DEXPERIENCE platform collaboration capabilities - Create parts using various methods - Design surface geometries - Build sheet metal parts - Import and modify external CAD models - Construct and modify assemblies - Animate and validate kinematic simulations - Validate the manufacturability of parts - Generate part and assembly drawings
Prerequisites	- Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. They must be familiar with the basic mechanical engineering concepts. - - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Mechanical and Shape Designer

Explore the Mechanical and Shape Designer Role

Available Online	Yes

Explore the Mechanical and Shape Engineer Role	
Course Code	CAT-en-M3S-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	5 hours
Course Material	
Level	Fundamental
Audience	
Description	In this learning module, you will learn the key capabilities of the Mechanical and Shape Engineer role to create and easily manage a complex mechanical engineering project
Objectives	Upon completion of this module, you will be able to: - Create assembly symmetry - Design a sheet metal part - Design parts using advanced Part and Surface modeling capabilities - Perform a static study - Create 3D Annotations - Create Kinematic Simulations
Prerequisites	Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. They must be familiar with the basic mechanical engineering concepts. 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Mechanical & Shape Engineer.
Available Online	Yes

Explore the Mechanical Engineer Role	
Course Code	CAT-en-M3K-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	4.50 hours
Course Material	
Level	Fundamental
Audience	
Description	In this learning module, you will learn the key capabilities of the Mechanical Engineer role to create and easily manage a complex mechanical engineering project.
Objectives	Upon completion of this module, you will be able to: - Create assembly symmetry - Design a sheet metal part - Perform a static study - Create 3D Annotations - Create Kinematic Simulations
Prerequisites	- Knowledge: Students attending this module should have completed the Explore the Business Innovator Role module. They must be familiar with the basic mechanical engineering concepts. - - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Mechanical Engineer.
Available Online	Yes

Explore the Mechanical Motion Designer Role	
Course Code	CAT-en-MOM-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	2.50 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designer
Description	In this learning module, you will learn the key capabilities of the Mechanical Motion Designer Role to create and manage mechanisms. You will also learn to perform the static study analysis of the components.
Objectives	Upon the completion of this module, you will be able to: - Leverage the 3DEXPERIENCE platform collaboration capabilities - Create assemblies using engineering connections - Create and modify simple and macro mechanisms - Create kinematics scenarios using excitations - Animate kinematics simulations - Detect and remove clashes between components - Plot results of kinematics motions - Perform the static study analysis under the static conditions
Prerequisites	- Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. They must be familiar with the basic mechanical engineering concepts. - - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Mechanical Motion Designer

Explore the Mechanical Motion Designer Role	
Available Online	Yes

Explore the SheetMetal Designer Role	
Course Code	CAT-en-SMW-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	3 hours
Course Material	
Level	Fundamental
Audience	Sheet Metal Designer
Description	In this module, you will explore the key capabilities of the Sheet Metal Designer Role. You will learn complete process of sheet metal design from conceptual design to detailed design. You will also learn how to prepare the sheet metal part for manufacturing.
Objectives	Upon completion of this module, you will be able to: - Explore and Modify the product structure - Design a sheet metal part - Create conceptual design of a sheet metal part - Create detailed design of the sheet metal part - Prepare the sheet metal part for manufacturing
Prerequisites	- Knowledge: Students attending this learning module should have completed the Explore the Business Innovator Role module. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and SheetMetal Designer
Available Online	Yes

Explore the Structural Generative Designer Role	
Course Code	CAT-en-SGD-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	2 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	In this module, you will learn how the Structural Generative Designer role helps you to optimize shape & parameters.
Objectives	Upon completion of this module, you will be able to: - Create concept shape using the Free Shape Design tools - Create local areas to optimize - Optimize shapes to reduce stress concentration - Perform parametric optimization for additive manufacturing and casting variants
Prerequisites	Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role and Explore the Function Driven Generative Designer Role module. They must be familiar with the basic mechanical engineering concepts. 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator, Structural Generative Designer and Simulation Collaborator.
Available Online	Yes

Explore the Surface Machined Part Designer Role	
Course Code	CAT-en-SUMPA-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	1.25 hours
Course Material	
Level	Fundamental
Audience	Surface Machined Part Designer
Description	This learning module provides you a guided and systematic approach to learn about the Surface Machined Part Designer for Aerospace and Defense role. It will teach you to design complex and detailed surface parts in context of the Airframe assembly.
Objectives	Upon the completion of this module, you will be able to: - Create complex surfaces - Analyze and refine the surfaces - Create tolerances and annotations on the surface - Generate 2D drawings
Prerequisites	Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator, Surface Machined Part Designer
Available Online	Yes

Lightweight Engineering for Sustainable Innovations	
Course Code	CAT-en-LESI-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	0.33 hours
Course Material	
Level	Fundamental
Audience	
Description	In this module,you will discover how the lightweight engineering domain is becoming the key to sustainable innovation enabling new ways for industry transformation
Objectives	Upon completion of this learning module, you will learn: - The Need for Lightweight Engineering in the Industry Renaissance - Lightweight Engineering Challenges imposed by the Industry Renaissance - Dassault Systèmes Value Proposition in Lightweight Engineering
Prerequisites	
Available Online	Yes

Master CATIA Assembly Design	
Course Code	CAT-en-ASD-A-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	11.50 hours
Course Material	
Level	Advanced
Audience	Mechanical Designers
Description	This module will introduce you to complex assembly modeling techniques. You will learn how to design a product architecture and manage complex assembly structures. You will also learn how to use advanced features to design parts within an assembly environment and how to analyze interferences.
Objectives	Upon the completion of this module you will be able to: - Analyze interferences - Analyze component links and relations - Design complex products - Design new parts within a product - Manage complex product structures
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and be familiar with the CATIA Part Design and Assembly Design fundamentals.
Available Online	Yes

Master CATIA Drafting	
Course Code	CAT-en-GDR-A-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	12 hours
Course Material	
Level	Advanced
Audience	Draftsmen
Description	This module will teach you how to manage drawing sheets and views in the Drafting app. You will also learn how to use advanced tools to dress-up, annotate views and customize the Drafting app.
Objectives	Upon completion of this module you will be able to: - Finalize the drawing sheet - Work with large assemblies - Customize the drafting app - Perform administrative tasks - Add Bill of Material
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. Additionally, they should be familiar with Part Design and Assembly Design in CATIA.
Available Online	Yes

Master CATIA Part Design	
Course Code	CAT-en-PDG-A-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	7 hours
Course Material	
Level	Advanced
Audience	Mechanical and Sheet Metal Designers
Description	This module will introduce you to complex 3D modeling techniques, using advanced sketch-based and surface-based features. You will learn how to manage complex part structures and how to improve productivity by reusing existing features. Finally, you will learn how to use parameters and tables to drive the design of a model.
Objectives	Upon completion of this module you will be able to: - Design parts with complex geometries - Create and manage robust part structures - Create fully parameterized models - Create re-usable features
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and be familiar with CATIA Part Design fundamentals.
Available Online	Yes

Practice CATIA 2D Layout for 3D Design	
Course Code	CAT-en-LO1-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	In this module you will learn how to create 2D layout views in a 3D model and use them to design the part in the 3D environment.
Objectives	Upon completion of this module you will be able to: - Create 2D layout views in a 3D environment - Export 2D geometry into a 3D environment - Create drawings using the 2D layout views
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with CATIA Part and Assembly Design.
Available Online	Yes

Practice CATIA 3D Annotation Insight	
Course Code	CAT-en-LFT-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	Design, Quality and other such departments where interrogating and annotating the 3D model is a frequent or occasional requirement.
Description	This module teaches how to use the 3D Annotation Insight app to review and filter 3D annotations information contained within part and assembly documents. Students will learn how to hide / show annotations and captures, use the dimensioning and tolerancing annotations to enhance understanding and improve the decision making.
Objectives	Upon completion of this module you will be able to: - Access and visualize the view, capture and annotation review features - Query and filter 3D annotations - Show/Hide individual as well as all annotations of a given type - Display FTA captures - Remove the FTA clipping plane of a capture - Filter 3D annotations
Prerequisites	Students attending this learning module should have taken the Explore the Collaborative Business Innovator Role module and should be familiar with the Windows Operating System.

Practice CATIA 3D Annotation Insight

Available Online	Yes

Practice CATIA 3D Tolerancing and Annotation	
Course Code	CAT-en-FTA-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	12 hours
Course Material	
Level	Fundamental
Audience	3D Master Designers
Description	This module will teach you how to annotate a 3D part. You will learn how to create annotation planes and how to add and manage 3D annotations on these planes. You will also learn how to create 3D views and use them to create 2D drawing views. You will also be able to create annotations on assemblies.
Objectives	Upon completion of this module you will be able to: - - Add 3D annotations to a part - - Manage and position the annotations - - Manage the 3D geometry associated to the annotations
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with CATIA Knowledgeware and basic CATIA Solid and Surface Design.
Available Online	Yes

Practice CATIA Assembly Design - Added Exercises	
Course Code	CAT-en-ASD-X-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	6 hours
Course Material	
Level	Exercise
Audience	Mechanical Designers
Description	This module provides you with exercises for additional practice on the 3DEXPERIENCE Assembly Design app. The exercises have been created based on Industry practices. You will practice creating assembly structure, positioning components, constraining components using engineering connections and modifying parts in assembly context.
Objectives	Upon completion of this module you will be able to: - Practice your Assembly Design skills using selected scenarios - Apply the recommended methodology in various scenarios
Prerequisites	Students attending this learning module should be familiar with Part Design and Assembly Design.
Available Online	Yes

Practice CATIA Bent Part Design	
Course Code	CAT-en-SMB-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	6 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designer and Sheetmetal Designer
Description	This module will teach you how to use the Bent Part Design app to create and modify a sheetmetal part. You will learn how to define the sheetmetal parameters and create features such as walls, bends, cutouts and corners. You will also learn different techniques for multi-selecting the objects and constraining the parts.
Objectives	Upon completion of this module you will be able to: - Define and modify the sheetmetal parameters - Create a sheetmetal part using the wall and bend features - Manage the folded and unfolded views of parts - Create cutouts, chamfers and corners - Constrain the parts
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Digitized Shape Preparation	
Course Code	CAT-en-DSE-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	Transportation Designers
Description	In this module, you will learn how to create a cloud of points and then process those points. You will also learn how to mesh the clouds, improve the mesh characteristics, align the cloud of points and perform deviation analysis.
Objectives	Upon the completion of this module, you will be able to: - Create a cloud of points - Process the points of a cloud - Mesh the clouds - Improve the mesh characteristics - Align the cloud of points - Perform deviation analysis
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Engineering Templates Reuse	
Course Code	CAT-en-KT1-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	0.50 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	In this course, you will learn how to create customized features by reusing the power copy and user feature.
Objectives	Upon completion of this course you will be able to: - Create customized features using templates.
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Flow Driven Generative Design	
Course Code	CAT-en-GDF-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	11 hours
Course Material	
Level	Fundamental
Audience	- Powertrain engineers/ designers - HVAC designers - Jet Propulsion engineers - Injection Molding specialists (Mold designers) - Valve and piping designers
Description	The CATIA Flow Driven Generative Design app provides an integrated design environment where the Flow simulation (From SIMULA), topology optimization (using TOSCA) and shape modeling are combined together in the same solution. The various capabilities of the 3DEXPERIENCE Platform allow you to comprehensively refine concept shapes, validate them and reconstruct them in a collaborative manner for additive manufacturing. This course will teach you to define Functional volumes (inlet, outlet and volumes to optimize) and the analysis setup for the optimization. You will also learn how to generate organic concept shapes automatically and validate their Fluid Flow Performances through dedicated KPIs.
Objectives	Explore and Generate shapes for internal fluid flows that minimize pressure drops and preserve the mass flow rate (HVAC, cabin comfort systems, etc.) - Generate automatically flow-driven shapes, validated with an easily set-up Navier-Stokes CFD simulations - Promote a seamless collaboration between Design and Simulation departments“

Practice CATIA Flow Driven Generative Design	
Prerequisites	
Available Online	Yes

Practice CATIA FreeStyle Shape Design	
Course Code	CAT-en-FSS-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	12 hours
Course Material	
Level	Fundamental
Audience	Industrial Designers and Creative Designers
Description	This module will teach you how to create flawless, styled shapes from scratch using 3D free-form curves and surfaces or using digitized data. You will also learn how to analyze and enhance the quality of existing curves and surfaces.
Objectives	Upon completion of this module you will be able to: - - Create styled shapes using digitized data - Create surfaces using the curve-based and the surface-based approaches - Analyze and enhance the quality of curves and surfaces
Prerequisites	Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. Additionally, they should be familiar with Generative Surface Design in CATIA.
Available Online	Yes

Practice CATIA Functional Plastic Parts	
Course Code	CAT-en-FMP-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	6 hours
Course Material	
Level	Fundamental
Audience	Plastic Part Designers and Molded Part Designers
Description	This module will teach you how to use the Functional Plastic Parts app to create molded parts. You will also learn how to create a core and a cavity using styling data. You will be able to create a detailed design by adding holes, stiffening ribs, bosses and additional fixtures. You will also be able to modify the design and complete the final part with additional draft and fillet features.
Objectives	Upon completion of this module you will be able to: - Create a molded plastic part - Add holes and protected areas - Add ribs and bosses
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with the Part Design app.
Available Online	Yes

Practice CATIA Generative Shape Design	
Course Code	CAT-en-GSD-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	Surface Designers
Description	This module will teach you how to use the Generative Shape Design app to create curves and surfaces. You will learn how to assemble, re-limit, and connect the geometries smoothly. You will also learn how to analyze the wireframe and the surface quality and rectify the detected defects.
Objectives	Upon completion of this module, you will be able to: - - Create curves and improve the quality of the imported wireframes - - Create surfaces based on the wireframe geometries - - Assemble, re-limit and connect the surfaces smoothly to achieve the topology - - Analyze the surface quality and heal the defects
Prerequisites	- Knowledge: Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. - - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Mechanical and Shape Designer
Available Online	Yes

Practice CATIA Generative Shape Design - Added Exercises	
Course Code	CAT-en-GSD-X-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	16 hours
Course Material	
Level	Exercise
Audience	Mechanical Designers and Surface Designers
Description	This module provides you with an extensive database of exercises for additional practice on advanced topics of Surface Design. The exercises have been created based on the Industry practices.
Objectives	Upon completion of this module you will be able to: - Create wireframe features using the existing curves and surfaces - Create advanced and parameterized swept surfaces - Perform advanced surface analysis and gap correction - Create advanced blend features - Improve the quality and stability of created geometries
Prerequisites	Students attending this module should know the basic and advanced features of Surface Design.
Available Online	Yes

Practice CATIA Generative Shape Develop	
Course Code	CAT-en-DL1-F-15-221
Available Release	3DEXPERIENCE R2022x
Duration	1.83 hours
Course Material	
Level	Fundamental
Audience	Surface Designers
Description	This module will teach you how to use CATIA Generative Shape Develop app functionalities to create unfolded surfaces from a ruled surface. You will learn how to develop wires and points onto a revolution surface.
Objectives	Upon completion of this module, you will be able to: - Create unfolded surfaces from a ruled surface using the CATIA Generative Shape Develop app functionalities - Develop wires and points onto a revolution surface
Prerequisites	Students attending this module should have completed the Gateway to the 3DEXPERIENCE platform course. They should also be familiar with Surface Design in CATIA.
Available Online	Yes

Practice CATIA Generative Wireframe and Surface	
Course Code	CAT-en-GS1-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	20 hours
Course Material	
Level	Fundamental
Audience	Surface Designers
Description	This module will teach you how to use the Generative Wireframe and Surface app to create curves and surfaces. You will learn how to assemble, re-limit and connect the geometries smoothly. You will also learn how to analyze the wireframe and the surface quality and rectify the detected defects.
Objectives	Upon completion of this module, you will be able to: - Create curves and improve the quality of the imported wireframes - Create surfaces based on the wireframe geometries - Assemble, re-limit and connect the surfaces smoothly to achieve the topology - Analyze the surface quality and heal the defects
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Imagine and Shape (IMA)	
Course Code	CAT-en-IMA-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	16 hours
Course Material	
Level	Fundamental
Audience	Shape Designers, Product Stylists and Industrial Designers
Description	This module will teach you how to use the CATIA Imagine & Shape app to create, modify and improve product shapes and styles. You will learn how to use the Sketch Tracer app to import stylist's images in the 3DEXPERIENCE platform. You will also learn how to create an environment for a designed model and render it.
Objectives	Upon completion of this module you will be able to: - Create subdivision surfaces using tools specific to the Imagine and Shape app - Modify the style surfaces using Generative Shape Design tools - Create the required environment around a model - Apply materials to the created models
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. Additionally, they should be familiar with the fundamentals of CATIA Mechanical and Shape Design.
Available Online	Yes

Practice CATIA Mechanical Systems Experience	
Course Code	CAT-en-KIN-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	9 hours
Course Material	
Level	Fundamental
Audience	Mechanical Design Engineers
Description	This module will teach you how to define a behavior by manually recording an animation and by using laws. You will also learn how to include the analysis of measurements and accelerations. Furthermore, you will learn how to generate traces, swept volumes and snapshots which can be used while reviewing the simulation results.
Objectives	Upon completion of this module, you will be able to: - Create a scenario manually or by using laws - Include measurement and interference analyses - Generate results - Create snapshots for a review - Export the final simulation
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and be familiar with Mechanical Systems Design in CATIA.
Available Online	Yes

Practice CATIA Natural Assembly	
Course Code	CAT-en-LCP-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	Mechanical Engineers and Designers, and Design Architects
Description	This module will teach you how to create and manage product structures. You will explore a product and modify its structure by adding new products and exploding existing products. You will then scan the structure to activate a working product level, search for and add existing parts and use constraints to position the parts. Finally, you will create a new sub-product from a components list and use it to complete the product.
Objectives	Upon completion of this module you will be able to: - Explore a product and modify its structure using Natural Assembly - Select the product levels using the Ladder functionality - Search for a product and insert it in an existing assembly - Position the parts using constraints - Create a new sub-product from a component's list and use it to complete the product
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.

Practice CATIA Natural Assembly

Available Online	Yes

Practice CATIA Natural Shape	
Course Code	CAT-en-LSP-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	7 hours
Course Material	
Level	Fundamental
Audience	Conceptual Designers, Stylists, Simulation and Manufacturing Engineers
Description	This module will introduce you to the CATIA Natural Shape app and its unique working environment. You will learn how to use the app to conceptualize, create and modify mechanical parts and shapes. The course features short-duration demos followed by exercises which will allow you to practice. You will also learn the related theory, tips and recommendations while performing the exercises.
Objectives	Upon completion of this module you will be able to: - Create a conceptual design directly in 3D - Use the hybrid design environment to conceptualize your designs - Work on the structure to create the 3D parts - Navigate through the structure and position the parts - Reuse the existing designs in the 3D models
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Part Design - Added Exercises	
Course Code	CAT-en-PDG-X-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	13 hours
Course Material	
Level	Exercise
Audience	Mechanical Designers
Description	This module provides you with an exercise database for additional practice on the3DEXPERIENCE Part Design app. The exercises have been arranged in increasing order of difficulty. The fundamental exercises will check and refresh your basic Part Design skills before you move on to more complex topics. The advanced exercises will make you practice the recommended design methodologies using realistic parts.
Objectives	Upon completion of this module you will be able to: - Apply your Mechanical skills in selected scenarios. - Employ the recommended methodology in various situations and efficiently use the Mechanical workbenches.
Prerequisites	Students attending this learning module should be familiar with CATIA Part Design.
Available Online	Yes

Practice CATIA Piping and Tubing 3D Design	
Course Code	CAT-en-PIP-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	16 hours
Course Material	
Level	Fundamental
Audience	Piping or Tubing Designers
Description	This module will teach you how to route a pipe or a tube, and place the piping components. You will learn how to detail the design and modify the network. You will also learn how to validate the design and prepare it for manufacturing. The module also features exercises that enable you to practice creating a piping system design.
Objectives	Upon completion of this module you will be able to: - Route straight pipes or tubes - Position piping or tubing parts - Adjust the design of a piping or a tubing network - Validate the piping and tubing design - Prepare the piping and tubing design for manufacturing
Prerequisites	Students attending this module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Piping and Tubing Setup	
Course Code	CAT-en-PTS-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	24 hours
Course Material	
Level	Fundamental
Audience	Fluid Systems Solution Administrators
Description	This module will teach you how to set up fluid systems resources and create piping components. You will learn how to manage component catalogs, design validation rules, and global naming conventions. You will also learn how to customize the generative view style file for drawings and standards for P&ID.
Objectives	Upon completion of this module you will be able to: - Create and manage resources for fluid systems design - Build equipment, supports, and components - Reuse the piping standard data for design setup - Create and manage component catalogs - Define the global naming conventions - Create the checks and rules for design validation - Create templates for generating reports - Customize the drafting standards and settings - Define symbols and annotations for piping and instrumentation diagrams
Prerequisites	Students attending this module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Quality Rules Reuse	
Course Code	CAT-en-KE1-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	5 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	This module will show you how to share corporate knowledge stored in the rule bases and leverage it across the company to ensure design compliance with the established standards. You will also learn to create reports and manage their template.
Objectives	Upon completion of this module you will be able to: - Automate the design modifications - Analyze and create reports
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Sheet Metal Design	
Course Code	CAT-en-SMD-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	16 hours
Course Material	
Level	Fundamental
Audience	Sheet Metal Designer
Description	This module will teach you how to create a sheet metal part using standard wall, bend and stamping features. You will see how user features can be incorporated into the design and how to use both standard and user-defined materials. Finally you will learn how to create a flat pattern and produce a detailed, annotated drawing.
Objectives	Upon completion of this module you will be able to: - Create a sheet metal part using wall and bend features - Manage folded and unfolded views - Use pre-defined sheet metal parameters - Create stamped features - Create duplicating features and use the multi-body methodology - Creating drawings of sheet metal parts - Export a finished flat pattern
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and be familiar with the CATIA Part Design app.
Available Online	Yes

Practice CATIA Surface Design - Added Exercises	
Course Code	CAT-en-GS1-X-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	8 hours
Course Material	
Level	Exercise
Audience	Mechanical Surface Designers
Description	This module provides you with an exercise database for additional practice on 3DEXPERIENCE Surface Design. The exercises have been created based on Industry practices. You will get to practice skills such as creating wireframes and surfaces, creating surfacic shells and solid parts, and working with multiple parts that are referencing a common part.
Objectives	These exercises will allow you to put your Shape skills into practice on selected scenarios. - You will apply the recommended methodology in various situations. - You will enhance your understanding and usage of the Shape apps.
Prerequisites	Students attending this course should be familiar with Surface Design.
Available Online	Yes

Practice CATIA Weld Design	
Course Code	CAT-en-WDG-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers and Structural Designers
Description	This module will teach you how to create a welded assembly. You will learn how to join parts using appropriate weld features and how to generate associative weld drawings and weld reports. This course will teach you how to define the welding resource in the Data Setup app and use it to create welds.
Objectives	Upon completion of this module, you will be able to: - Define the welding resource - Create and manage welded assemblies - Generate weld reports - Create welding drawings
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with Assembly Design.
Available Online	Yes

Understand Composite Design	
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	2 hours
Course Material	
Level	Fundamental
Audience	
Description	In this module , you will discover how to design a part taken account the specificities of the materials composites
Objectives	Identify some of the key requirements to capture for composite design and manufacture - Understand the process of selection the correct materials and processes - Appreciate the principles of Classical Laminate Analysis - Be able to create a laminate stacking sequence - Identify some common composite design guidelines - Understand the effects of defects on the design process
Prerequisites	
Available Online	Yes

Understand Lightweight Engineering	
Course Code	CAT-en-OLE-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	2.25 hours
Course Material	
Level	Fundamental
Audience	
Description	In this module, you will understand various domains of lightweight engineering that help the designers to make the right decisions on the adoption of lightweight technologies.
Objectives	Upon the completion of this module, you will be able to: - Optimize parts with Cognitive Augmented Design approach - Understand the CATIA Composites Design approach - Design parts with Reverse Engineering - Design Sheetmetal parts for the Hydro-forming process - Create Stamping Die Face design for sheetmetal parts
Prerequisites	- Knowledge: Learners attending this module should have completed the Explore the Collaborative Business Innovator role module. Additionally, they must be familiar with the basics of mechanical design and engineering. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator, Function Driven Gen. Designer, Simulation Collaborator, Composites Designer, Hydroformed

Understand Lightweight Engineering	
	SheetMetal Designer, Reverse Engineer and Stamping Die Designer.
Available Online	Yes

CATIA

Multi-Discipline Automated Engineering

Discover Enterprise Knowledge Language	
Course Code	CAT-en-EKL-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	5 hours
Course Material	
Level	Fundamental
Audience	Templates and Rules Designer
Description	This module will introduce you to the Enterprise Knowledge Language (EKL), used in different knowledgeware apps, which allows you to construct smart-models and automate design for maximum productivity.
Objectives	Upon completion of this module, you will be able to: - Describe the EKL syntax and its usage - Manipulate CATIA objects through EKL scripts directly - Embed design logic in CATIA models using EKL - Create Parameters, Formulae, Rules, Checks and Actions
Prerequisites	Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. They should also be familiar with engineering design fundamentals.
Available Online	Yes

Explore the 3D Pattern Shape Creator Role	
Course Code	CAT-en-XGG-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	1.20 hours
Course Material	
Level	Fundamental
Audience	Mechanical designers, Architects, Engineers or BIM/ VDC consultants
Description	3D Pattern Shape Creator lets you design shapes and patterns through interactive panel by using parametric modeling.
Objectives	Upon completion of this course you will be able to: - Get how both interfaces (Graph & 3D Model) work with each other - Get fundamentals of visual scripting - Create a fully parametric model - Understand how it may be applicable to your business or your client's - Develop your own logics that can be re-used within your company - Share knowledge inside your organization - Build user interface and explore design variation using monitor
Prerequisites	
Available Online	Yes

Explore the Templates and Rules Designer Role	
Course Code	CAT-en-TER-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	2 hours
Course Material	
Level	Fundamental
Audience	Templates and Rules Designers
Description	This learning module provides you a guided and systematic approach to learn about the Templates and Rules Designer role. It will teach you how to automate the repetitive design process. It will also teach you how to validate the design specifications.
Objectives	Upon completion of this module, you will be able to: - Create User Defined Features and Engineering Templates to automate the repetitive design process - Create and manage reusable functions to write complex scripts easily - Create Expert Checks to validate the design specifications
Prerequisites	Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator, Mechanical Designer and Templates and Rules Designer
Available Online	Yes

Practice CATIA Engineering Rules Capture	
Course Code	CAT-en-KWA-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	10.17 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	This module will teach you how to create knowledgeware objects in order to embed parameters and design rules within your models. You will also learn how to check the models, reduce design errors and automate the modifications.
Objectives	Upon completion of this module you will be able to: - Create parametric models - Embed your design knowledge in the models - Automate the design and modification processes - Create design configurations using design tables - Customize the specification tree to display knowledgeware features
Prerequisites	Students attending this module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with the Enterprise Knowledge Language (EKL) and Part Design.
Available Online	Yes

Practice CATIA Engineering Templates Capture	
Course Code	CAT-en-PKT-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	2 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	This module will teach you how to create and store engineering templates and then reuse and adapt them in a new context.
Objectives	Upon completion of this module, you will be able to: - Create engineering templates - Reuse the templates in a new context
Prerequisites	Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. They should also be familiar with Part Design and Engineering Rules Capture.
Available Online	Yes

Practice CATIA Quality Rules Capture	
Course Code	CAT-en-KWE-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	Design Engineers
Description	This module will teach you how to create PLM knowledge objects in the 3DEXPERIENCE platform. You will work with PLM rules and check. You will learn how to create reusable functions using EKL. You will also learn how to store and manage the libraries of reusable functions.
Objectives	Upon completion of this module you will be able to: - Create Rule Sets - Create PLM Rules and Checks - Create Reusable Functions - Create and Manage Libraries of Reusable Functions
Prerequisites	Students attending this module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with the fundamentals of Enterprise Knowledge Language (EKL).
Available Online	Yes

Practice CATIA xGenerative Design	
Course Code	CAT-en-XGD-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	3 hours
Course Material	
Level	Fundamental
Audience	Create Designers, Architects, Mechanical Designers
Description	xGenerative Design lets you design both simple and complex shapes and patterns using parametric modeling. Whether you work in the 3D view or in the graph view, you can design geometries through a set of operations defined by input and output parameters.
Objectives	After completing this module, you will be able to: - Create generative patterns - Design complex surfaces - Explore design alternatives using variants
Prerequisites	- Knowledge: Students enrolling for this module should have completed the Explore the Collaborative Business Innovator Role module. - 3DEXPERIENCE Roles: Collaborative Business Innovator and Collaborative Industry Innovator
Available Online	Yes

CATIA

Multi-Discipline Engineering

Collaborate for Parametric Façade Modelling for Fabrication	
Course Code	CAT-en-BDFE-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	2.25 hours
Course Material	
Level	Fundamental
Audience	
Description	In this module, you will learn how to design a conceptual shape of a building from scratch using Building Planning. In addition, you will learn how to generate a fully parametric façade ready for fabrication from that conceptual shape. For each curtain wall, a technical drawing with good dimensions, an up-to-date Bill of materials and a step file is ready to be exported.
Objectives	At the end of this learning module, you will be able to: - Understand CATIA CCT datamodel - Generate a building massing - Explore main Building Space Planning features - Isolate part of the building and edit it in xGenerative Design - Synchronize web and native models - Create and instantiate templates - Prepare inputs for template instantiation
Prerequisites	
Available Online	Yes

Collaborate from Design to Manufacturing in Composites	
Course Code	CAT-en-CDMC-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	2.50 hours
Course Material	
Level	Fundamental
Audience	Composites Designers, Composites Engineers, Composites Manufacturers and Simulation Engineers
Description	In this module, you will discover the end-to-end process from design to manufacturing a composite part using the Dassault Systemes' integrated solutions in the 3DEXPERIENCE Platform for composites engineering. You will also discover how composites designers, simulation engineers and composites manufacturers collaborate using the 3DEXPERIENCE platform.
Objectives	Upon completion of this module, you will be able to: - Design a composite part - Simulate the composites design - Prepare the composite part for manufacturing and laser projection
Prerequisites	- Knowledge: Students attending this module must be familiar with the fundamentals of composites design and must have completed the Explore the Collaborative Business Innovator Role module. - Essential 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator, Airframe Composites Designer,

Collaborate from Design to Manufacturing in Composites	
	Composites Structures Analysis Engineer and Airframe Composites Manufacturing Engineer
Available Online	Yes

Discover Composite Materials	
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	2 hours
Course Material	
Level	Fundamental
Audience	
Description	In this module , you will discover the basics of composites -Defining the term 'Composite' -The Properties of fibres and resins -Different types of resin system and reinforcements -Room and elevated temperature resin systems -Identifying and comparing weave styles -The benefits of using composites to build components -Types of manufacturing processes -Fibre orientation and core materials
Objectives	Define the term composite - State 2 properties of fibre and resin - Compare 4 resin systems - Compare 4 fibre reinforcements - Explain the difference between room and elevated temperature resin systems - Identify and compare 3 weave styles - Explain the terms warp and weft - List 4 benefits of using composites to build components - Identify 3 composite manufacturing processes - Explain the terms Thermoplastic and Thermoset
Prerequisites	
Available Online	Yes

Explore the Airframe Composites Designer Role	
Course Code	CAT-en-AICOA-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	4.50 hours
Course Material	
Level	Fundamental
Audience	Composites Designers, Airframe Composites Designers
Description	In this module, you will discover and practice the key capabilities of the Airframe Composites Designer role. You will also learn how to design composites parts using the Manual and Grid Approach.
Objectives	Upon completion of this module, you will be able to: - Define Composites Parameters - Create Manual Plies - Analyze and Modify Plies - Create Solids from Plies - Analyze Composites Parts for Producibility - Generate Ply Books - Create Preliminary and Detailed Grid Design
Prerequisites	Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. They should be familiar with the basics of composites design. 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Airframe Composites Designer
Available Online	Yes

Explore the Airframe Composites Manufacturing Engineer Role	
Course Code	CAT-en-AICMA-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	3 hours
Course Material	
Level	Fundamental
Audience	Composites Manufacturers, Composites Manufacturing Engineers
Description	In this module, you will discover the Airframe Composites Manufacturing Engineer role along with its key capabilities to manufacture composites parts. The learning module enables you to prepare composites parts for manufacturing, analyze them for producibility and export the composites information for downstream manufacturing processes.
Objectives	Upon completion of this module, you will be able to: - Create manufacturing parts - Analyze manufacturing parts for their producibility - Create ply books - Prepare manufacturing parts for laser projection
Prerequisites	Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. They should be familiar with the composites manufacturing processes. 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Airframe Composites Manufacturing Engineer
Available Online	Yes

Explore the Composites Braiding and Forming Engineer Role	
Course Code	CAT-en-BRF-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	3 hours
Course Material	
Level	Fundamental
Audience	Composites Forming Engineers, Composites Braiding Engineers, Composites Manufacturers
Description	Discover and practice the key capabilities of the Composites Braiding and Forming Engineer role.
Objectives	Upon completion of this module, you will be able to: - Define composites parameters - Create composites design for braiding - Perform producibility analysis for braiding - Generate braiding mesh - Differentiate quick forming simulation and detailed forming simulation - Perform quick forming simulation
Prerequisites	- Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. They should be familiar with the basics of composites design and manufacturing processes. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Composites Braiding and Forming Engineer
Available Online	Yes

Explore the Composites Engineer for Transportation and Mobility Role	
Course Code	CAT-en-COEFT-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	6 hours
Course Material	
Level	Fundamental
Audience	Composites Designers, Composites Engineers for Transportation and Mobility
Description	In this module, you will discover and practice the key capabilities of the Composites Engineer for Transportation and Mobility role. You will also learn how to design composites parts using the manual and the grid approach.
Objectives	Upon completion of this module, you will be able to: - Define composites parameters - Create manual plies - Analyze and modify plies - Create solids from plies - Analyze composites parts for producibility - Generate ply books - Create preliminary and detailed grid design - Perform simulations on composites parts
Prerequisites	Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. They should be familiar with the basics of composites design. 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Composites Engineer for Transportation and Mobility

Explore the Composites Engineer for Transportation and Mobility Role

Available Online	Yes

Explore the Composites Manufacturing Engineer for Transportation and Mobility Role	
Course Code	CAT-en-COMET-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	3 hours
Course Material	
Level	Fundamental
Audience	Composites Manufacturing Engineers, Composites Manufacturers
Description	In this module, you will discover and practice the key capabilities of the Composites Manufacturing Engineer for Transportation and Mobility role. The learning module enables you to prepare composites parts for manufacturing and downstream manufacturing processes.
Objectives	Upon completion of this module, you will be able to: - Create manufacturing parts - Analyze manufacturing parts for their producibility - Create ply books - Prepare manufacturing parts for laser projection
Prerequisites	- Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. They should be familiar with the composites manufacturing processes. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Composites Manufacturing Engineer for Transportation and Mobility

Explore the Composites Manufacturing Engineer for Transportation and Mobility Role	
Available Online	Yes

Explore the Mold and Tooling Designer Role	
Course Code	CAT-en-MTG-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	6 hours
Course Material	
Level	Fundamental
Audience	Mold & Tooling Designers
Description	This learning module provides you with a guided and systematic approach to learn about the Mold & Tooling Design role. You will learn how to import design data and prepare a mold project. You will create molded part from the design part and also create the mold tools. Finally, you will learn how to add additional components from the catalog.
Objectives	Upon completion of this module, you will be able to: - Import components from the catalog - Prepare a molded part - Create conceptual mold design - Create detailed core cavity design - Create detailed mold design - Create the cooling circuits - Analyze the design
Prerequisites	- Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. They must be familiar with the basic mold tool design concepts. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Mold & Tooling Designer

Explore the Mold and Tooling Designer Role

Available Online	Yes

Lightweight Engineering for Sustainable Innovations	
Course Code	CAT-en-LESI-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	0.33 hours
Course Material	
Level	Fundamental
Audience	
Description	In this module,you will discover how the lightweight engineering domain is becoming the key to sustainable innovation enabling new ways for industry transformation
Objectives	Upon completion of this learning module, you will learn: - The Need for Lightweight Engineering in the Industry Renaissance - Lightweight Engineering Challenges imposed by the Industry Renaissance - Dassault Systèmes Value Proposition in Lightweight Engineering
Prerequisites	
Available Online	Yes

Master CATIA Assembly Design	
Course Code	CAT-en-ASD-A-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	11.50 hours
Course Material	
Level	Advanced
Audience	Mechanical Designers
Description	This module will introduce you to complex assembly modeling techniques. You will learn how to design a product architecture and manage complex assembly structures. You will also learn how to use advanced features to design parts within an assembly environment and how to analyze interferences.
Objectives	Upon the completion of this module you will be able to: - Analyze interferences - Analyze component links and relations - Design complex products - Design new parts within a product - Manage complex product structures
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and be familiar with the CATIA Part Design and Assembly Design fundamentals.
Available Online	Yes

Master CATIA Drafting	
Course Code	CAT-en-GDR-A-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	12 hours
Course Material	
Level	Advanced
Audience	Draftsmen
Description	This module will teach you how to manage drawing sheets and views in the Drafting app. You will also learn how to use advanced tools to dress-up, annotate views and customize the Drafting app.
Objectives	Upon completion of this module you will be able to: - Finalize the drawing sheet - Work with large assemblies - Customize the drafting app - Perform administrative tasks - Add Bill of Material
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. Additionally, they should be familiar with Part Design and Assembly Design in CATIA.
Available Online	Yes

Master CATIA Part Design	
Course Code	CAT-en-PDG-A-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	7 hours
Course Material	
Level	Advanced
Audience	Mechanical and Sheet Metal Designers
Description	This module will introduce you to complex 3D modeling techniques, using advanced sketch-based and surface-based features. You will learn how to manage complex part structures and how to improve productivity by reusing existing features. Finally, you will learn how to use parameters and tables to drive the design of a model.
Objectives	Upon completion of this module you will be able to: - Design parts with complex geometries - Create and manage robust part structures - Create fully parameterized models - Create re-usable features
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and be familiar with CATIA Part Design fundamentals.
Available Online	Yes

Practice CATIA 2D Layout for 3D Design	
Course Code	CAT-en-LO1-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	In this module you will learn how to create 2D layout views in a 3D model and use them to design the part in the 3D environment.
Objectives	Upon completion of this module you will be able to: - Create 2D layout views in a 3D environment - Export 2D geometry into a 3D environment - Create drawings using the 2D layout views
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with CATIA Part and Assembly Design.
Available Online	Yes

Practice CATIA 3D Annotation Insight	
Course Code	CAT-en-LFT-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	Design, Quality and other such departments where interrogating and annotating the 3D model is a frequent or occasional requirement.
Description	This module teaches how to use the 3D Annotation Insight app to review and filter 3D annotations information contained within part and assembly documents. Students will learn how to hide / show annotations and captures, use the dimensioning and tolerancing annotations to enhance understanding and improve the decision making.
Objectives	Upon completion of this module you will be able to: - Access and visualize the view, capture and annotation review features - Query and filter 3D annotations - Show/Hide individual as well as all annotations of a given type - Display FTA captures - Remove the FTA clipping plane of a capture - Filter 3D annotations
Prerequisites	Students attending this learning module should have taken the Explore the Collaborative Business Innovator Role module and should be familiar with the Windows Operating System.

Practice CATIA 3D Annotation Insight	
Available Online	Yes

Practice CATIA 3D Printing Preparation	
Course Code	CAT-en-TLE-F-15-221
Available Release	3DEXPERIENCE R2022x
Duration	2 hours
Course Material	
Level	Fundamental
Audience	Reverse Engineers, Virtual and Physical Prototypers
Description	In this module, you will learn how to create an output for 3D printing. You will also learn how to improve the characteristics of a mesh.
Objectives	Upon the completion of this module, you will be able to: - Import a cloud of points - Prepare a mesh for 3D Printing - Create an output for 3D Printing
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA 3D Tolerancing and Annotation	
Course Code	CAT-en-FTA-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	12 hours
Course Material	
Level	Fundamental
Audience	3D Master Designers
Description	In this module, you will learn how to annotate a 3D part. You will learn how to create annotation planes and how to add and manage 3D annotations on these planes. You will also learn how to create 3D views and use them to create 2D drawing views. You will also be able to create annotations on assemblies.
Objectives	Upon completion of this module you will be able to: - - Add 3D annotations to a part - - Manage and position the annotations - - Manage the 3D geometry associated to the annotations
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with CATIA Knowledgeware and basic CATIA Solid and Surface Design.
Available Online	Yes

Practice CATIA Assembly Design - Added Exercises	
Course Code	CAT-en-ASD-X-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	6 hours
Course Material	
Level	Exercise
Audience	Mechanical Designers
Description	This module provides you with exercises for additional practice on the 3DEXPERIENCE Assembly Design app. The exercises have been created based on Industry practices. You will practice creating assembly structure, positioning components, constraining components using engineering connections and modifying parts in assembly context.
Objectives	Upon the completion of this module you will be able to: - Practice your Assembly Design skills using selected scenarios - Apply the recommended methodology in various scenarios
Prerequisites	Students attending this learning module should be familiar with Part Design and Assembly Design.
Available Online	Yes

Practice CATIA Bent Part Design	
Course Code	CAT-en-SMB-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	6 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designer and Sheetmetal Designer
Description	This module will teach you how to use the Bent Part Design app to create and modify a sheetmetal part. You will learn how to define the sheetmetal parameters and create features such as walls, bends, cutouts and corners. You will also learn different techniques for multi-selecting the objects and constraining the parts.
Objectives	Upon completion of this module you will be able to: - Define and modify the sheetmetal parameters - Create a sheetmetal part using the wall and bend features - Manage the folded and unfolded views of parts - Create cutouts, chamfers and corners - Constrain the parts
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Composites Design	
Course Code	CAT-en-CPE-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	Composites Designers, Airframe Composites Designers
Description	The CATIA Composites Design app offers composites design engineers with a complete set of process-oriented features to engineer composites parts. This learning module lets you practice the various approaches used to design a composites part. You will also learn how to analyze composites design and generate production documents.
Objectives	Upon the completion of this module, you will be able to: - Define Composites Parameters - Import Composites Design Directly from an Excel File - Design a Composite Part using the Grid Approach - Design a Composite Part using the Zone Approach with Solid Slicing - Perform and inspect the Producibility Analysis - Export and import the Ply Design Data - Create a Ply Book
Prerequisites	Students attending this module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with CATIA Drafting.
Available Online	Yes

Practice CATIA Die Face Design	
Course Code	CAT-en-TDF-F-15-221
Available Release	3DEXPERIENCE R2022x
Duration	20 hours
Course Material	
Level	Fundamental
Audience	
Description	Use powerful and business oriented command from the Die Face Design App to create a concept method plan and validate it through geometric analysis , quickly design accurate tool surfaces and easily manage design change.
Objectives	Create a stamping concept method plan - Validate a method plan through knowledge rules and geometrical analysis - Comprehend how CATIA Die Face Design helps reduce the time to design a productive stamping process - Design accurate tool surface, while keeping the link to the concept definition - Compute accurate unfolded views of flanges through SIMULIA - Learn how CATIA Die Face Design helps reduce time and knowledge needed to design high quality addendum surfaces and tool base surfaces. - Use Die face Design design change tools to replace a part by a newer revision - Understand how CATIA Die Face Design helps reduce the time needed to manage design changes
Prerequisites	Generative Shape Design

Practice CATIA Die Face Design

Available Online	Yes

Practice CATIA Digitized Shape Preparation	
Course Code	CAT-en-DSE-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	Transportation Designers
Description	In this module, you will learn how to create a cloud of points and then process those points. You will also learn how to mesh the clouds, improve the mesh characteristics, align the cloud of points and perform deviation analysis.
Objectives	Upon the completion of this module, you will be able to: - Create a cloud of points - Process the points of a cloud - Mesh the clouds - Improve the mesh characteristics - Align the cloud of points - Perform deviation analysis
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Drafting	
Course Code	CAT-en-GDR-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	6 hours
Course Material	
Level	Fundamental
Audience	Draftsmen
Description	This module will teach you how to create drawings using the Drafting app. You will learn how to create projection views and section views of a 3D model or an assembly and add the required dimensions.
Objectives	Upon completion of this module you will be able to: - Create simple projection views and section views of 3D parts and assemblies - Position the views on a drawing sheet - Add dimensions and annotations to the views
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. Additionally, they should be familiar with Part Design and Assembly Design in CATIA.
Available Online	Yes

Practice CATIA Engineering Templates Capture	
Course Code	CAT-en-PKT-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	2 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	This module will teach you how to create and store engineering templates and then reuse and adapt them in a new context.
Objectives	Upon completion of this module you will be able to: - Create engineering templates - Reuse the templates in a new context
Prerequisites	Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. They should also be familiar with Part Design and Engineering Rules Capture.
Available Online	Yes

Practice CATIA Engineering Templates Reuse	
Course Code	CAT-en-KT1-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	0.50 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	In this module, you will learn how to create customized features by reusing the power copy and user feature.
Objectives	Upon completion of this module you will be able to: - Create customized features using templates.
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA FreeStyle Shape Design	
Course Code	CAT-en-FSS-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	12 hours
Course Material	
Level	Fundamental
Audience	Industrial Designers and Creative Designers
Description	This module will teach you how to create flawless, styled shapes from scratch using 3D free-form curves and surfaces or using digitized data. You will also learn how to analyze and enhance the quality of existing curves and surfaces.
Objectives	Upon completion of this module you will be able to: - - Create styled shapes using digitized data - Create surfaces using the curve-based and the surface-based approaches - Analyze and enhance the quality of curves and surfaces
Prerequisites	Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. Additionally, they should be familiar with Generative Surface Design in CATIA.
Available Online	Yes

Practice CATIA Functional Plastic Parts	
Course Code	CAT-en-FMP-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	6 hours
Course Material	
Level	Fundamental
Audience	Plastic Part Designers and Molded Part Designers
Description	This module will teach you how to use the Functional Plastic Parts app to create molded parts. You will also learn how to create a core and a cavity using styling data. You will be able to create a detailed design by adding holes, stiffening ribs, bosses and additional fixtures. You will also be able to modify the design and complete the final part with additional draft and fillet features.
Objectives	Upon completion of this module you will be able to: - Create a molded plastic part - Add holes and protected areas - Add ribs and bosses
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with the Part Design app.
Available Online	Yes

Practice CATIA Generative Shape Design	
Course Code	CAT-en-GSD-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	Surface Designers
Description	This module will teach you how to use the Generative Shape Design app to create curves and surfaces. You will learn how to assemble, re-limit, and connect the geometries smoothly. You will also learn how to analyze the wireframe and the surface quality and rectify the detected defects.
Objectives	Upon the completion of this module, you will be able to: - - Create curves and improve the quality of the imported wireframes - - Create surfaces based on the wireframe geometries - - Assemble, re-limit and connect the surfaces smoothly to achieve the topology - - Analyze the surface quality and heal the defects
Prerequisites	- Knowledge: Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. - - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Mechanical and Shape Designer
Available Online	Yes

Practice CATIA Generative Shape Design - Added Exercises	
Course Code	CAT-en-GSD-X-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	16 hours
Course Material	
Level	Exercise
Audience	Mechanical Designers and Surface Designers
Description	This module provides you with an extensive database of exercises for additional practice on advanced topics of Surface Design. The exercises have been created based on the Industry practices.
Objectives	Upon completion of this module you will be able to: - Create wireframe features using the existing curves and surfaces - Create advanced and parameterized swept surfaces - Perform advanced surface analysis and gap correction - Create advanced blend features - Improve the quality and stability of created geometries
Prerequisites	Students attending this module should know the basic and advanced features of Surface Design.
Available Online	Yes

Practice CATIA Generative Shape Develop	
Course Code	CAT-en-DL1-F-15-221
Available Release	3DEXPERIENCE R2022x
Duration	1.83 hours
Course Material	
Level	Fundamental
Audience	Surface Designers
Description	This module will teach you how to use CATIA Generative Shape Develop app functionalities to create unfolded surfaces from a ruled surface. You will learn how to develop wires and points onto a revolution surface.
Objectives	Upon completion of this module, you will be able to: - Create unfolded surfaces from a ruled surface using the CATIA Generative Shape Develop app functionalities - Develop wires and points onto a revolution surface
Prerequisites	Students attending this module should have completed the Gateway to the 3DEXPERIENCE platform course. They should also be familiar with Surface Design in CATIA.
Available Online	Yes

Practice CATIA Generative Wireframe and Surface	
Course Code	CAT-en-GS1-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	19 hours
Course Material	
Level	Fundamental
Audience	Surface Designers
Description	This module will teach you how to use the Generative Wireframe and Surface app to create curves and surfaces. You will learn how to assemble, re-limit and connect the geometries smoothly. You will also learn how to analyze the wireframe and the surface quality and rectify the detected defects.
Objectives	Upon completion of this module, you will be able to: - Create curves and improve the quality of the imported wireframes - Create surfaces based on the wireframe geometries - Assemble, re-limit and connect the surfaces smoothly to achieve the topology - Analyze the surface quality and heal the defects
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Natural Assembly	
Course Code	CAT-en-LCP-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	Mechanical Engineers and Designers, and Design Architects
Description	This module will teach you how to create and manage product structures. You will explore a product and modify its structure by adding new products and exploding existing products. You will then scan the structure to activate a working product level, search for and add existing parts and use constraints to position the parts. Finally, you will create a new sub-product from a components list and use it to complete the product.
Objectives	Upon completion of this module you will be able to: - Explore a product and modify its structure using Natural Assembly - Select the product levels using the Ladder functionality - Search for a product and insert it in an existing assembly - Position the parts using constraints - Create a new sub-product from a component's list and use it to complete the product
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.

Practice CATIA Natural Assembly

Available Online	Yes

Practice CATIA Natural Shape	
Course Code	CAT-en-LSP-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	7 hours
Course Material	
Level	Fundamental
Audience	Conceptual Designers, Stylists, Simulation and Manufacturing Engineers
Description	This module will introduce you to the CATIA Natural Shape app and its unique working environment. You will learn how to use the app to conceptualize, create and modify mechanical parts and shapes. The course features short-duration demos followed by exercises which will allow you to practice. You will also learn the related theory, tips and recommendations while performing the exercises.
Objectives	Upon the completion of this module you will be able to: - Create a conceptual design directly in 3D - Use the hybrid design environment to conceptualize your designs - Work on the structure to create the 3D parts - Navigate through the structure and position the parts - Reuse the existing designs in the 3D models
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Natural Sketch	
Course Code	CAT-en-NTS-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	Creative Designers
Description	This module contains both videos and exercises. After a short introduction to the app and the user interface, videos will be used to demonstrate the sketching techniques and the use of the sketch tools. You will use the exercises that follow the videos to practice what you have learned and familiarize yourself with the available tools.
Objectives	Upon completion of this module you will be able to: - Sketch curves or primitives in 2D and 3D - Trace and refine vector or primitive curves - Sketch on a surface - Import and edit images - Transform curves and images
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. They should also be familiar with basic sketching techniques.
Available Online	Yes

Practice CATIA Part Design - Added Exercises	
Course Code	CAT-en-PDG-X-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	12.75 hours
Course Material	
Level	Exercise
Audience	Mechanical Designers
Description	This module provides you with an exercise database for additional practice on the 3DEXPERIENCE Part Design app. The exercises have been arranged in increasing order of difficulty. The fundamental exercises will check and refresh your basic Part Design skills before you move on to more complex topics. The advanced exercises will make you practice the recommended design methodologies using realistic parts.
Objectives	Upon completion of this module you will be able to: - Apply your Mechanical skills in selected scenarios. - Employ the recommended methodology in various situations and efficiently use the Mechanical workbenches.
Prerequisites	Students attending this learning module should be familiar with CATIA Part Design.
Available Online	Yes

Practice CATIA Quality Rules Reuse	
Course Code	CAT-en-KE1-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	5 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	This module will show you how to share corporate knowledge stored in the rule bases and leverage it across the company to ensure design compliance with the established standards. You will also learn to create reports and manage their template.
Objectives	Upon completion of this module you will be able to: - Automate the design modifications - Analyze and create reports
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Sheet Metal Design	
Course Code	CAT-en-SMD-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	16 hours
Course Material	
Level	Fundamental
Audience	Sheet Metal Designer
Description	This module will teach you how to create a sheet metal part using standard wall, bend and stamping features. You will see how user features can be incorporated into the design and how to use both standard and user-defined materials. Finally you will learn how to create a flat pattern and produce a detailed, annotated drawing.
Objectives	Upon completion of this module you will be able to: - Create a sheet metal part using wall and bend features - Manage folded and unfolded views - Use pre-defined sheet metal parameters - Create stamped features - Create duplicating features and use the multi-body methodology - Creating drawings of sheet metal parts - Export a finished flat pattern
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and be familiar with the CATIA Part Design app.
Available Online	Yes

Practice CATIA Surface Design - Added Exercises	
Course Code	CAT-en-GS1-X-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	8 hours
Course Material	
Level	Exercise
Audience	Mechanical Surface Designers
Description	This module provides you with an exercise database for additional practice on 3DEXPERIENCE Surface Design. The exercises have been created based on Industry practices. You will get to practice skills such as creating wireframes and surfaces, creating surfacic shells and solid parts, and working with multiple parts that are referencing a common part.
Objectives	These exercises will allow you to put your Shape skills into practice on selected scenarios. - You will apply the recommended methodology in various situations. - You will enhance your understanding and usage of the Shape apps.
Prerequisites	Students attending this course should be familiar with Surface Design.
Available Online	Yes

Transition to the 3DEXPERIENCE platform for Mechanical Designers	
Course Code	CAT-en-3DMT-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	12 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	In this module, you will learn how to design a new part with the 3DEXPERIENCE platform. You will also learn how to compute weight, create a new part version, replace the original and create a drawing. Finally, you will learn how to manage complex product structures, create product features, manage catalogs and analyze assemblies.
Objectives	Upon completion of this module, you will be able to: - Create new products and parts - Insert a part in a product and position it - Apply materials to parts - Calculate the weight of a product - Insert and complete a drawing - Create a new part version - Replace a part and update a product - Design parts in context - Create assembly features and catalogs - Analyze the assemblies
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. They should also be familiar with CATIA V5 Mechanical Design.

Transition to the 3DEXPERIENCE platform for Mechanical Designers

Available Online	Yes

Transition to the 3DEXPERIENCE platform for Surface Designers	
Course Code	CAT-en-3DST-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	7 hours
Course Material	
Level	Fundamental
Audience	Designers who need to work with styled parts.
Description	In this module, you will learn how to design a new part with the 3DEXPERIENCE platform. It addresses the needs of Surface Designers. You will also learn how to create a new part version, replace the original part and update the product.
Objectives	Upon completion of this module you will be able to: - Create new products and parts - Create a new part version - Replace a part and update a product
Prerequisites	- Knowledge: Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. They should also be familiar with CATIA V5 Mechanical Design and Surface Design. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Mechanical and Shape Designer
Available Online	Yes

Understand Composite Design	
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	2 hours
Course Material	
Level	Fundamental
Audience	
Description	In this module , you will discover how to design a part taken account the specificities of the materials composites
Objectives	Identify some of the key requirements to capture for composite design and manufacture - Understand the process of selection the correct materials and processes - Appreciate the principles of Classical Laminate Analysis - Be able to create a laminate stacking sequence - Identify some common composite design guidelines - Understand the effects of defects on the design process
Prerequisites	
Available Online	Yes

Understand Lightweight Engineering	
Course Code	CAT-en-OLE-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	2.25 hours
Course Material	
Level	Fundamental
Audience	
Description	In this module, you will understand various domains of lightweight engineering that help the designers to make the right decisions on the adoption of lightweight technologies.
Objectives	Upon the completion of this module, you will be able to: - Optimize parts with Cognitive Augmented Design approach - Understand the CATIA Composites Design approach - Design parts with Reverse Engineering - Design Sheetmetal parts for the Hydro-forming process - Create Stamping Die Face design for sheetmetal parts
Prerequisites	- Knowledge: Learners attending this module should have completed the Explore the Collaborative Business Innovator role module. Additionally, they must be familiar with the basics of mechanical design and engineering. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator, Function Driven Gen. Designer, Simulation Collaborator, Composites Designer, Hydroformed

Understand Lightweight Engineering	
	SheetMetal Designer, Reverse Engineer and Stamping Die Designer.
Available Online	Yes

CATIA

Styling

Explore the Mechanical Shape Refinement Designer Role	
Course Code	CAT-en-SUM-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	1 hours
Course Material	
Level	Fundamental
Audience	Mechanical Shape Refinement Designer
Description	This learning module provides you a guided and systematic approach to learn about the Mechanical Shape Refinement Designer role. It will teach you how to improve surface quality and reach higher shape standards.
Objectives	Upon the completion of this module, you will be able to: - Analyze the surface for any imperfections - Create surfaces with higher perceived quality while respecting engineering constraints
Prerequisites	- Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Mechanical Shape Refinement Designer
Available Online	Yes

Explore the Product Industrial Designer Role	
Course Code	CAT-en-CDD-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	3 hours
Course Material	
Level	Fundamental
Audience	Product Industrial Designers
Description	This learning module provides you with a guided and systematic approach to learn about the Product Industrial Designer role. It will teach you how to import the 2D sketch and explore ideas by sketching in 3D. It will also teach you, how to sculpt in 3D with ultra-fast virtual clay modelling using the subdivision surface technology. It will also teach you how to create precise shapes with NURBS surface modeling and direct solid modeling.
Objectives	Upon the completion of this module, you will be able to: - Create 3D sketches for conceptual design - Sculpt the concept shapes using the subdivision surface technology - Add technical details on the concept designs - Assemble and modify parts using direct modeling methods - Create high quality rendering images for life like experience
Prerequisites	Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Product Industrial Designer

Explore the Product Industrial Designer Role

Available Online	Yes

Explore the Reverse Engineer Role	
Course Code	CAT-en-RPE-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	1.50 hours
Course Material	
Level	Fundamental
Audience	Reverse Engineer, Virtual & Physical Prototyper, Shape Designer
Description	Reverse Engineer is a specific role dealing with the transition between digital and physical worlds. In this module, you will learn how to import and process the digitized data (scans or clouds of points). You will also learn to create the surface from the digitized data.
Objectives	Upon completion of this module you will be able to: - Import and process digitized point cloud data - Create mesh on the point cloud data - Extract characteristic curves from the data - Create curves on mesh data - Create surfaces from curves
Prerequisites	Knowledge: Students attending this learning module should have completed the Explore the Business Innovator Role module. 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Reverse Engineer
Available Online	Yes

Lightweight Engineering for Sustainable Innovations	
Course Code	CAT-en-LESI-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	0.33 hours
Course Material	
Level	Fundamental
Audience	
Description	In this module,you will discover how the lightweight engineering domain is becoming the key to sustainable innovation enabling new ways for industry transformation
Objectives	Upon completion of this learning module, you will learn: - The Need for Lightweight Engineering in the Industry Renaissance - Lightweight Engineering Challenges imposed by the Industry Renaissance - Dassault Systèmes Value Proposition in Lightweight Engineering
Prerequisites	
Available Online	Yes

Master CATIA Assembly Design	
Course Code	CAT-en-ASD-A-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	12 hours
Course Material	
Level	Advanced
Audience	Mechanical Designers
Description	This module will introduce you to complex assembly modeling techniques. You will learn how to design a product architecture and manage complex assembly structures. You will also learn how to use advanced features to design parts within an assembly environment and how to analyze interferences.
Objectives	Upon completion of this module you will be able to: - Analyze interferences - Analyze component links and relations - Design complex products - Design new parts within a product - Manage complex product structures
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and be familiar with the CATIA Part Design and Assembly Design fundamentals.
Available Online	Yes

Master CATIA Drafting	
Course Code	CAT-en-GDR-A-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	12 hours
Course Material	
Level	Advanced
Audience	Draftsmen
Description	This module will teach you how to manage drawing sheets and views in the Drafting app. You will also learn how to use advanced tools to dress-up, annotate views and customize the Drafting app.
Objectives	Upon completion of this module you will be able to: - Finalize the drawing sheet - Work with large assemblies - Customize the drafting app - Perform administrative tasks - Add Bill of Material
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. Additionally, they should be familiar with Part Design and Assembly Design in CATIA.
Available Online	Yes

Practice CATIA 2D Layout for 3D Design	
Course Code	CAT-en-LO1-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	In this module you will learn how to create 2D layout views in a 3D model and use them to design the part in the 3D environment.
Objectives	Upon completion of this module you will be able to: - Create 2D layout views in a 3D environment - Export 2D geometry into a 3D environment - Create drawings using the 2D layout views
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with CATIA Part and Assembly Design.
Available Online	Yes

Practice CATIA Assembly Design - Added Exercises	
Course Code	CAT-en-ASD-X-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	6 hours
Course Material	
Level	Exercise
Audience	Mechanical Designers
Description	This module provides you with exercises for additional practice on the 3DEXPERIENCE Assembly Design app. The exercises have been created based on Industry practices. You will practice creating assembly structure, positioning components, constraining components using engineering connections and modifying parts in assembly context.
Objectives	Upon completion of this module you will be able to: - Practice your Assembly Design skills using selected scenarios - Apply the recommended methodology in various scenarios
Prerequisites	Students attending this learning module should be familiar with Part Design and Assembly Design.
Available Online	Yes

Practice CATIA Digitized Shape Preparation	
Course Code	CAT-en-DSE-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	Transportation Designers
Description	In this module, you will learn how to create a cloud of points and then process those points. You will also learn how to mesh the clouds, improve the mesh characteristics, align the cloud of points and perform deviation analysis.
Objectives	Upon the completion of this module, you will be able to: - Create a cloud of points - Process the points of a cloud - Mesh the clouds - Improve the mesh characteristics - Align the cloud of points - Perform deviation analysis
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Digitized Shape to Surface	
Course Code	CAT-en-DSS-A-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	2 hours
Course Material	
Level	Fundamental
Audience	
Description	This module will teach you how to create a surface from mesh shape using various methods. You will also learn how to create curves to generate surfaces.
Objectives	Upon completion of this module, you will be able to: - Import the scan data - Create curves - Create mesh surfaces using various tools - Analyze the mesh
Prerequisites	- Knowledge: Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Reverse Engineer
Available Online	Yes

Practice CATIA Engineering Templates Reuse	
Course Code	CAT-en-KT1-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	0.50 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	In this course, you will learn how to create customized features by reusing the power copy and user feature.
Objectives	Upon completion of this course you will be able to: - Create customized features using templates.
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA FreeStyle Shape Design	
Course Code	CAT-en-FSS-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	12 hours
Course Material	
Level	Fundamental
Audience	Industrial Designers and Creative Designers
Description	This module will teach you how to create flawless, styled shapes from scratch using 3D free-form curves and surfaces or using digitized data. You will also learn how to analyze and enhance the quality of existing curves and surfaces.
Objectives	Upon completion of this module you will be able to: - - Create styled shapes using digitized data - Create surfaces using the curve-based and the surface-based approaches - Analyze and enhance the quality of curves and surfaces
Prerequisites	Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. Additionally, they should be familiar with Generative Surface Design in CATIA.
Available Online	Yes

Practice CATIA Generative Shape Design	
Course Code	CAT-en-GSD-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	Surface Designers
Description	This module will teach you how to use the Generative Shape Design app to create curves and surfaces. You will learn how to assemble, re-limit, and connect the geometries smoothly. You will also learn how to analyze the wireframe and the surface quality and rectify the detected defects.
Objectives	Upon completion of this module, you will be able to: - - Create curves and improve the quality of the imported wireframes - - Create surfaces based on the wireframe geometries - - Assemble, re-limit and connect the surfaces smoothly to achieve the topology - - Analyze the surface quality and heal the defects
Prerequisites	- Knowledge: Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. - - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Mechanical and Shape Designer
Available Online	Yes

Practice CATIA Generative Shape Design - Added Exercises	
Course Code	CAT-en-GSD-X-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	16 hours
Course Material	
Level	Exercise
Audience	Mechanical Designers and Surface Designers
Description	This module provides you with an extensive database of exercises for additional practice on advanced topics of Surface Design. The exercises have been created based on the Industry practices.
Objectives	Upon completion of this module you will be able to: - Create wireframe features using the existing curves and surfaces - Create advanced and parameterized swept surfaces - Perform advanced surface analysis and gap correction - Create advanced blend features - Improve the quality and stability of created geometries
Prerequisites	Students attending this module should know the basic and advanced features of Surface Design.
Available Online	Yes

Practice CATIA Generative Wireframe and Surface	
Course Code	CAT-en-GS1-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	20 hours
Course Material	
Level	Fundamental
Audience	Surface Designers
Description	This module will teach you how to use the Generative Wireframe and Surface app to create curves and surfaces. You will learn how to assemble, re-limit and connect the geometries smoothly. You will also learn how to analyze the wireframe and the surface quality and rectify the detected defects.
Objectives	Upon completion of this module, you will be able to: - Create curves and improve the quality of the imported wireframes - Create surfaces based on the wireframe geometries - Assemble, re-limit and connect the surfaces smoothly to achieve the topology - Analyze the surface quality and heal the defects
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Imagine and Shape (IMA)	
Course Code	CAT-en-IMA-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	16 hours
Course Material	
Level	Fundamental
Audience	Shape Designers, Product Stylists and Industrial Designers
Description	This module will teach you how to use the CATIA Imagine & Shape app to create, modify and improve product shapes and styles. You will learn how to use the Sketch Tracer app to import stylist's images in the 3DEXPERIENCE platform. You will also learn how to create an environment for a designed model and render it.
Objectives	Upon completion of this module you will be able to: - Create subdivision surfaces using tools specific to the Imagine and Shape app - Modify the style surfaces using Generative Shape Design tools - Create the required environment around a model - Apply materials to the created models
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. Additionally, they should be familiar with the fundamentals of CATIA Mechanical and Shape Design.
Available Online	Yes

Practice CATIA Live Rendering	
Course Code	CAT-en-LRE-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	Visual Experience Designers
Description	This module will introduce you to the CATIA Live Rendering app and its working environment. You will learn how to create highly realistic renderings and visualizations by application of customized materials, ambiences, cameras and lights. You will also learn about various other tools and options that you can use for creating rendered images and videos.
Objectives	Upon completion of this module, you will be able to: - Create and apply materials and stickers to 3D models. - Enhance a 3D Scene by adding dome ambiences and HDRi lights. - Create Cameras and animations for realistic visualizations and renderings - Render batches of images and animations - Export rendered images and generate videos - Add 3D environment and visualize the model
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Natural Assembly	
Course Code	CAT-en-LCP-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	Mechanical Engineers and Designers, and Design Architects
Description	This module will teach you how to create and manage product structures. You will explore a product and modify its structure by adding new products and exploding existing products. You will then scan the structure to activate a working product level, search for and add existing parts and use constraints to position the parts. Finally, you will create a new sub-product from a components list and use it to complete the product.
Objectives	Upon completion of this module you will be able to: - Explore a product and modify its structure using Natural Assembly - Select the product levels using the Ladder functionality - Search for a product and insert it in an existing assembly - Position the parts using constraints - Create a new sub-product from a component's list and use it to complete the product
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.

Practice CATIA Natural Assembly

Available Online	Yes

Practice CATIA Natural Shape	
Course Code	CAT-en-LSP-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	7 hours
Course Material	
Level	Fundamental
Audience	Conceptual Designers, Stylists, Simulation and Manufacturing Engineers
Description	This module will introduce you to the CATIA Natural Shape app and its unique working environment. You will learn how to use the app to conceptualize, create and modify mechanical parts and shapes. The course features short-duration demos followed by exercises which will allow you to practice. You will also learn the related theory, tips and recommendations while performing the exercises.
Objectives	Upon completion of this module you will be able to: - Create a conceptual design directly in 3D - Use the hybrid design environment to conceptualize your designs - Work on the structure to create the 3D parts - Navigate through the structure and position the parts - Reuse the existing designs in the 3D models
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Natural Sketch	
Course Code	CAT-en-NTS-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	Creative Designers
Description	This module contains both videos and exercises. After a short introduction to the app and the user interface, videos will be used to demonstrate the sketching techniques and the use of the sketch tools. You will use the exercises that follow the videos to practice what you have learned and familiarize yourself with the available tools.
Objectives	Upon completion of this module you will be able to: - Sketch curves or primitives in 2D and 3D - Trace and refine vector or primitive curves - Sketch on a surface - Import and edit images - Transform curves and images
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. They should also be familiar with basic sketching techniques.
Available Online	Yes

Practice CATIA Quality Rules Reuse	
Course Code	CAT-en-KE1-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	5 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	This module will show you how to share corporate knowledge stored in the rule bases and leverage it across the company to ensure design compliance with the established standards. You will also learn to create reports and manage their template.
Objectives	Upon completion of this module you will be able to: - Automate the design modifications - Analyze and create reports
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Surface Design - Added Exercises	
Course Code	CAT-en-GS1-X-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	8 hours
Course Material	
Level	Exercise
Audience	Mechanical Surface Designers
Description	This module provides you with an exercise database for additional practice on 3DEXPERIENCE Surface Design. The exercises have been created based on Industry practices. You will get to practice skills such as creating wireframes and surfaces, creating surfacic shells and solid parts, and working with multiple parts that are referencing a common part.
Objectives	These exercises will allow you to put your Shape skills into practice on selected scenarios. - You will apply the recommended methodology in various situations. - You will enhance your understanding and usage of the Shape apps.
Prerequisites	Students attending this course should be familiar with Surface Design.
Available Online	Yes

Understand Lightweight Engineering	
Course Code	CAT-en-OLE-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	2.25 hours
Course Material	
Level	Fundamental
Audience	
Description	In this module, you will understand various domains of lightweight engineering that help the designers to make the right decisions on the adoption of lightweight technologies.
Objectives	Upon the completion of this module, you will be able to: - Optimize parts with Cognitive Augmented Design approach - Understand the CATIA Composites Design approach - Design parts with Reverse Engineering - Design Sheetmetal parts for the Hydro-forming process - Create Stamping Die Face design for sheetmetal parts
Prerequisites	- Knowledge: Learners attending this module should have completed the Explore the Collaborative Business Innovator role module. Additionally, they must be familiar with the basics of mechanical design and engineering. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator, Function Driven Gen. Designer, Simulation Collaborator, Composites Designer, Hydroformed

Understand Lightweight Engineering	
	SheetMetal Designer, Reverse Engineer and Stamping Die Designer.
Available Online	Yes

CATIA

Surface Rafinement

Explore the Mechanical Shape Refinement Designer Role	
Course Code	CAT-en-SUM-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	1 hours
Course Material	
Level	Fundamental
Audience	Mechanical Shape Refinement Designer
Description	In this module, you will learn about the key functionalities of the Mechanical Shape Refinement Designer role. You will also learn how to improve surface quality and achieve higher shape standards.
Objectives	Upon the completion of this module, you will be able to: - Analyze the surface for any imperfections - Create surfaces with higher perceived quality while respecting engineering constraints
Prerequisites	- Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Mechanical Shape Refinement Designer
Available Online	Yes

Master CATIA Assembly Design	
Course Code	CAT-en-ASD-A-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	11.50 hours
Course Material	
Level	Advanced
Audience	Mechanical Designers
Description	This module will introduce you to complex assembly modeling techniques. You will learn how to design a product architecture and manage complex assembly structures. You will also learn how to use advanced features to design parts within an assembly environment and how to analyze interferences.
Objectives	Upon the completion of this module you will be able to: - Analyze interferences - Analyze component links and relations - Design complex products - Design new parts within a product - Manage complex product structures
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and be familiar with the CATIA Part Design and Assembly Design fundamentals.
Available Online	Yes

Master CATIA Drafting	
Course Code	CAT-en-GDR-A-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	12 hours
Course Material	
Level	Advanced
Audience	Draftsmen
Description	This module will teach you how to manage drawing sheets and views in the Drafting app. You will also learn how to use advanced tools to dress-up, annotate views and customize the Drafting app.
Objectives	Upon completion of this module you will be able to: - Finalize the drawing sheet - Work with large assemblies - Customize the drafting app - Perform administrative tasks - Add Bill of Material
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. Additionally, they should be familiar with Part Design and Assembly Design in CATIA.
Available Online	Yes

Master CATIA Part Design	
Course Code	CAT-en-PDG-A-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	7 hours
Course Material	
Level	Advanced
Audience	Mechanical and Sheet Metal Designers
Description	This module will introduce you to complex 3D modeling techniques, using advanced sketch-based and surface-based features. You will learn how to manage complex part structures and how to improve productivity by reusing existing features. Finally, you will learn how to use parameters and tables to drive the design of a model.
Objectives	Upon completion of this module you will be able to: - Design parts with complex geometries - Create and manage robust part structures - Create fully parameterized models - Create re-usable features
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and be familiar with CATIA Part Design fundamentals.
Available Online	Yes

Practice CATIA 2D Layout for 3D Design	
Course Code	CAT-en-LO1-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	In this module you will learn how to create 2D layout views in a 3D model and use them to design the part in the 3D environment.
Objectives	Upon completion of this module you will be able to: - Create 2D layout views in a 3D environment - Export 2D geometry into a 3D environment - Create drawings using the 2D layout views
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with CATIA Part and Assembly Design.
Available Online	Yes

Practice CATIA 3D Printing Preparation	
Course Code	CAT-en-TLE-F-15-221
Available Release	3DEXPERIENCE R2022x
Duration	2 hours
Course Material	
Level	Fundamental
Audience	Reverse Engineers, Virtual and Physical Prototypers
Description	In this module, you will learn how to create an output for 3D printing. You will also learn how to improve the characteristics of a mesh.
Objectives	Upon the completion of this module, you will be able to: - Import a cloud of points - Prepare a mesh for 3D Printing - Create an output for 3D Printing
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Assembly Design - Added Exercises	
Course Code	CAT-en-ASD-X-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	6 hours
Course Material	
Level	Exercise
Audience	Mechanical Designers
Description	This module provides you with exercises for additional practice on the 3DEXPERIENCE Assembly Design app. The exercises have been created based on Industry practices. You will practice creating assembly structure, positioning components, constraining components using engineering connections and modifying parts in assembly context.
Objectives	Upon the completion of this module you will be able to: - Practice your Assembly Design skills using selected scenarios - Apply the recommended methodology in various scenarios
Prerequisites	Students attending this learning module should be familiar with Part Design and Assembly Design.
Available Online	Yes

Practice CATIA Bent Part Design	
Course Code	CAT-en-SMB-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	6 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designer and Sheetmetal Designer
Description	This module will teach you how to use the Bent Part Design app to create and modify a sheetmetal part. You will learn how to define the sheetmetal parameters and create features such as walls, bends, cutouts and corners. You will also learn different techniques for multi-selecting the objects and constraining the parts.
Objectives	Upon completion of this module you will be able to: - Define and modify the sheetmetal parameters - Create a sheetmetal part using the wall and bend features - Manage the folded and unfolded views of parts - Create cutouts, chamfers and corners - Constrain the parts
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Drafting	
Course Code	CAT-en-GDR-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	6 hours
Course Material	
Level	Fundamental
Audience	Draftsmen
Description	This module will teach you how to create drawings using the Drafting app. You will learn how to create projection views and section views of a 3D model or an assembly and add the required dimensions.
Objectives	Upon completion of this module you will be able to: - Create simple projection views and section views of 3D parts and assemblies - Position the views on a drawing sheet - Add dimensions and annotations to the views
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. Additionally, they should be familiar with Part Design and Assembly Design in CATIA.
Available Online	Yes

Practice CATIA Engineering Templates Reuse	
Course Code	CAT-en-KT1-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	0.50 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	In this module, you will learn how to create customized features by reusing the power copy and user feature.
Objectives	Upon completion of this module you will be able to: - Create customized features using templates.
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA FreeStyle Shape Design	
Course Code	CAT-en-FSS-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	12 hours
Course Material	
Level	Fundamental
Audience	Industrial Designers and Creative Designers
Description	In this module, you will learn how to create flawless, styled shapes from scratch using 3D free-form curves and surfaces or using digitized data. You will also learn how to analyze and enhance the quality of existing curves and surfaces.
Objectives	Upon the completion of this module, you will be able to: - - Create styled shapes using digitized data - Create surfaces using the curve-based and the surface-based approaches - Analyze and enhance the quality of curves and surfaces
Prerequisites	Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. Additionally, they should be familiar with Generative Surface Design in CATIA.
Available Online	Yes

Practice CATIA Functional Plastic Parts	
Course Code	CAT-en-FMP-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	6 hours
Course Material	
Level	Fundamental
Audience	Plastic Part Designers and Molded Part Designers
Description	This module will teach you how to use the Functional Plastic Parts app to create molded parts. You will also learn how to create a core and a cavity using styling data. You will be able to create a detailed design by adding holes, stiffening ribs, bosses and additional fixtures. You will also be able to modify the design and complete the final part with additional draft and fillet features.
Objectives	Upon completion of this module you will be able to: - Create a molded plastic part - Add holes and protected areas - Add ribs and bosses
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with the Part Design app.
Available Online	Yes

Practice CATIA Generative Shape Design	
Course Code	CAT-en-GSD-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	Surface Designers
Description	This module will teach you how to use the Generative Shape Design app to create curves and surfaces. You will learn how to assemble, re-limit, and connect the geometries smoothly. You will also learn how to analyze the wireframe and the surface quality and rectify the detected defects.
Objectives	Upon the completion of this module, you will be able to: - - Create curves and improve the quality of the imported wireframes - - Create surfaces based on the wireframe geometries - - Assemble, re-limit and connect the surfaces smoothly to achieve the topology - - Analyze the surface quality and heal the defects
Prerequisites	- Knowledge: Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. - - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Mechanical and Shape Designer
Available Online	Yes

Practice CATIA Generative Shape Design - Added Exercises	
Course Code	CAT-en-GSD-X-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	16 hours
Course Material	
Level	Exercise
Audience	Mechanical Designers and Surface Designers
Description	This module provides you with an extensive database of exercises for additional practice on advanced topics of Surface Design. The exercises have been created based on the Industry practices.
Objectives	Upon completion of this module you will be able to: - Create wireframes features - Create surfaces using existing wireframes - Create advanced and parameterized swept surfaces - Perform advanced surface analysis and gap correction - Create advanced blend features - Improve the quality and stability of created geometries
Prerequisites	Students attending this module should know the basic and advanced features of Surface Design.
Available Online	Yes

Practice CATIA Generative Shape Develop	
Course Code	CAT-en-DL1-F-15-221
Available Release	3DEXPERIENCE R2022x
Duration	1.83 hours
Course Material	
Level	Fundamental
Audience	Surface Designers
Description	This module will teach you how to use CATIA Generative Shape Develop app functionalities to create unfolded surfaces from a ruled surface. You will learn how to develop wires and points onto a revolution surface.
Objectives	Upon completion of this module, you will be able to: - Create unfolded surfaces from a ruled surface using the CATIA Generative Shape Develop app functionalities - Develop wires and points onto a revolution surface
Prerequisites	Students attending this module should have completed the Gateway to the 3DEXPERIENCE platform course. They should also be familiar with Surface Design in CATIA.
Available Online	Yes

Practice CATIA Generative Wireframe and Surface	
Course Code	CAT-en-GS1-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	19 hours
Course Material	
Level	Fundamental
Audience	Surface Designers
Description	This module will teach you how to use the Generative Wireframe and Surface app to create curves and surfaces. You will learn how to assemble, re-limit and connect the geometries smoothly. You will also learn how to analyze the wireframe and the surface quality and rectify the detected defects.
Objectives	Upon completion of this module, you will be able to: - Create curves and improve the quality of the imported wireframes - Create surfaces based on the wireframe geometries - Assemble, re-limit and connect the surfaces smoothly to achieve the topology - Analyze the surface quality and heal the defects
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Mechanical Surface Refinement	
Course Code	CAT-en-SRF-F-15-221
Available Release	3DEXPERIENCE R2022x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	Surface styling designers
Description	In this module, you will learn how to use the CATIA Mechanical Surface Refinement app to modify and refine a mechanical surface in order to improve the surface quality.
Objectives	Upon the completion of this module, you will be able to: - Create a preliminary surface design - Analyze the result and identify problem areas - Modify the design using styling surfaces - Refine the design - Complete a high quality surface design
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. Additionally, they should be familiar with the fundamentals of CATIA surface design.
Available Online	Yes

Practice CATIA Mechanical Systems Design	
Course Code	CAT-en-KIM-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	This module will teach you how to create the architecture of a mechanism using simple wireframe elements and then complete the mechanism by adding 3D representations. You will also learn how to create a more complex mechanism using existing mechanisms, and finally how to animate the result.
Objectives	Upon completion of this module you will be able to: - Create a new mechanism - Manage the mechanism behavior - Include alternative representations to complete the mechanism - Create a new macro mechanism from existing sub-mechanisms - Animate the mechanism
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with the Assembly Design app.
Available Online	Yes

Practice CATIA Natural Assembly	
Course Code	CAT-en-LCP-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	Mechanical Engineers and Designers, and Design Architects
Description	In this module, you will learn how to create and manage product structures. You will explore a product and modify its structure by adding new products and exploding existing products. You will then scan the structure to activate a working product level, search for and add existing parts and use constraints to position the parts. You will also create a new sub-product from a components list and use it to complete the product.
Objectives	Upon the completion of this module you will be able to: - Explore a product and modify its structure using Natural Assembly - Select the product levels using the Ladder functionality - Search for a product and insert it in an existing assembly - Position the parts using constraints - Create a new sub-product from a component's list and use it to complete the product
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.

Practice CATIA Natural Assembly

Available Online	Yes

Practice CATIA Natural Shape	
Course Code	CAT-en-LSP-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	7 hours
Course Material	
Level	Fundamental
Audience	Conceptual Designers, Stylists, Simulation and Manufacturing Engineers
Description	This module will introduce you to the CATIA Natural Shape app and its unique working environment. You will learn how to use the app to conceptualize, create and modify mechanical parts and shapes. The course features short-duration demos followed by exercises which will allow you to practice. You will also learn the related theory, tips and recommendations while performing the exercises.
Objectives	Upon the completion of this module you will be able to: - Create a conceptual design directly in 3D - Use the hybrid design environment to conceptualize your designs - Work on the structure to create the 3D parts - Navigate through the structure and position the parts - Reuse the existing designs in the 3D models
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Natural Sketch	
Course Code	CAT-en-NTS-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	7 hours
Course Material	
Level	Fundamental
Audience	Creative Designers
Description	This module contains both videos and exercises. After a short introduction to the app and the user interface, videos will be used to demonstrate the sketching techniques and the use of the sketch tools. You will use the exercises that follow the videos to practice what you have learned and familiarize yourself with the available tools.
Objectives	Upon completion of this module you will be able to: - Sketch curves or primitives in 2D and 3D - Trace and refine vector or primitive curves - Sketch on a surface - Import and edit images - Transform curves and images
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. They should also be familiar with basic sketching techniques.
Available Online	Yes

Practice CATIA Part Design	
Course Code	CAT-en-PDG-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	17 hours
Course Material	
Level	Fundamental
Audience	Mechanical and Sheet Metal Designers
Description	This module will teach you how to create a 3D model using the CATIA Part Design app. You will learn how to use different feature-based tools to build a 3D model. You will also learn how to add parameters, then review, measure and modify a model.
Objectives	Upon the completion of this module you will be able to: - Create new parts - Create and constrain 2D sketches - Complete a 3D model using basic features - Parameterize a model - Review and measure a model - Reuse existing features
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Part Design - Added Exercises	
Course Code	CAT-en-PDG-X-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	12.75 hours
Course Material	
Level	Exercise
Audience	Mechanical Designers
Description	This module provides you with an exercise database for additional practice on the 3DEXPERIENCE Part Design app. The exercises have been arranged in increasing order of difficulty. The fundamental exercises will check and refresh your basic Part Design skills before you move on to more complex topics. The advanced exercises will make you practice the recommended design methodologies using realistic parts.
Objectives	Upon completion of this module you will be able to: - Apply your Mechanical skills in selected scenarios. - Employ the recommended methodology in various situations and efficiently use the Mechanical workbenches.
Prerequisites	Students attending this learning module should be familiar with CATIA Part Design.
Available Online	Yes

Practice CATIA Quality Rules Reuse	
Course Code	CAT-en-KE1-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	5 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	In this module, you will learn how to share corporate knowledge stored in the rule bases and leverage it across the company to ensure design compliance with the established standards. You will also learn to create reports and manage their template.
Objectives	Upon completion of this module you will be able to: - Automate the design modifications - Analyze and create reports
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Surface Design - Added Exercises	
Course Code	CAT-en-GS1-X-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	8 hours
Course Material	
Level	Exercise
Audience	Mechanical Surface Designers
Description	This module provides you with an exercise database for additional practice on 3DEXPERIENCE Surface Design. The exercises have been created based on Industry practices. You will get to practice skills such as creating wireframes and surfaces, creating surfacic shells and solid parts, and working with multiple parts that are referencing a common part.
Objectives	These exercises will allow you to put your Shape skills into practice on selected scenarios. - You will apply the recommended methodology in various situations. - You will enhance your understanding and usage of the Shape apps.
Prerequisites	Students attending this course should be familiar with Surface Design.
Available Online	Yes

Practice CATIA Weld Design	
Course Code	CAT-en-WDG-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	3.75 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers and Structural Designers
Description	This module will teach you how to create a welded assembly. You will learn how to join parts using appropriate weld features and how to generate associative weld drawings and weld reports. This course will teach you how to define the welding resource in the Data Setup app and use it to create welds.
Objectives	Upon completion of this module, you will be able to: - Define the welding resource - Create and manage welded assemblies - Generate weld reports - Create welding drawings
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with Assembly Design.
Available Online	Yes

Transition to the 3DEXPERIENCE platform for Mechanical Designers	
Course Code	CAT-en-3DMT-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	12 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	In this module, you will learn how to design a new part with the 3DEXPERIENCE platform. You will also learn how to compute weight, create a new part version, replace the original and create a drawing. Finally, you will learn how to manage complex product structures, create product features, manage catalogs and analyze assemblies.
Objectives	Upon completion of this module, you will be able to: - Create new products and parts - Insert a part in a product and position it - Apply materials to parts - Calculate the weight of a product - Insert and complete a drawing - Create a new part version - Replace a part and update a product - Design parts in context - Create assembly features and catalogs - Analyze the assemblies
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. They should also be familiar with CATIA V5 Mechanical Design.

Transition to the 3DEXPERIENCE platform for Mechanical Designers

Available Online	Yes

Transition to the 3DEXPERIENCE platform for Surface Designers	
Course Code	CAT-en-3DST-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	7 hours
Course Material	
Level	Fundamental
Audience	Designers who need to work with styled parts.
Description	In this module, you will learn how to design a new part with the 3DEXPERIENCE platform. It addresses the needs of Surface Designers. You will also learn how to create a new part version, replace the original part and update the product.
Objectives	Upon completion of this module you will be able to: - Create new products and parts - Create a new part version - Replace a part and update a product
Prerequisites	- Knowledge: Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. They should also be familiar with CATIA V5 Mechanical Design and Surface Design. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Mechanical and Shape Designer
Available Online	Yes

Cross-Brand

3DEXPERIENCE Platform User Experiences

Explore the Platform Manager Role	
Course Code	CRB-en-PLMG-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	1 hours
Course Material	
Level	Fundamental
Audience	Cloud administrator
Description	In this module, you learn how to configure the 3DEXPERIENCE platform on cloud to provide scalable and efficient solutions using well-organized applications. You will also learn to create custom roles and applications.
Objectives	Upon the completion of this course, you will be able to: - Manage settings for 3DSwym, 3DDrive, 3DSearch and 3DSpace applications - Create custom roles and additional apps - Manage members on the platform - Set legal policies - Unify the vocabularies
Prerequisites	Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator
Available Online	Yes

It's an Industry Renaissance	
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	0.67 hours
Course Material	
Level	Fundamental
Audience	Deicision Makers or users who want to know more about the Industry Renaissance.
Description	In this module, you will discover how the Industry Renaissance is shaking all sectors of society with new ways of learning, producing and doing business.
Objectives	Upon completion of this course, you will be able to: - Understand the Industry Renaissance. - the challenges imposed by the Industry Renaissance. - How can the 3DEXPERIENCE platform help companies transform their businesses and ensure sustainability and competitiveness
Prerequisites	
Available Online	Yes

Understand 3DEXPERIENCE Platform for your business transformation	
Course Code	CRB-en-UPBT-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	0.47 hours
Course Material	
Level	Fundamental
Audience	
Description	In this module, you will understand how the Industry Renaissance is shaking all sectors of society with new ways of learning, producing and doing business.
Objectives	Understand 3DEXPERIENCE Platform as a business transformation enabler for all industries - Understand the main challenges organizations are facing in the context of industry renaissance. - Understand how the 3DEXPERIENCE platform tie together products, services and their context of use
Prerequisites	
Available Online	Yes

Cross-Brand

Business Modeling and Planning

Explore Project Management with 3DEXPERIENCE platform	
Course Code	CRB-en-CGP-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	3 hours
Course Material	
Level	Fundamental
Audience	All Value Engagement team
Description	In this module, you will learn to govern and execute projects in a collaborative environment using the 3DEXPERIENCE platform.
Objectives	Upon completion of this learning module, you will be able to: - Understand the values and solutions of project management with 3DEXPERIENCE platform - Build and manage project schedule - Mitigate risks and issues - Schedule meetings and implement decisions - Monitor and assess the projects
Prerequisites	- Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role, Explore the Collaborative Industry Innovator Role modules. - - - - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator, Project Manager and Project Intelligence Consumer.

Explore Project Management with 3DEXPERIENCE platform	
Available Online	Yes

Cross-Brand

Cyber Physical Systems

Systems Engineering at the Heart of the Industry Renaissance	
Available Release	3DEXPERIENCE R2021x
Duration	0.25 hours
Course Material	
Level	Fundamental
Audience	
Description	In this module, you will learn about the future stakes of cyber-physical systems and the role of Model-Based Systems Engineering in supporting organizations digital transformation.
Objectives	Upon completion of this learning module, you will be able to comprehend : - The need of systems in the Industry Renaissance - The enterprises and cyber-physical systems challenges imposed by Industry Renaissance - How can the Dassault Systèmes helps companies with a Model-Based Systems Engineering approach.
Prerequisites	
Available Online	Yes

DELMIA

Digital Manufacturing

Collaborate for Virtual Commissioning in Automotive Industry	
Course Code	DEL-en-VCDC-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	10.83 hours
Course Material	
Level	Advanced
Audience	Factory Simulation Engineers, Body-in-White Robot Programmers
Description	In this module, you will explore Virtual commissioning with DELMIA and ControlBuild. Discover how to improve the virtual workcell in DELMIA Robotics to make it ready for co-simulation with CATIA ControlBuild, using sensors, IO and others, through the example of a Body-in-White (BIW) station. You will learn about ControlBuild, with a basic example of model in standalone mode, then with a more complex logic to control the BIW station. Further, you will understand how to connect the two softwares through shared memory and FMI to perform a “model in the loop” virtual commissioning.
Objectives	Upon completion of this learning module, you will be able to: - Prepare a Robot Workcell for Virtual Commissioning - Create the required dataset in ControlBuild (virtual control software and real-time functional plant behavior) in SFC or Ladder - Create an FMU connector for the real-time communication with DELMIA - Connect the two modules to perform a co-simulation (“model in the loop”) through an FMU Connector

Collaborate for Virtual Commissioning in Automotive Industry	
	- In the provided example, the control (logics) of the DELMIA workcell is done in CB Beside the logics, we also provide an example of a functional model (clamp) in CB, where we compute the joint values used in DELMIA to animate this clamp in 3D in real-time.
Prerequisites	- Students enrolling for this learning path must be familiar with the fundamentals of the Collaborative Industry Innovator and Collaborative Business Innovator domain. Additionally, they should have the knowledge on the following topics: - DELMIA Body-in-White Robot Programmer - BIW domain - Development of automated applications (PLC) - International Electrotechnical Commission (IEC) 61131-3 standard language (Sequential Function Chart SFC, Ladder program, Function Bloc Diagram, Structured text)
Available Online	Yes

Collaborate to Build and Manage a Configured MBOM	
Course Code	DEL-en-BNCM-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	2 hours
Course Material	
Level	Fundamental
Audience	
Description	In this module, you will learn to manage the engineering and manufacturing items structure, variants and evolutions of a product.
Objectives	Upon completion of this learning module, you will be able to: - Build and manage Manufacturing Bill of Materials (MBOM) - Create and manage models, variants and product configurations - Manage product evolutions
Prerequisites	Knowledge: Learners attending this course should have completed the 3DEXPERIENCE platform modules. Additionally, they should be familiar with the basics of process engineering, change management and product configuration. 3DEXPERIENCE roles: Collaborative Business & Industry Innovator (IFW-OC & CSV-OC), 3DProduct Architect (PAU-OC), 3DInnovator (CXD-OC), Change Manager (CHG-OC)
Available Online	Yes

Collaborate using Process Engineering and Work Instructions for Part Fabrication	
Course Code	DEL-en-PPWI-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	2.33 hours
Course Material	
Level	Fundamental
Audience	
Description	In this module, you will learn to manage process planning, NC programs and work instructions for part fabrication.
Objectives	Upon completion of this learning module, you will be able to: - Define an MBOM - Manage routings, operations and process models - Create a manufacturing cell - Create and manage work instructions - Assign capable resources - Re-use, simulate and validate NC Programs
Prerequisites	- Knowledge: Users attending this course should have completed the 3DEXPERIENCE Platform modules. Additionally, they should be familiar with the basics of process engineering, work instructions and machining. - 3DEXPERIENCE roles: Collaborative Business & Industry Innovator (IFW-OC & CSV-OC), 3D Tolerancing and annotation Designer (TAD-OC), Requirement Manager (TRM-OC).
Available Online	Yes

Collaborate using Service Process Engineering and Work Instructions for Maintenance	
Course Code	DEL-en-PEWIM-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	1.50 hours
Course Material	
Level	Fundamental
Audience	
Description	In this module, you will learn how to use the Service Process Engineer and Work Instructions Author roles to manage service process definition and work instructions for services.
Objectives	Upon completion of this module, you will be able to: - Define and manage a Service Bill of Materials (SBOM) - Author and manage service process plans - Create, manage and review work instructions
Prerequisites	Knowledge: Users attending this course should have completed the Explore the Collaborative Business Innovator role and the Explore the Collaborative Industry Innovator role modules. Additionally, they should be familiar with the basics of service process engineering and work instructions. 3DEXPERIENCE roles: Collaborative Business Innovator & Collaborative Industry Innovator (IFW-OC & CSV-OC), Work Plan Viewer (WKB-OC), Service Process Engineer (SEN-OC), Work Instructions Author (PWD-OC).
Available Online	Yes

DELMIA V5 to 3DEXPERIENCE Machining Transition	
Course Code	DEL-en-PMGT-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	12.2 hours
Course Material	
Level	Fundamental
Audience	NC Programmers
Description	This module will teach you what are the differences between the Machining PPR Structure of CATIA V5 and DELMIA 3DEXPERIENCE and how to migrate the CATIA V5 Machining data to DELMIA 3DEXPERIENCE. You will also learn how to create a PPRContext, assign an NC Machine, insert and mount an NC Machine accessory, and then mount the workpiece. This module will also teach you how to define a tool assembly and its advanced parameters. You will learn how to define a Prismatic Machining Operation, replay the toolpath, and generate the NC Output.
Objectives	Upon completion of this module you will be able to: - Use the DELMIA 3DEXPERIENCE Machining product to define a Machining Process - Create Tools, Holders and Tool Assemblies - Define a Machining Operation - Generate a Numerical Control (NC) Output - Store and retrieve a Machining Process from the 3DEXPERIENCE database - Migrate CATIA V5 Machining objects to DELMIA 3DEXPERIENCE
Prerequisites	Students attending this course should have completed the Explore the Business Innovator module.

DELMIA V5 to 3DEXPERIENCE Machining Transition	
	Additionally, they must be experienced users of the DELMIA V5 Machining product.
Available Online	Yes

Explore the Assembly Robot Programmer Role	
Course Code	DEL-en-RAM-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	10.50 hours
Course Material	
Level	Fundamental
Audience	Robot Programmers, Equipment Designers, Manufacturing Engineers
Description	In this module, you will learn to define and simulate a robotic workcell. You will also learn to create, improve, simulate and execute robot tasks.
Objectives	After completing this module, you will be able to: - Prepare the workcell - Create the robot tasks - Simulate the robots in sequence - Perform robot tasks with I/O monitoring - Detect collision and improve robot tasks - Create robot programs
Prerequisites	- Learners attending this course should have completed the Explore the Collaborative Business Innovator Role module. - 3DEXPERIENCE Roles: Collaborative Business Innovator (IFW-OC), Collaborative Industry Innovator (CSV-OC) and Assembly Robot programmer (RAM-OC)
Available Online	Yes

Explore the Factory Simulation Engineer Role	
Course Code	DEL-en-EFS-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	2 hours
Course Material	
Level	Fundamental
Audience	Plant Layout Designers, Manufacturing Engineers, Factory Simulation Engineers.
Description	In this module, you will learn to validate the behavior of a working station, a production line and a complete plant. You will also learn to simulate production flow with rework and repair configuration and identify and eliminate bottlenecks.
Objectives	Upon completion of this module, you will be able to: - generate a Material flow and resource simulation with discrete event simulation - manage resource pool and walk pathway for workers - define rework, failure and repair model - manage product routing and buffer capacities - analyze performance statistics - generate and publish reports - identify and remove bottlenecks
Prerequisites	- Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Factory Simulation Engineer.

Explore the Factory Simulation Engineer Role

Available Online	Yes

Explore the Manufacturing Engineer Role	
Course Code	DEL-en-PST-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	1.50 hours
Course Material	
Level	Fundamental
Audience	Process Engineer, Manufacturing Engineer
Description	This module will teach you how to define and manage the manufacturing item structure, routings and capable resource structure using DELMIA Manufacturing Engineer Role.
Objectives	Upon completion of this module, you will be able to: - Manage the manufacturing item structure - Define the operations in process plan - Associate MBOM items to operations - Manage the capable resource structure
Prerequisites	Students attending this module needs to be familiar with
Available Online	Yes

Explore the NC Milling Machine Programmer Role	
Course Code	DEL-en-NTX-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	1.50 hours
Course Material	
Level	Fundamental
Audience	NC Programmers
Description	In this module, you will learn to define, manage and generate high-quality NC programs for machine complex parts.
Objectives	Upon completion of this module you will be able to: - Define multi-axis contouring operations - Define multi-axis finishing operations - Define specific machining operations to machine Impeller Hub parts
Prerequisites	- Knowledge: Students attending this course should have completed the Explore the Collaborative Business Innovator Role module. Additionally, they should be familiar with the fundamentals of machining products using the 3DEXPERIENCE platform. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator, NC Milling Machine Programmer
Available Online	Yes

Explore the NC Mold and Die Programmer Role	
Course Code	DEL-en-NMD-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	1.50 hours
Course Material	
Level	Fundamental
Audience	NC Programmers
Description	This module gives you an overview of the 3DEXPERIENCE NC Milling Machining Programmer role that enables you to create milling operations to machine molds and die parts. You will learn to use various 3-axis machining strategies to produce a part. It will also teach you to compute remaining material on a machined part and define required rework operations to complete the machining of the part.
Objectives	Upon completion of this module, you will be able to: - Define the roughing operation - Compute rework areas and define semi-finishing operations - Convert 3 axis tool path into 5 axis - Define finishing operations
Prerequisites	- Knowledge: Students attending this course should have completed the Explore the Collaborative Business Innovator Role module. Additionally, they should be familiar with the fundamentals of machining products using the 3DEXPERIENCE platform. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator, NC Milling Machining Programmer and NC Prismatic Programmer.

Explore the NC Mold and Die Programmer Role

Available Online	Yes

Explore the NC Prismatic and Turning Programmer Role	
Course Code	DEL-en-NPT-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	2 hours
Course Material	
Level	Fundamental
Audience	NC Programmers
Description	This module gives you an overview of the 3DEXPERIENCE NC Prismatic & Mill-Turn Machine Programmer role that enables you to create a mill-turn machining operation and simulate the tool path. You will learn how to simulate the machines, detect clashes and analyze them. It will also teach you to generate the NC output for an NC program.
Objectives	Upon completion of this module, you will be able to: - Define the infrastructure required for machining - Create tools and tool assemblies - Define turning operations - Replay and simulate tool paths - Simulate a machine using a simulation object - Generate the Numerical Control (NC) output
Prerequisites	- Knowledge: Students attending this course should have completed the Explore the Collaborative Business Innovator Role module. Additionally, they should be familiar with the fundamentals of machining. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and NC Prismatic & Mill-Turn Programmer.

Explore the NC Prismatic and Turning Programmer Role	
Available Online	Yes

Explore the NC Prismatic Machine Programmer Role	
Course Code	DEL-en-NPM-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	3 hours
Course Material	
Level	Fundamental
Audience	NC Programmers
Description	In this module gives you an overview of the 3DEXPERIENCE NC Prismatic Machine Programmer Role that enables you to create a machining operation and simulate the tool path. You will learn how to simulate the machines, detect clashes and analyze them. It will also teach you to generate the NC output for an NC program.
Objectives	Upon completion of this module, you will be able to: - Define the infrastructure required for machining - Create tools and tool assemblies - Define prismatic machining operations - Replay and simulate tool paths - Simulate a machine using a simulation object - Generate the Numerical Control (NC) output
Prerequisites	- Knowledge: Students attending this course should have completed the Explore the Business Innovator module. Additionally, they should be familiar with the fundamentals of machining. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and NC Prismatic Machine Programmer.
Available Online	Yes

Explore the NC Shop Floor Programmer Role	
Course Code	DEL-en-NSR-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	10 hours
Course Material	
Level	Fundamental
Audience	NC Programmers
Description	In this module, you will learn to perform machining of components using the NSR role, which provides various 2.5 axis and 3 axis machining techniques.
Objectives	Upon completion of this module, you will learn to: - - Define a manufacturing product - - Configure the machining environment - - Create 2.5-axis and axial machining operations - - Create 3-axis machining operations - - Generate NC Code Output and NC Documentation
Prerequisites	- Knowledge: Learners attending this course should have completed the 3DEXPERIENCE platform modules. Additionally, they should be familiar with the machining concepts using the 3DEXPERIENCE platform and the fundamentals of the. - 3DEXPERIENCE roles: Collaborative Business & Industry Innovator (IFW-OC & CSV-OC), NC Shop Floor Programmer (NSR-OC)
Available Online	Yes

Explore the Plant Layout Designer Role	
Course Code	DEL-en-PLA-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	1.50 hours
Course Material	
Level	Fundamental
Audience	Plant Layout Designers
Description	In this module, you will learn to design a 3D plant layout from 2D drawing. You will define and manage the resource structure, position and manipulate the resources in the 3D environment and use resources from a catalog.
Objectives	Upon completion of this module, you will be able to: - Create a 3D plant layout with 2D drawing - Define the resource structure - Use the resources from a catalog - Position and manage the resources in the 3D layout - Define and validate the shop floor layouts
Prerequisites	- Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Plant Layout Designer.
Available Online	Yes

Explore the Powder Bed Machine Programmer Role (PBF)	
Course Code	DEL-en-PBF-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	2 hours
Course Material	
Level	Fundamental
Audience	3D Printer Programmers. Product Designers
Description	In this module, you will learn to optimize powder bed fusion manufacturing techniques (infrastructure, scan path, output).
Objectives	Upon completion of this module, you will be able to: - Set up and manage the infrastructure to produce a part - Define and manage the build layout - Generate the support structures - Define and validate the scan path for the part - Export the output
Prerequisites	- Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Powder Bed Programmer.
Available Online	Yes

Explore the Process Engineer Role for Complex Assembly	
Course Code	DEL-en-PPL-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	1.25 hours
Course Material	
Level	Fundamental
Audience	Process planners, Manufacturing Engineers
Description	In this module, you will learn to create and manage the complete process planning from EBOM to resource allocation of a product in 3D context.
Objectives	Upon completion of this learning module, you will be able to: - Create and manage a MBOM structure - Create and manage a process planning - Assign manufacturing items to operations - Create product flows - Create and manage resources - Assign resources to operations - Position operations on a 3D model - Preview an assembly
Prerequisites	
Available Online	Yes

Explore the Work Instructions Author Role	
Course Code	DEL-en-PWD-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	1.17 hours
Course Material	
Level	Fundamental
Audience	
Description	In this module, you will learn to create textual instructions and 3D work instructions to describe a process and steps involved in it.
Objectives	Upon completion of this learning module, you will be able to: - Validate the product build-up - Create work instructions - Create 3D work instructions - Publish work instructions - Create work instructions templates using catalogs
Prerequisites	
Available Online	Yes

Practice DELMIA Machining Validation	
Course Code	DEL-en-MSG-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	6 hours
Course Material	
Level	Fundamental
Audience	NC Programmers
Description	This module will teach you how to simulate an NC machine using tool path and NC code. You will learn how to create probes in the simulation object environment and use them to detect the clashes that occur during a machine simulation. You will also learn how to perform a fault analysis to detect, analyze and eliminate the clashes.
Objectives	Upon completion of this module you will be able to: - Create a simulation object - Simulate the machine using tool path and NC code - Create Probes to detect clashes during the machine simulation - Analyze and eliminate the clashes
Prerequisites	Students attending this course should have completed the Explore the Business Innovator module. Additionally, they should be familiar with the fundamentals of machining and the DELMIA Prismatic Machining. ap3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator, NC Prismatic Machine Programmer and NC MachineCode Validation Specialist.p.
Available Online	Yes

Practice DELMIA Manufacturing Context Builder	
Course Code	DEL-en-MSB-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	5.80 hours
Course Material	
Level	Fundamental
Audience	Process Planners
Description	In this module, you will learn to explore the PPR context. You will also learn to manage the documents in the spreadsheet view. You will learn to use the Compare command to compare structures of different versions of a PPR object like products, manufactured items, resources, systems or operations.
Objectives	Upon completion of this module you will be able to: - Explore the PPR context - Manage the documents in the spreadsheet view - Manage the PPR Smart Completion - Navigate Relations on a Product - Compare structures of different versions of a PPR object
Prerequisites	- Knowledge: Students attending this module should have completed the Explore the Business Innovator module. Additionally, they should be familiar with the fundamentals of Process Planning. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Process Engineer.
Available Online	Yes

Practice DELMIA Milling Machining	
Course Code	DEL-en-SMG-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	10.67 hours
Course Material	
Level	Fundamental
Audience	Numerical Control (NC) Programmers
Description	This course will teach you how to define and manage NC programs dedicated to machining parts that are designed with surface or solid geometry. You will learn how to define the 3-Axis Roughing, Semi-finishing and Finishing operations. You will also learn how to improve productivity in mould and die machining using the various functionalities of 3-Axis Surface Machining.
Objectives	Upon completion of this course you will be able to: - Define 3-Axis Surface Machining operations - Define a Rework Area - Create Machining Features - Analyze and modify the Tool path
Prerequisites	Students attending this course should have completed the Explore the Business Innovator module. Additionally, they should be familiar with the fundamentals of machining and the DELMIA Prismatic Machining app.
Available Online	Yes

Practice DELMIA Multi-Axis Machining	
Course Code	DEL-en-MMG-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	8.67 hours
Course Material	
Level	Fundamental
Audience	Numerical Control (NC) Programmers
Description	This module will teach you how to use the common functionalities available in the machining apps of DELMIA. You will learn how to define and manage NC programs dedicated to machining parts that are designed with surface or solid geometry. This module also teaches you how to generate high quality NC programs for machining complex 3D parts and free-form shapes using advanced machining techniques. You will learn how to perform 2.5 to 5-Axis machining operations.
Objectives	Upon completion of this module you will be able to: - Define the infrastructure required for machining - Define 3-Axis surface machining operations - Define multi-axis finishing and contouring operations - Define multi-pockets machining operations - Define multi-axis helix machining operation
Prerequisites	Students attending this module should have completed the Explore the Business Innovator module. Additionally, they should be familiar with the fundamentals of machining and the DELMIA Prismatic Machining app.
Available Online	Yes

Practice DELMIA Planning Structure	
Course Code	DEL-en-PRR-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	8.17 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers and Process Planners
Description	This module will teach you how to define and manage the manufactured product structure, routings and resource allocation in one single and simple interface. You will learn how to perform line balancing across stations and lines. You will also learn how to detect issues early in the process plan using 3D validation.
Objectives	Upon completion of this course you will be able to: - Define a manufacturing bill of materials - Reuse the manufacturing bill of materials template - Associate the manufacturing bill of materials to a product structure - Create assemblies and sub-assemblies - Assign parts to sub-assemblies - Define the operation - Assign resources to operations
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice DELMIA Prismatic and Turning Machining	
Course Code	DEL-en-LMG1-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	23.17 hours
Course Material	
Level	Fundamental
Audience	NC Programmers
Description	This module will teach you how to define various turning operations to machine cylindrical parts. You will learn how to define multi-spindle and multi-turret machines, and use multiple turrets simultaneously to machine a part. You will also learn how to perform the part transfer activity using the multi-spindle machine to complete the machining on both sides of a part without any manual intervention. This module will also teach you how to create milling operations using the mill-turn machine.
Objectives	Upon completion of this module you will be able to: - Define the machining infrastructure - Define the turning operations - Define the milling operations using the multi-slide machine - Define multi-setups and multi-part machining - Replay and simulate the tool paths - Generate the Numerical Control (NC) output
Prerequisites	Students attending this module should have completed the Explore the Collaborative Business Innovator role and the Explore the Collaborative Industry Innovator role modules. Additionally, they should be familiar with the fundamentals of machining.

Practice DELMIA Prismatic and Turning Machining

Available Online	Yes

Practice DELMIA Prismatic Machining	
Course Code	DEL-en-PMG-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	12.8 hours
Course Material	
Level	Fundamental
Audience	NC Programmers
Description	This module will teach you how to use the common functionalities available in the machining apps of DELMIA. It will also teach you the fundamentals of creating and simulating a tool path. You will learn how to create tool paths for 2 and 2.5-axis machining operations. You will also learn how to create probes in the simulation object and how to simulate the machines, detect clashes and analyze them.
Objectives	Upon completion of this module you will be able to: - Define the infrastructure required for machining - Create tools and tool assemblies - Define prismatic machining operations - Replay and simulate tool paths - Generate the Numerical Control (NC) output"
Prerequisites	- Knowledge: Students attending this course should have completed the Explore the Business Innovator module. Additionally, they should be familiar with the fundamentals of machining. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and NC Prismatic Machine Programmer and Mechanical Designer.
Available Online	Yes

DELMIA

Fabrication

Collaborate using Process Engineering and Work Instructions for Part Fabrication	
Course Code	DEL-en-PPWI-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	2.33 hours
Course Material	
Level	Fundamental
Audience	
Description	In this module, you will learn to manage process planning, NC programs and work instructions for part fabrication.
Objectives	Upon completion of this learning module, you will be able to: - Define an MBOM - Manage routings, operations and process models - Create a manufacturing cell - Create and manage work instructions - Assign capable resources - Re-use, simulate and validate NC Programs
Prerequisites	- Knowledge: Users attending this course should have completed the 3DEXPERIENCE Platform modules. Additionally, they should be familiar with the basics of process engineering, work instructions and machining. - 3DEXPERIENCE roles: Collaborative Business & Industry Innovator (IFW-OC & CSV-OC), 3D Tolerancing and annotation Designer (TAD-OC), Requirement Manager (TRM-OC).
Available Online	Yes

Practice DELMIA Wire EDM Machining	
Course Code	DEL-en-WMG-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	2.33 hours
Course Material	
Level	Fundamental
Audience	NC Programmer, Wire EDM Programmers
Description	In this module, you will learn to use the Wire EDM machining process to produce intricate and complex shapes using an electrical discharge (spark).
Objectives	Upon completion of this module, you will learn to: - Prepare the Wire EDM machining environment - Define Wire EDM machining operations - Simulate the Wire EDM Program - Generate NC Output
Prerequisites	- Students enrolling for this module should have completed the Explore the Collaborative Business Innovator Role module. Additionally, they should be familiar with the Wire EDM technology and machining techniques using the 3DEXPERIENCE platform. - 3DEXPERIENCE Roles: Collaborative Business Innovator (IFW-OC), Collaborative Industry Innovator (CSV-OC), and NC Prismatic Machine Programmer (NPM-OC)
Available Online	Yes

DELMIA

Process Engineering

Collaborate to Build and Manage a Configured MBOM	
Course Code	DEL-en-BNCM-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	2.33 hours
Course Material	
Level	Fundamental
Audience	
Description	In this module, you will learn to manage the engineering and manufacturing items structures, variants and evolutions of a product.
Objectives	Upon completion of this learning module, you will be able to: - Build and manage Manufacturing Bill of Materials (MBOM) - Create and manage models, variants and product configurations - Manage product evolutions
Prerequisites	Knowledge: Learners attending this course should have completed the 3DEXPERIENCE platform modules. Additionally, they should be familiar with the basics of process engineering, change management and product configuration. 3DEXPERIENCE roles: Collaborative Business & Industry Innovator (IFW-OC & CSV-OC), 3DProduct Architect (PAU-OC), 3DInnovator (CXD-OC), Change Manager (CHG-OC)
Available Online	Yes

Collaborate using Process Engineering and Work Instructions for Part Fabrication	
Course Code	DEL-en-PPWI-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	2.33 hours
Course Material	
Level	Fundamental
Audience	
Description	In this module, you will learn to manage process planning, NC programs and work instructions for part fabrication.
Objectives	Upon completion of this learning module, you will be able to: - Define an MBOM - Manage routings, operations and process models - Create a manufacturing cell - Create and manage work instructions - Assign capable resources - Re-use, simulate and validate NC Programs
Prerequisites	- Knowledge: Users attending this course should have completed the 3DEXPERIENCE Platform modules. Additionally, they should be familiar with the basics of process engineering, work instructions and machining. - 3DEXPERIENCE roles: Collaborative Business & Industry Innovator (IFW-OC & CSV-OC), 3D Tolerancing and annotation Designer (TAD-OC), Requirement Manager (TRM-OC).
Available Online	Yes

Collaborate using Service Process Engineering and Work Instructions for Maintenance	
Course Code	DEL-en-PEWIM-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	1.50 hours
Course Material	
Level	Fundamental
Audience	
Description	In this module, you will learn how to use the Service Process Engineer and Work Instructions Author roles to manage service process definition and work instructions for services.
Objectives	Upon completion of this module, you will be able to: - Define and manage a Service Bill of Materials (SBOM) - Author and manage service process plans - Create, manage and review work instructions
Prerequisites	Knowledge: Users attending this course should have completed the Explore the Collaborative Business Innovator role and the Explore the Collaborative Industry Innovator role modules. Additionally, they should be familiar with the basics of service process engineering and work instructions. 3DEXPERIENCE roles: Collaborative Business Innovator & Collaborative Industry Innovator (IFW-OC & CSV-OC), Work Plan Viewer (WKB-OC), Service Process Engineer (SEN-OC), Work Instructions Author (PWD-OC).
Available Online	Yes

Experience the Digital Factory in Virtual Reality	
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	0.67 hours
Course Material	
Level	Fundamental
Audience	
Description	In this module, you will learn with a virtual reality experience to explore the digital factory and interact with the end-to-end processes to manufacture the Turbo Fan product.
Objectives	Upon completion of this module, you will learn: - How the digital factory works - How a turbofan product is assembled - What are the processes in the digital factory
Prerequisites	
Available Online	Yes

Explore the Process Engineer Role for Complex Assembly	
Course Code	DEL-en-PPL-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	1.25 hours
Course Material	
Level	Fundamental
Audience	
Description	In this module, you will learn to create and manage the complete process planning from EBOM to resource allocation of a product in 3D context.
Objectives	Upon completion of this learning module, you will be able to: - Create and manage a MBOM structure - Create and manage a process planning - Assign manufacturing items to operations - Create product flows - Create and manage resources - Assign resources to operations - Position operations on a 3D model - Preview an assembly
Prerequisites	
Available Online	Yes

Explore the Work Instructions Author Role	
Course Code	DEL-en-PWD-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	1.17 hours
Course Material	
Level	Fundamental
Audience	
Description	In this module, you will learn to create textual instructions and 3D work instructions to describe a process and steps involved in it.
Objectives	Upon completion of this learning module, you will be able to: - Validate the product build-up - Create work instructions - Create 3D work instructions - Publish work instructions - Create work instructions templates using catalogs
Prerequisites	
Available Online	Yes

DELMIA

Robotics

Explore the Assembly Robot Programmer Role	
Course Code	DEL-en-RAM-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	10.50 hours
Course Material	
Level	Fundamental
Audience	Robot Programmers, Equipment Designers, Manufacturing Engineers
Description	In this module, you will learn to define and simulate a robotic workcell. You will also learn to create, improve, simulate and execute robot tasks.
Objectives	After completing this module, you will be able to: - Prepare the workcell - Create the robot tasks - Simulate the robots in sequence - Perform robot tasks with I/O monitoring - Detect collision and improve robot tasks - Create robot programs
Prerequisites	- Learners attending this course should have completed the Explore the Collaborative Business Innovator Role module. - 3DEXPERIENCE Roles: Collaborative Business Innovator (IFW-OC), Collaborative Industry Innovator (CSV-OC) and Assembly Robot programmer (RAM-OC)
Available Online	Yes

Explore the Fabrication Robot Programmer Role	
Course Code	DEL-en-RFP-F-15-221
Available Release	3DEXPERIENCE R2022x
Duration	4.50 hours
Course Material	
Level	Fundamental
Audience	Robot Programmers, Equipment Designers, Manufacturing Engineers
Description	In this module, you will learn how to program, simulate and validate an entire robotic arc welding workcell in an interactive 3D environment.
Objectives	After completing this module, you will be able to: - Prepare the workcell - Create arc welding profiles - Define robot arc weld trajectories - Generate an arc welding task - Validate and download the robot program - Add motion to track and positioner - Use Weld Template System to create trajectories
Prerequisites	- Learners attending this course should have completed the Explore the Collaborative Business Innovator Role module. - 3DEXPERIENCE Roles: Collaborative Business Innovator (IFW-OC), Collaborative Industry Innovator (CSV-OC) and Fabrication Robot Programmer (RFP-OC)
Available Online	Yes

Explore the Surface Robot Programmer Role	
Course Code	DEL-en-RSG-F-15-221
Available Release	3DEXPERIENCE R2022x
Duration	4.75 hours
Course Material	
Level	Fundamental
Audience	Robotics Engineer
Description	This module will teach you how to setup a paint cell with the required resources and prepare it for painting an object. It will also teach you how to create paint and conveyor tracking profiles. Further, you will learn how to deposit the paint on a product and analyze the paint deposition results.
Objectives	Upon completion of this module, you will be able to: - Prepare a paint cell - Create conveyor and paint profiles - Create a surface trajectory - Simulate the paint deposition on a part - Analyze the paint deposition results
Prerequisites	- Learners attending this course should have completed the Explore the Collaborative Business Innovator Role module. Additionally, they should also be familiar with the Robotics Simulation topic. - 3DEXPERIENCE Roles: Collaborative Business Innovator (IFW-OC), Collaborative Industry Innovator (CSV-OC), and Surface Robot Programmer (RSG-OC)
Available Online	Yes

ENOVIA

Business Modeling & Planning

Explore the Project Manager Role	
Course Code	ENOV-en-DPM-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	2.5 hours
Course Material	
Level	Fundamental
Audience	Project Managers, Project Team Members and Reviewers
Description	In today's fast-paced, customer-driven environment, products need to be designed and delivered in a timely yet highly efficient manner. You need great project management skills to deliver successful results. This self-paced module will help you to learn and explore the capabilities of the Project Manager.
Objectives	By the end of this module, you will be able to: - Create Project Templates - Define Project Schedule - Submit Weekly Time Sheets - Monitor Project Status
Prerequisites	Students attending this module should have completed the Explore the Collaborative Business Innovator module and Explore the Collaborative Industry Innovator module. 3DEXPERIENCE Roles: Collaborative Business Innovator and Collaborative Industry Innovator, Project Manager and Project Team Member.
Available Online	Yes

Practice ENOVIA Design Review	
Course Code	ENOV-en-REEV-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	6.5 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	This module will teach you how to create different slides for various positions of an assembly to create exploded views. You will also learn how to create sections and measures, and export them as parts or drawings.You will also learn how to compare 3D objects and how to create multi-context reviews.
Objectives	Upon completion of this module you will be able to: - Create a design review and add markups to it - Create slides and add markers - Create and export sections and measures - Compare 3D Objects and 2D Drawings - Create multi-context reviews
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

ENOVIA

Business Modeling and Planning

Explore the Product Manager Role	
Course Code	ENOV-en-PDM-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	2 hours
Course Material	
Level	Fundamental
Audience	Product Managers
Description	As a Product Manager, you will drive the corporate strategy with collaboration between cross-functional teams to achieve the product's strategic intent. In this module, you will learn to manage the entire definition, planning and development of the product portfolio based on customer needs and market opportunities.
Objectives	Upon the completion of this module, you will be able to: - Create Model Versions - Add Requirements to Model Versions - Create Variants and Options - Frame Model Version Rules - Build Product Configurations
Prerequisites	- Knowledge: Students attending this course should have completed the Explore the Collaborative Business Innovator and Explore the Collaborative Industry Innovator Role modules. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Product Manager.
Available Online	Yes

Master ENOVIA Project Management	
Course Code	ENOV-en-PRPR-A-15-211
Available Release	3DEXPERIENCE R2021x
Duration	8 hours
Course Material	
Level	Advanced
Audience	Project Managers and Project Members
Description	This module focuses on the advanced functionalities of the Project Management app. You will learn how to manage risks associated with a project, assign people to meet the project's resource requirements and track quality metrics. You will also learn how to create budgets and benefits for a project, work with time sheets and generate labor reports.
Objectives	Upon completion of this module, you will be able to: - Document the various risk areas of a project and track them - Create and manage the resource requirements for a project - Create budgets and benefits to monitor the financials of a project - Track the time spent on a project using time sheets - Create calendars for the projects - Identify the quality factors of a project and monitor them - Create an assessment to measure the project's health - Use dashboards to monitor the status of your projects
Prerequisites	Knowledge: Students attending this module should have completed the Explore the Business Innovator, Explore the Industry Innovator module and Practice

Master ENOVIA Project Management	
	ENOVIA Project Management. 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Project Manager.
Available Online	Yes

Practice ENOVIA Project Execution	
Course Code	ENOV-en-PREX-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	2.50 hours
Course Material	
Level	Fundamental
Audience	
Description	This module will teach you how to use the Project Execution app to manage your assigned tasks. You will be able to manage the project schedule, modify the tasks, record the risks and create timesheets.
Objectives	Upon completion of this module, you will be able to: - Manage the project schedule - Record risks for tasks - Create and submit timesheets
Prerequisites	Knowledge: Students attending this course should have completed the Explore the Business Innovator and Explore the Industry Innovator module. Additionally, they should be familiar with the Practice the Project Management module. 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Project Team Member.
Available Online	Yes

Practice ENOVIA Project Management	
Course Code	ENOV-en-PRPR-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	11 hours
Course Material	
Level	Fundamental
Audience	Project Managers and Project Team Members.
Description	This module will teach you how to create and manage projects, assign project members, create tasks, create bookmark structures and define access rights for managing the documents related to the projects. You will also learn how to create the process flows for the review and approval of tasks, and how to monitor the status of different projects. Additionally, you will learn how to use the Microsoft Project Integration functionality to exchange and view a project's data.
Objectives	Upon completion of this module, you will be able to: - Create programs and projects - Assign members to a project - Add tasks and assign project members to the tasks - Create bookmarks for managing project documents - Create process flow for tasks - Review the status of programs and projects - Exchange and view projects' data using Microsoft Project Integration
Prerequisites	Knowledge: Students attending this course should have completed the Explore the Business Innovator and Explore the Industry Innovator module. 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Project Manager.

Practice ENOVIA Project Management

Available Online	Yes

Practice ENOVIA Traceable Requirements Management – Added Exercise	
Course Code	ENOV-en-RERE-X-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	4.50 hours
Course Material	
Level	Exercise
Audience	Requirements Engineer
Description	This module provides you with exercises for additional practice on the ENOVIA Traceable Requirements Management app. The exercises have been created based on Industry practices. You will practice creating requirements and specification structures. You will also learn how to allocate requirements to products and models and generate traceability reports for them.
Objectives	Upon completion of this module you will be able to: - Capture requirements from MS Word and MS Excel documents - Create requirements and requirement specifications - Allocate requirements to products and models - Create test cases and use cases - Create revision and multiple versions of requirements - Generate traceability reports
Prerequisites	Students attending this learning module should be familiar with ENOVIA Traceable Requirements Management.
Available Online	Yes

ENOVIA

Business Strategy, Planning and Execution

Practice ENOVIA Variant Management: Product Manager	
Course Code	ENOV-en-VAMAPDM-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	3.50 hours
Course Material	
Level	Fundamental
Audience	Product Managers
Description	This module will teach you how to use the Variant Management app for creating and managing product configurations.
Objectives	Upon completion of this module, you will be able to: - Create product structures - Define product portfolios - Create features and rules - Create product configurations
Prerequisites	Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role, Explore the Collaborative Industry Innovator Role and Explore the Product Manager Role modules. 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Product Manager.
Available Online	Yes

ENOVIA

Cyber Physical Systems

Practice ENOVIA Collaborative Lifecycle Management	
Course Code	ENOV-en-LIIN-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	CAD designers, engineers in charge of product development
Description	In this module, you will learn how to use the ENOVIA Collaborative Lifecycle Management app to manage the complete lifecycle of an object in order to achieve concurrent engineering. You will also learn to manage the access and ownership of objects for collaboration of members on the same platform.
Objectives	Upon completion of this module you will be able to: - Create a new product structure - Use different sections of the Action bar effectively - Manage the changes in a product structure - Save the product structure in the database
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice ENOVIA Design Review	
Course Code	ENOV-en-REEV-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	6.5 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	This module will teach you how to create different slides for various positions of an assembly to create exploded views. You will also learn how to create sections and measures, and export them as parts or drawings.You will also learn how to compare 3D objects and how to create multi-context reviews.
Objectives	Upon completion of this module you will be able to: - Create a design review and add markups to it - Create slides and add markers - Create and export sections and measures - Compare 3D Objects and 2D Drawings - Create multi-context reviews
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice ENOVIA Exchanges Management	
Course Code	ENOV-en-EXCH-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	2 hours
Course Material	
Level	Fundamental
Audience	CAD Designers and Platform Contributors
Description	This module will teach you how to use the import / export tools in 3DEXPERIENCE. You will also manage the mastership between V5 files and 3DEXPERIENCE files.
Objectives	Upon completion of this module, you will be able to: - Import and export 3DXML files - Import and export CATIA V5 files - Manage the Mastership of imported objects
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice ENOVIA On-The-Go	
Course Code	ENOV-en-ONGO-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	1 hours
Course Material	
Level	Fundamental
Audience	Users of the 3DEXPERIENCE platform
Description	This module will teach you how you can work in the offline mode in the 3DEXPERIENCE platform.
Objectives	Upon completion of this module you will be able to: - Work in the offline mode - Return to the online mode - Restore the last session - Create the offline content in the online mode
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

ENOVIA

Planning

Explore the Requirements Engineer Role	
Course Code	ENOV-en-TRM-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	5 hours
Course Material	
Level	Fundamental
Audience	Requirement Engineers, Product Managers, Product Architects and Product Engineers.
Description	In this module, you will learn how to use the ENOVIA Requirements Management Role to gather requirements from various sources and allocate them to products. You will also learn how to manage and trace requirement revisions and variants.
Objectives	Upon the completion of this module you will be able to: - Capture requirements from MS Word and MS Excel documents - Create requirements and requirement specifications - Allocate requirements to products and models - Create test cases and use cases - Create revisions and multiple versions of requirements - Generate traceability reports
Prerequisites	- Knowledge: Students attending this course should have completed the Explore the Business Innovator Role and Explore the Industry Innovator Role modules. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator, Requirements Engineer and Systems Architecture Designer

Explore the Requirements Engineer Role	
Available Online	Yes

ENOVIA

Platform and Deployment Options

Practice ENOVIA Collaborative Lifecycle Management	
Course Code	ENOV-en-LIIN-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	CAD designers, engineers in charge of product development
Description	In this module, you will learn how to use the ENOVIA Collaborative Lifecycle Management app to manage the complete lifecycle of an object in order to achieve concurrent engineering. You will also learn to manage the access and ownership of objects for collaboration of members on the same platform.
Objectives	Upon completion of this module you will be able to: - Create a new product structure - Use different sections of the Action bar effectively - Manage the changes in a product structure - Save the product structure in the database
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice ENOVIA Exchanges Management	
Course Code	ENOV-en-EXCH-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	2 hours
Course Material	
Level	Fundamental
Audience	CAD Designers and Platform Contributors
Description	This module will teach you how to use the import / export tools in 3DEXPERIENCE. You will also manage the mastership between V5 files and 3DEXPERIENCE files.
Objectives	Upon completion of this module, you will be able to: - Import and export 3DXML files - Import and export CATIA V5 files - Manage the Mastership of imported objects
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

ENOVIA

Product Configurations

Explore the Classification Manager Role	
Course Code	ENOV-en-CCM-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	1.50 hours
Course Material	
Level	Fundamental
Audience	Classification Managers
Description	In an industrial scenario, it is important for the classification manager to organize and manage libraries efficiently. This learning module will take you through the use of IP Classification app to create libraries and classes. You will learn how to store, manage and access documents and other files within the application in a collaborative work environment.
Objectives	Upon completion of this module, you will be able to: - Manage general libraries and their related hierarchies - Create and manage attribute groups - Classify the library objects in IP Classify and Reuse widget
Prerequisites	Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator module and Explore the Collaborative Industry Innovator module. 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator, Classification Manager.
Available Online	Yes

Explore the Configuration Engineer Role	
Course Code	ENOV-en-CFG-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	2 hours
Course Material	
Level	Fundamental
Audience	Configuration Engineers
Description	Welcome to this interactive module on the Configuration Engineer role. To stay ahead of the latest innovations and market trends, it is time companies transform from traditional product design processes to managing configurable product structures. It applies to all functional aspects (e.g. engineering, manufacturing) and all other data contributing to the end to end product definition.
Objectives	In this module, you will learn to: - 1. Define and manage configured product data structures - 2. Apply configuration effectivity to satisfy all possible product variations - 3. Analyze and filter 150% configured structure
Prerequisites	- Knowledge: Students attending this course should have completed the Explore the Collaborative Business Innovator Role, Explore the Collaborative Industry Innovator Role and Explore the Product Manager Role modules. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator, Product Manager, Mechanical Designer and Configuration Engineer.

Explore the Configuration Engineer Role

Available Online	Yes

Explore the Digital Mockup Review Engineer Role	
Course Code	ENOV-en-DRN-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	3 hours
Course Material	
Level	Fundamental
Audience	
Description	Design validation is an important phase in the lifecycle of product development. Design Reviewer helps analyze and communicate issues as well as resolution ideas. In this module, you will learn the key capabilities of the Digital Mockup Review Engineer role. You will learn how to create and manage reviews on the virtual prototype.
Objectives	Upon completion of this module you will be able to: - Explore Product Structures - Create Reference Geometries - Create Reviews - Manage Interferences - Validate Reviews - Analyze Technical Attributes
Prerequisites	- Knowledge: Students attending this learning module should have completed the Explore the Business Innovator Role module. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Digital Mockup Review Engineer
Available Online	Yes

Explore the Digital Mockup Validation Engineer Role	
Course Code	ENOV-en-DEY-F-15-211
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	1 hours
Course Material	
Level	Fundamental
Audience	
Description	Design Validation is an important phase in the product development lifecycle. In this module, you will learn the key capabilities of the Digital Mockup Validation Engineer role. The Digital Mockup Validation Engineer role offers a complete set of tools to organize, manage and follow issues. You will learn how to define, manage and validate the reviews on the virtual prototype.
Objectives	Upon completion of this module you will be able to: - Define the Review - Define Checks and Associate Requirements - Create Highlights to Describe Major Problems - Create Stamp Markers to Approve the Design - Create an Issue Against Faulty Design
Prerequisites	- Knowledge: Students attending this module should have completed the Explore the Business Innovator module. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator, Digital Mockup Validation Engineer.
Available Online	Yes

Practice ENOVIA Artwork Connector	
Course Code	ENOV-en-ARCO-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	2.58 hours
Course Material	
Level	Fundamental
Audience	Graphic Designers and Project Managers
Description	Learn how the Adobe Illustrator plug-in provides capabilities to collaborate, access, and store final artwork to the 3DEXPERIENCE platform. Also, learn how to synchronize in one click the artwork text boxes with the copy content stored in the 3DEXPERIENCE platform with pre-tagged fields in the artwork file.
Objectives	Upon completion of this module, you will be able to: - Install and set-up the connector - List the operating systems supported by the connector - Search for a POA, access the artwork assembly, map, sync , check-in and other critical functions using the Artwork Assembly panel - Create, access and manage templates in the platform using the Artwork Template panel - Assign a GS1 artwork element type to the text areas using the Type Assignment panel
Prerequisites	- Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. Additionally they should possess knowledge of Adobe Illustrator. - - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator, Artwork Coordinator and Copy Author & Graphic Designer.

Practice ENOVIA Artwork Connector

Available Online	Yes

Practice ENOVIA Change Action Management	
Course Code	ENOV-en-NCHA-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	5.5 hours
Course Material	
Level	Fundamental
Audience	Change Initiators, Design Engineers and Product Managers
Description	This module will teach you how to use the ENOVIA Change Action Management app to manage the engineering change process. You will learn how to create change actions and add Proposed changes to it. You will also learn to work with change actions and view the Realized changes to complete the change process.
Objectives	Upon completion of this module, you will be able to: - Initiate a Change Action - Add Proposed Changes to a Change Action - Work Under Change Action to execute a Design Modification - View the Realized Changes - Review and Approve the Design changes
Prerequisites	Students attending this module should have completed the Explore the Collaborative Business Innovator and Explore the Collaborative Industry Innovator modules.
Available Online	Yes

Practice ENOVIA Engineering Release	
Course Code	ENOV-en-ENXENG-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	Release Engineers
Description	This module will teach you to analyze the engineering items and create a new engineering definition using the ENOVIA Engineering Release widget. You will play the role of a Product Release Engineer in building a new engineering definition from early definition to final validation in collaboration with engineering ecosystem.
Objectives	Upon completion of this module, you will be able to: - View and Open Engineering Items - Evaluate the geometry in 3DPlay - Explore revision history - Create a new Engineering definition - Set the re-use and duplicate components - Set the Part Number and update its quantity - Add and review the design specification document - Assign the design responsibilities - Release the Engineering definition
Prerequisites	Knowledge: Students attending this course should have completed the Explore the Business Innovator module. 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator, Product Release Engineer and Mechanical Designer.
Available Online	Yes

Practice ENOVIA IP Classification	
Course Code	ENOV-en-PACL-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	4.50 hours
Course Material	
Level	Fundamental
Audience	Classification Managers
Description	This module will teach you how to use the IP Classification app to improve reuse and reduce costs through secure content classification during the development process.
Objectives	Upon completion of this module, you will be able to: - Manage general libraries and their related hierarchies - Create and manage attribute groups - Classify the library objects using IP Classify and Reuse widget
Prerequisites	Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role, Explore the Collaborative Industry Innovator Role and Explore the Classification Manager Role modules. 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Classification Manager.
Available Online	Yes

ENOVIA

Program and Project Performance & Execution

Explore the Change Manager Role	
Course Code	ENOV-en-CHG-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	1.50 hours
Course Material	
Level	Fundamental
Audience	Change Managers, Change Coordinator and Product Managers.
Description	In this module, you will learn to establish a governance-monitored change implementation process across the global teams.
Objectives	Upon the completion of this module, you will be able to: - Create and assign a Change Request and add an Impact Analysis - Create a Change Order and the associated Change Action - Review and Approve Change (Change Request, Change Order and Change Action)
Prerequisites	- Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role and Explore the Collaborative Industry Innovator Role modules. - - 3DEXPERIENCE Roles: Collaborative Business Innovator Role (IFW-OC) and Collaborative Industry Innovator Role (CSV-OC) / Collaborative Business & Industry Innovator (PCS-OC), Change Manager (CHG-OC).
Available Online	Yes

Explore the Project Manager Role	
Course Code	ENOV-en-DPM-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	2.50 hours
Course Material	
Level	Fundamental
Audience	Project Managers and Reviewers
Description	In today's fast-paced, customer-driven environment, products need to be designed and delivered in a timely yet highly efficient manner. You need great project management skills to deliver successful results. This self-paced module will help you to learn and explore the capabilities of the Project Manager.
Objectives	By the end of this module, you will be able to: - Create Project Templates - Define Project Schedule - Submit Weekly Time Sheets - Monitor Project Status
Prerequisites	- Students attending this module should have completed the Explore the Collaborative Business Innovator module and Explore the Collaborative Industry Innovator module. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Project Manager
Available Online	Yes

Practice ENOVIA Change Action Management - Added Exercise	
Course Code	ENOV-en-NCHA-F-15-221
Available Release	3DEXPERIENCE R2022x
Duration	2 hours
Course Material	
Level	Fundamental
Audience	Change Managers, Product Managers, Mechanical Designers
Description	In this module, you will be provided with an added exercise to initiate a change action, add proposed changes, apply work under, approve the design changes and complete a change action.
Objectives	Upon completion of this added exercise, you will be able to: - Prepare the data for scenario - Initiate a Change Action - Execute a Design Modification - Review and Approve Design Modifications
Prerequisites	Students attending this module should have completed the Explore the Collaborative Business Innovator module, Explore the Collaborative Industry Innovator module and Explore the Change Manager role module. 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Mechanical Designer
Available Online	Yes

ENOVIA

Structured Collaboration & collaborative Content

Explore the Collaborative Industry Innovator Role	
Course Code	CRB-en-CSV-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	1.92 hours
Course Material	
Level	Fundamental
Audience	Users of the 3DEXPERIENCE platform
Description	In this module, you will learn how to collaborate across disciplines with full flexibility and traceability to define and develop innovative products.
Objectives	Upon completion of this module, you will be able to: - Create and manage a collaborative space - Create and manage a bookmark root and bookmark - Manage MS Office documents into 3DEXPERIENCE platform using Collaboration for Microsoft - Create, edit and start a task - Create and manage a route - Manage data collaboratively using Collaborative Lifecycle - Annotate and comment a content using 3DMarkup - Report and manage an issue - Discover the others applications available with Collaborative Industry Innovator role
Prerequisites	- Knowledge Prerequisites: Learners attending this module should have completed Explore the Collaborative Business Innovator Role module. - - 3DEXPERIENCE roles: Collaborative Business & Industry Innovator (PCS-OC)

Explore the Collaborative Industry Innovator Role	
Available Online	Yes

Explore the Project Planner Role	
Course Code	CRB-en-XPP-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	0.75 hours
Course Material	
Level	Fundamental
Audience	Users of the 3DEXPERIENCE platform
Description	In this module, you will learn how to perform team-based planning and monitor with real-time status to meet the key milestones.
Objectives	Upon completion of this module, you will be able to: - Create Projects and Add Members - Schedule Project Tasks - Manage Tasks using Project Planning and Collaborative Tasks app - Define Project Hierarchies with Sub-Projects - Export and Import Project Structures
Prerequisites	- Learners attending this module should have completed Explore the Collaborative Business Innovator Role module. - - 3DEXPERIENCE Roles: Collaborative Business Innovator (IFW-OC) or - Collaborative Business & Industry Innovator (PCS-OC), Project Planner (XPP-OC).
Available Online	Yes

EXALEAD

PartSupply

Explore the Classification Intelligence Analyst Role	
Course Code	EXA-en-CLY-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	0.17 hours
Course Material	
Level	Fundamental
Audience	
Description	The Classification Intelligence Analyst role provides a new step by step process for enabling massive and automated classification thanks to components 3D shape and semantic complete recognition. Once classified, your components are more easily found, reused and can be compared in detail with each other and all market components from PartSupply Community.
Objectives	Objectives include: - Analyzing data to perform clustering and run the classifier. - Classify your components from automated suggestions.
Prerequisites	
Available Online	Yes

Explore the PartSupply Optimized Components Consumer Role	
Course Code	EXA-en-EPU-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	0.17 hours
Course Material	
Level	Fundamental
Audience	
Description	Learn about accessing and using PartSupply Enterprise on the 3DEXPERIENCE Marketplace.
Objectives	You will learn how to open, insert and replace components from the PartSupply catalog from within SOLIDWORKS.
Prerequisites	N/A
Available Online	Yes

Explore the PartSupply Standard Components Manager Role	
Course Code	EXA-en-EPA-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	0.20 hours
Course Material	
Level	Fundamental
Audience	
Description	Learn about selecting components from qualified suppliers, and how to subscribe to a whole supplier catalog.
Objectives	Objectives include learning import your own in-house components, and how to manage requests to add components to your company ecosystem.
Prerequisites	N/A
Available Online	Yes

Explore the Standardization Intelligence Analyst Role	
Course Code	EXA-en-SDI-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	0.17 hours
Course Material	
Level	Fundamental
Audience	
Description	The Standardization Intelligence Analyst role enables you to identify and promote components for reuse, taking into account engineering, compliance, manufacturing and sourcing requirements.
Objectives	The objectives of this course include: - Analyze your data to perform part standardization clustering. - Label parts as preferred, alternate, or obsolete.
Prerequisites	
Available Online	Yes

NA

3DEXPERIENCE platform

Stimulate open innovation across your ecosystem	
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	0.33 hours
Course Material	
Level	Fundamental
Audience	
Description	In this module, you will understand the keys points to allow you unleashing open innovation inside your company and ensuring seamless collaboration across all departments
Objectives	Change to cross discipline to cross solution strategy - Master how to gather talents, ideas, solutions and data - Comprehend cross-discipline, end-to-end continuity with 3DEXPERIENCE platform - Managing open innovation inside companies through all departments - Continuous Value Creation Framework - Ideations experiences (My3DEXPERIENCE, 3DSketch, 3DStory)
Prerequisites	
Available Online	Yes

NETVIBES

Industry intelligence

Explore the Social Business Analyst Role	
Course Code	NET-en-NBA-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	1.17 hours
Course Material	
Level	Fundamental
Audience	
Description	Learn how the 3DEXPERIENCE Platform and it's game changing online content aggregation and analysis apps help companies make better decisions faster.
Objectives	Upon completion of this course, you will be able to: - Build dashboards to leverage your business analysis and make your insights actionable. - Managing sources with the Library App - Monitor specifics sources with the Tracked Topic App - Leverage the Social Analytics app to analyze what matters to you - Enhance your analysis by comparing data with the Metrics Reader App - Make your insights actionable: reporting and sharing via Potions and 3DSwYm
Prerequisites	
Available Online	Yes

NETVIBES

Sourcing & Standardization

Collaborate on Standard Component Management on Cloud	
Course Code	NET-en-BACMC-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	0.33 hours
Course Material	
Level	Fundamental
Audience	
Description	In this module, you will discover the Standard Component Management on Cloud NETVIBES Industry Process Experience.
Objectives	It enables a component manager to easily classify components in an internal catalog & to deploy an efficient and cost killer standardization and sourcing process, aligned with business policy while increasing product quality.
Prerequisites	
Available Online	Yes

SIMULIA

Additive Manufacturing

Getting Started with Physics Simulation	
Course Code	SIM-en-GSPS-F-15-221
Available Release	3DEXPERIENCE R2022x
Duration	7 hours
Course Material	
Level	Fundamental
Audience	This course is intended for users on the 3DEXPERIENCE platform with roles enabling native apps including physics simulation in the disciplines of Structures, Fluids, Electromagnetics or Motion.
Description	Physics simulation on the 3DEXPERIENCE platform can include simulation in disciplines such as Structures, Fluids, Electromagnetics, Vibroacoustics or Motion. Using the apps to run the simulations requires a baseline knowledge of how to log in to the platform, use 3DSearch to find and filter data, how to explore the data and manage the maturity for the purposes of physics simulation. The 3DEXPERIENCE native apps and web interfaces (including dashboards) will be introduced in this course. This course is the prerequisite for other physics simulation courses in the learning paths for the roles shown here.
Objectives	Upon completion of this course you will be able to: - Log in to the 3DEXPERIENCE platform - Search for and explore physical products and simulation objects - Manage maturity of data on the platform, track revisions, and delete example data - Configure preferences and settings including default display units
Prerequisites	None

Getting Started with Physics Simulation	
Available Online	Yes

SIMULIA

Automation

Getting Started with Automation and Optimization	
Course Code	SIM-en-GSAO-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	4.17 hours
Course Material	
Level	Fundamental
Audience	Multidisciplinary Optimization Engineer, Simulation Collaborator, or Simulation Process Engineer
Description	This getting started course will give you the basics of how to use the 3DEXPERIENCE platform, before you attempt courses in the topics of Automation and Optimization.
Objectives	Upon completion of this course you will be able to log in to the 3DEXPERIENCE platform, use search to find process simulations and templates, configure preferences and settings and explore a simulation process.
Prerequisites	None
Available Online	Yes

Practice SIMULIA Performance Trade-off	
Course Code	SIM-en-PTO-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	- This course is intended for the following roles: - - Simulation Collaborator - Simulation Process Engineer - Multidisciplinary Optimization Engineer
Description	This course is an introduction to the integrated web-based tool in the 3DEXPERIENCE platform that allows decision makers to select the best option among the competing objectives by providing trade-off and collaborative decision-support capability.
Objectives	Upon completion of this course you will be able to: - Compare alternatives, from simulation or test datasets - Conduct trade-off analyses to select the best alternative
Prerequisites	Getting Started with Automation and Optimization
Available Online	Yes

Practice SIMULIA Physics Simulation Review	
Course Code	SIM-en-PSR-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	2 hours
Course Material	
Level	Fundamental
Audience	This course is intended for all simulation roles.
Description	This course teaches you how to view simulation experience content in the Physics Simulation Review app, providing lightweight results visualization.
Objectives	Upon completion of this course you will be able to: - - • Replay simulation experiences in Physics Simulation Review for both native simulations and externally generated simulation results. - - • Perform lightweight visualization through web browsers
Prerequisites	None
Available Online	Yes

SIMULIA

Capture and Reuse Engineering Intent

Practice SIMULIA Process Experience Studio	
Course Code	SIM-en-EXPS-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	2.17 hours
Course Material	
Level	Fundamental
Audience	This course is intended for the Simulation Process Method Developer role.
Description	This course is an introduction to the web-based tool in the 3DEXPERIENCE Platform that allows methods developers to create customized interfaces for the Simulation Experiences. This app is similar to a form builder which lets the methods developer quickly develop the customized interface.
Objectives	Upon completion of this course you will be able to: - Produce simulation experiences - Create experience user interfaces
Prerequisites	The Process Composer Essentials course is required prior to taking this one.
Available Online	Yes

Practice SIMULIA Results Analytics	
Course Code	SIM-en-REII-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	6.92 hours
Course Material	
Level	Fundamental
Audience	This course is intended for the following roles: Simulation Process Method Developer Results Data Analyst
Description	This course is an introduction to the integrated web-based tool in the 3DEXPERIENCE platform that allows decision makers to collaboratively choose the best design from a large pool of data. This tool allows one to view and conduct trade-off analyses.
Objectives	Upon completion of this course you will be able to: - Initialize an analytics case - Conduct trade-off analyses - Select the best alternative
Prerequisites	None
Available Online	Yes

SIMULIA

Electromagnetics Simulation

Getting Started with Physics Simulation	
Course Code	SIM-en-GSPS-F-15-221
Available Release	3DEXPERIENCE R2022x
Duration	7 hours
Course Material	
Level	Fundamental
Audience	This course is intended for users on the 3DEXPERIENCE platform with roles enabling native apps including physics simulation in the disciplines of Structures, Fluids, Electromagnetics or Motion.
Description	Physics simulation on the 3DEXPERIENCE platform can include simulation in disciplines such as Structures, Fluids, Electromagnetics, Vibroacoustics or Motion. Using the apps to run the simulations requires a baseline knowledge of how to log in to the platform, use 3DSearch to find and filter data, how to explore the data and manage the maturity for the purposes of physics simulation. The 3DEXPERIENCE native apps and web interfaces (including dashboards) will be introduced in this course. This course is the prerequisite for other physics simulation courses in the learning paths for the roles shown here.
Objectives	Upon completion of this course you will be able to: - Log in to the 3DEXPERIENCE platform - Search for and explore physical products and simulation objects - Manage maturity of data on the platform, track revisions, and delete example data - Configure preferences and settings including default display units
Prerequisites	None

Getting Started with Physics Simulation	
Available Online	Yes

Practice SIMULIA Connector for CST	
Course Code	SIM-en-CSTPB-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	1 hours
Course Material	
Level	Fundamental
Audience	- This course is intended for the following role: - Electromagnetics Analyst - Antenna Placement Electromagnetics Engineer - All Physics Analyst
Description	This course is an introduction to the interactive connector between CST Studio Suite and the 3DEXPERIENCE platform.
Objectives	Upon completion of this course you will be able to: - Import Product Structure CST Studio Suite - Save results to the 3DEXPERIENCE platform - Open/download results from the 3DEXPERIENCE platform - View/analyze the results using the Physics Simulation Review app
Prerequisites	- The following course is required prior to taking this one: - Introduction to CST Studio Suite
Available Online	Yes

SIMULIA

Knowledge & Knowhow Capitalization

Getting Started with Physics Simulation	
Course Code	SIM-en-GSPS-F-15-221
Available Release	3DEXPERIENCE R2022x
Duration	7 hours
Course Material	
Level	Fundamental
Audience	This course is intended for users on the 3DEXPERIENCE platform with roles enabling native apps including physics simulation in the disciplines of Structures, Fluids, Electromagnetics or Motion.
Description	Physics simulation on the 3DEXPERIENCE platform can include simulation in disciplines such as Structures, Fluids, Electromagnetics, Vibroacoustics or Motion. Using the apps to run the simulations requires a baseline knowledge of how to log in to the platform, use 3DSearch to find and filter data, how to explore the data and manage the maturity for the purposes of physics simulation. The 3DEXPERIENCE native apps and web interfaces (including dashboards) will be introduced in this course. This course is the prerequisite for other physics simulation courses in the learning paths for the roles shown here.
Objectives	Upon completion of this course you will be able to: - Log in to the 3DEXPERIENCE platform - Search for and explore physical products and simulation objects - Manage maturity of data on the platform, track revisions, and delete example data - Configure preferences and settings including default display units
Prerequisites	None

Getting Started with Physics Simulation	
Available Online	Yes

Practice SIMULIA Connector for Simpack	
Course Code	SIM-en-SMPKPB-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	1.17 hours
Course Material	
Level	Fundamental
Audience	Simpack users who want to leverage the power of the 3DEXPERIENCE platform to update Simpack models based on an existing product structure, collaborate across their organization, and view the results of an analysis with high-performance visualization apps.
Description	This course is an introduction to the interactive connector between Simpack and the 3DEXPERIENCE platform.
Objectives	Upon completion of this course, you will be able to: - • Save Product Structure from the 3DEXPERIENCE platform to Simpack - • Save results to the 3DEXPERIENCE platform - • Open/download results from 3DEXPERIENCE platform - • Preview simulation results in 3DPlay - • View/analyze the results using Physics Simulation Review
Prerequisites	Before undertaking this course, you should have completed the Introduction to Simpack training and the Physics Simulation Review Essentials course.
Available Online	Yes

SIMULIA

Mechanical Engineering

Practice SIMULIA Static Study	
Course Code	SIM-en-STDY-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	4.17 hours
Course Material	
Level	Fundamental
Audience	This course is intended for the following role: Mechanism Simulation Designer
Description	This course is an introduction to performing linear static simulations in the 3DEXPERIENCE Platform. The Static Study app enables designers to perform strength and deflection calculations under static conditions to validate product performance to guide design modifications. Designers can experience product performance virtually so that they can make better-informed design decisions early in the design cycle, when the cost of design change is low and opportunity is high.
Objectives	Upon completion of this course you will be able to: - Search for simulation data in the database - Open the simulation for modification - Perform a simulation using the Static Study app - Review simulations stored in a database and generate reports
Prerequisites	None
Available Online	Yes

SIMULIA

Motion Engineering

Practice SIMULIA Connector for Simpack	
Course Code	SIM-en-SMPKPB-F-15-221
Available Releases	3DEXPERIENCE R2021x , 3DEXPERIENCE R2022x
Duration	1.17 hours
Course Material	
Level	Fundamental
Audience	Simpack users who want to leverage the power of the 3DEXPERIENCE platform to update Simpack models based on an existing product structure, collaborate across their organization, and view the results of an analysis with high-performance visualization apps.
Description	This course is an introduction to the interactive connector between Simpack and the 3DEXPERIENCE platform.
Objectives	Upon completion of this course, you will be able to: - • Save Product Structure from the 3DEXPERIENCE platform to Simpack - • Save results to the 3DEXPERIENCE platform - • Open/download results from 3DEXPERIENCE platform - • Preview simulation results in 3DPlay - • View/analyze the results using Physics Simulation Review
Prerequisites	Before undertaking this course, you should have completed the Introduction to Simpack training and the Physics Simulation Review Essentials course.
Available Online	Yes

Practice SIMULIA Motion Analysis	
Course Code	SIM-en-MOTA-F-15-221
Available Release	3DEXPERIENCE R2022x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	Designers and engineers who want to perform kinematic and dynamic analysis on mechanical systems.
Description	This course is an introduction to performing multibody system simulation on the 3DEXPERIENCE platform. The Motion Analysis app enables engineers to perform kinematic and dynamic simulations to predict and optimize the motion behavior of any mechanical system.
Objectives	Upon completion of this course, you will be able to: - • Create mechanisms to understand the motion behavior of a product assembly - • Enhance mechanisms with motion specific elements such as contact and springs - • Perform kinematic and dynamic analyses of a mechanism - • Review the results of a simulation
Prerequisites	Before undertaking this course, you should have some familiarity with fundamental multibody concepts and you should have completed the Getting Started with Physics Simulation course.
Available Online	Yes

SIMULIA

Multi-Discipline Engineering

Practice SIMULIA Plastic Part Filling	
Course Code	SIM-en-PPF-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	4.67 hours
Course Material	
Level	Fundamental
Audience	Plastic Mechanical Designer Interior Designer Mold & Tooling Designer
Description	This course is an introduction to performing basic injection molding simulation to spur product and design innovation in the 3DEXPERIENCE platform. The 3DEXPERIENCE platform enables realistic plastic injection molding simulation of the filling manufacturing process early in the design cycle, when the cost of design change is low and opportunity is high.
Objectives	Upon completion of this course you will be able to: - Perform Mold Filling simulations - View and evaluate simulation results
Prerequisites	None
Available Online	Yes

SIMULIA

Multiphysics Simulation

Explore the Fluid Dynamics Engineer Role	
Course Code	SIM-en-FMK-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	16 hours
Course Material	
Level	Fundamental
Audience	- This course is intended for the following roles: - Fluid Dynamics Engineer
Description	This course is a comprehensive introduction to fluid mechanics simulation in the 3DEXPERIENCE Platform. In this course, you will learn how to solve computational fluid dynamics (CFD) problems.
Objectives	Upon completion of this course you will be able to: - Set up and create CFD simulations in the 3DEXPERIENCE Platform - Perform incompressible and compressible CFD analyses - Perform fully coupled conjugate heat transfer (CHT) analyses - Postprocess results
Prerequisites	None
Available Online	Yes

Explore the Structural Mechanics Engineer Role	
Course Code	SIM-en-SSUW-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	25.50 hours
Course Material	
Level	Fundamental
Audience	- SOLIDWORKS users who have reached the limits of the SOLIDWORKS simulation tools or those who wish to benefit from the power of cloud-based simulation and the collaboration tools on the 3DEXPERIENCE Platform will benefit from attending this class. - - This course is intended for the following role: - Structural Mechanics Engineer
Description	This course is an introduction to the Structural Mechanics Engineer role, which is an offering to expand the simulation capabilities for SOLIDWORKS users, beyond the capabilities offered with the Structural Professional Engineer role. The 3DEXPERIENCE PLM Services connector automatically transfers study data into the simulation apps on the 3DEXPERIENCE platform. The Structural Mechanics Engineer role offers a wide range of element types and meshing tools, including an app to prepare geometry for simulation. The simulation apps on the 3DEXPERIENCE platform provide reliable solutions to multi-step simulations with combinations of non-linearities, including simple and robust contact setup and solution using General Contact for both static and dynamic problems. This role enables the explicit dynamic solver allowing for simulation of highly nonlinear impact or quasi-static problems. The 3DEXPERIENCE Platform provides apps and tools

Explore the Structural Mechanics Engineer Role	
	for easy sharing of data and knowledge enabling collaboration.
Objectives	The course covers the following topics: - • Access and use of the 3DEXPERIENCE PLM Services connector - • Understand which entities are transferred into the 3DEXPERIENCE simulation apps - • Create complete Finite Element models for structural and thermal simulations
Prerequisites	None
Available Online	Yes

Explore the Structural Performance Engineer Role	
Course Code	SIM-en-DRDW-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	21.67 hours
Course Material	
Level	Fundamental
Audience	Structural Simulation Engineer
Description	This course is an introduction to the Structural Simulation Engineer role, which is an offering to expand the simulation capabilities for SOLIDWORKS users.
Objectives	Upon completion of this course you will be able to: - Access and use the SOLIDWORKS Simulation Connector - Understand which entities are transferred into the 3DEXPERIENCE simulation apps - Create complete Finite Element models for structural and thermal simulations
Prerequisites	None
Available Online	Yes

Practice SIMULIA Abaqus Study	
Course Code	SIM-en-ABQX-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	2.33 hours
Course Material	
Level	Fundamental
Audience	Experienced Abaqus users who need to be able to run and manage their simulations in the 3DEXPERIENCE Platform will benefit from attending this class.
Description	The course covers the following topics: • Creating and configuring jobs • Managing files and data • Common Abaqus simulation use cases, including submodeling, making use of user subroutines, restart and import simulations. The course is divided into lectures and workshops. The course's workshops are integral to the training. They are designed to reinforce concepts presented during the lectures. They are intended to provide users with the experience of running and trouble-shooting actual simulation processes.
Objectives	This course is an introduction to running existing Abaqus simulations in the 3DEXPERIENCE Platform. The Abaqus Study app does not contain any simulation authoring tools, so a pre-existing Abaqus input file is required as a start point. The Abaqus Study app can be used to configure job execution options and run an Abaqus/Standard or an Abaqus/Explicit analysis, while still providing the full job execution functionality of Abaqus, such as the ability to use include files and to run user subroutines. Abaqus Study helps Abaqus users leverage the power of the 3DEXPERIENCE platform to manage their simulation data, collaborate across their organization, and view the results of an analysis with high-performance visualization apps.

Practice SIMULIA Abaqus Study	
Prerequisites	
Available Online	Yes

Practice SIMULIA Additive Manufacturing Scenario	
Course Code	SIM-en-MDA-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	This course is intended for the following roles: Additive Manufacturing Researcher, Additive Manufacturing Programmer
Description	This course is a comprehensive introduction to defining and performing additive manufacturing process simulations. It teaches you how to add material to the part, define laser paths, and model cooling effects during the build process in the context of thermal and thermal-stress simulations.
Objectives	Upon completion of this course you will be able to: - Generate machine build environment, support structures and scan path using the Powder Bed Fabrication application - Perform sequential thermal-structural simulations using the Additive Manufacturing Scenario application - View and evaluate simulation results
Prerequisites	Mechanical Scenario Creation Essentials
Available Online	Yes

Practice SIMULIA Composite Structures Simulation	
Course Code	SIM-en-SCI-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	Composites Simulation Engineer
Description	Composite materials are used in many design applications because of their high stiffness-to-weight ratios. The 3DEXPERIENCE Platform offers a variety of tools for their design and analysis in the context of a single integrated work environment. This enables greater productivity and efficiency.
Objectives	Upon completion of this course you will be able to: - Perform simulations of composite materials
Prerequisites	Any one of the following courses is required prior to taking this one: Mechanical Scenario Creation Essentials Structural Scenario Creation Essentials Linear Dynamics Scenario Creation Essentials
Available Online	Yes

Practice SIMULIA Connector for Abaqus/CAE	
Course Code	SIM-en-ABQPB-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	1 hours
Course Material	
Level	Fundamental
Audience	- Abaqus users who want to leverage the power of the 3DEXPERIENCE platform to update Abaqus models based on an existing product structure, collaborate across their organization, and view the results of an analysis with high-performance visualization apps. This course is intended for the following roles: - Structural Mechanics Analyst - All Physics Analyst
Description	This course is an introduction to the interactive connector between Abaqus/CAE and the 3DEXPERIENCE platform.
Objectives	Upon completion of this course, you will be able to: - Import/download Product Structure from the 3DEXPERIENCE platform to Abaqus/CAE - Save results to the 3DEXPERIENCE platform - Open/download files from 3DEXPERIENCE platform - View/analyze the results using Physics Simulation Review and Physics Results Explorer app
Prerequisites	- The following courses are required prior to taking this one: - Introduction to Abaqus
Available Online	Yes

Practice SIMULIA Durability Simulation	
Course Code	SIM-en-FGA-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	7 hours
Course Material	
Level	Fundamental
Audience	The course is intended for users with role: Structural Analysis Engineer, Durability Performance Engineer, Durability and Mechanics Engineer, or Composite Structures Analysis Engineer
Description	Durability of metals is a physics simulation discipline used across industries by many companies designing products made from steel, aluminum, and other metals. Using the simulation you have run in Structural Scenario or Mechanical Scenario, the fields that were solved can then be directed to be used in a complex fatigue loading history, to calculate either stress-life, strain-life or infinite life FRF values. These are used for redesign instead of the stresses or strains.
Objectives	Upon completion of this course you will be able to: - Perform fatigue simulations - Understand the fatigue loading most applicable to simulation procedures - Use fatigue materials and simulate surface roughness - View and evaluate fatigue simulation results
Prerequisites	Any one of the following courses is required prior to taking this course Mechanical Scenario Creation Essentials or Structural Scenario Creation Essentials
Available Online	Yes

Practice SIMULIA Linear Structural Scenario Creation	
Course Code	SIM-en-LNCS-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	- This course is intended for the following roles: - Structural Engineer
Description	This course is an introduction to linear, frequency and thermal simulations, and to the evaluation of simulation results.
Objectives	Upon completion of this course you will be able to: - Perform linear and frequency simulations - Perform thermal simulations - View and evaluate simulation results
Prerequisites	- The following course is required prior to taking this one: - Structural Model Creation Essentials
Available Online	Yes

Practice SIMULIA Linear Structural Validation	
Course Code	SIM-en-LSDY-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	- The course is intended for the following audience: - Structural Designer
Description	This course is an introduction to performing structural simulation for designers using the 3DEXPERIENCE Platform, including product performance assessment under linear static conditions. The 3DEXPERIENCE Platform provides seamless integration between CAD, lifecycle and simulation so that your simulation automatically reacts when you update the design.
Objectives	The course covers the following topics: - Searching and managing simulation data. - Performing a structural simulation using the Linear Structural Validation app, including: Linear statics, Natural frequency extraction, Thermal (steady-state). - Review the results of the simulation using contour plots, animations and other visualization features.
Prerequisites	None
Available Online	Yes

Practice SIMULIA Material Calibration	
Course Code	SIM-en-MCAL-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	12 hours
Course Material	
Level	Fundamental
Audience	- This course is intended for the following roles: - Material Calibration Specialist - Structural Mechanics Engineer
Description	It is important to calibrate advanced material models for simulation, so that the response of the mathematical model used during simulation matches the material's tested physical behavior. This course is an introduction to the optimization methods embedded in the Material Calibration app. Test data can be imported, edited, and a math model optimized to fit the data. Plotting and other outputs help the user to determine the goodness of fit. Afterwards, a core material can be created for use in the 3DEXPERIENCE platform structural simulation apps, and/or an *.inp file can be exported for use in Abaqus.
Objectives	Upon completion of this course you will be able to: - Import and plot material test data - Configure and calibrate material models - Use optimization settings - Generate additional outputs - Create a core material in the 3DEXPERIENCE platform - Export materials for use in an Abaqus input file
Prerequisites	The following course is required prior to taking this one: Structural Model Creation Essentials

Practice SIMULIA Material Calibration

Available Online	Yes

Practice SIMULIA Mechanical Scenario Creation	
Course Code	SIM-en-MECS-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	16 hours
Course Material	
Level	Fundamental
Audience	- This course is intended for the following roles: - Structural Mechanics Engineer
Description	This course is an introduction to mechanical and thermal simulation in the 3DEXPERIENCE Platform. It teaches you how to solve both linear and nonlinear static and dynamics problems and view simulation results.
Objectives	Upon completion of this course you will be able to: - Perform structural simulations (linear and nonlinear; statics and dynamics) - Perform thermal simulations - View and evaluate simulation results
Prerequisites	The following course is required prior to taking this one: Structural Model Creation Essentials
Available Online	Yes

Practice SIMULIA Mechanical Scenario Creation: Linear Dynamics	
Course Code	SIM-en-MECS2-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	8 hours
Course Material	
Level	Advanced
Audience	- This course is intended for the following roles: - Structural Mechanics Engineer
Description	This course is an introduction to linear dynamics simulation in the 3DEXPERIENCE Platform. It teaches you how to solve linear dynamics problems, including natural frequency, harmonic response, and model dynamic applications. It also provides an introduction to solving interior structural-acoustic problems and conduct complex eigenvalue analyses. .
Objectives	Upon completion of this course you will be able to: - Perform linear dynamics simulations - Perform coupled structural-acoustic simulations - Perform complex eigenvalue simulations - View and evaluate simulation results
Prerequisites	- The following course is required prior to taking this one: - Mechanical Scenario Creation Essentials
Available Online	Yes

Practice SIMULIA Model Assembly Design	
Course Code	SIM-en-MSAM-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	- This course is intended for the following roles: - Structural Performance Engineer - Structural Mechanics Engineer
Description	This course in an introduction to creating large and complex finite element assemblies using the Batch Modeling technology in the 3DEXPERIENCE Platform. The course also discusses managing the product structure for large assemblies of parts and meshes created either in the 3DEXPERIENCE Platform or in 3rd-party tools.
Objectives	Upon completion of this course you will be able to: - Create external simulation representations. - Perform automated modeling
Prerequisites	Structural Model Creation: Geometry and Meshing
Available Online	Yes

Practice SIMULIA Multiscale Experiment Creation	
Course Code	SIM-en-MSEC-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	This course is intended for the following roles: Multiscale Systems Specialist Multiphysics Experiment Creator Multiscale System Analyst
Description	This course is an introduction to performing multiscale and multiphysics simulations in the 3DEXPERIENCE platform. Multiscale experiments can combine 3D physics simulations with logical system simulations that are highly abstracted approximations of real-world physical behavior (usually packaged in the form of a functional mockup unit or FMU). Multiphysics experiments involve high-precision 3D simulations such as mechanical finite element analyses, computational fluid dynamics (CFD) flow simulations, and electromagnetic simulations. You can combine two different physics domains to create a co-simulation such as a fluid-structure interaction (FSI) and conjugate heat transfer (CHT).
Objectives	Upon completion of this course you will be able to: - Set up and create models for co-simulation analysis in the 3DEXPERIENCE platform - Perform co-simulation analyses - Postprocess co-simulation analyses
Prerequisites	The following courses are required prior to taking this one: Mechanical Scenario Creation Essentials Fluid Mechanics Analyst Essentials

Practice SIMULIA Multiscale Experiment Creation

Available Online	Yes

Practice SIMULIA Parametric Design Study	
Course Code	SIM-en-PDSM-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	8.33 hours
Course Material	
Level	Fundamental
Audience	- Structural Mechanics Engineer - Structural Analysis Engineer - Durability and Mechanics Engineer
Description	The Parametric Design Study app allows simulation engineers to apply design exploration to a simulation for a single simulation object in a familiar scenario application interface. Using the app you can easily author, monitor and postprocess design exploration studies. This enables automatically search and discover of better designs using a design improvement study.
Objectives	Upon completion of this course you will be able to use the Parametric Design Study to: - Create a design study, defining design variables and response variables - Use Knowledgeware parameters to reference geometric, mesh, scenario and results features in such studies - Perform design space checks and running the study - Monitor and review study results
Prerequisites	- The following course is required prior to taking this one: - Mechanical Scenario Creation Essentials
Available Online	Yes

Practice SIMULIA Physics Results Explorer	
Course Code	SIM-en-PHYR-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	- This course is intended for the following roles: - Fluid Dynamics Engineer - Structural Engineer - Structural Mechanics Engineer - Structural Performance Engineer
Description	The 3DEXPERIENCE Platform offers a rich variety of simulation tools and provides a new paradigm in results visualization. This course is an introduction to the high-performance visualization tool in the 3DEXPERIENCE Platform that allows simulation analysts and engineers to view and evaluate simulation results.
Objectives	Upon completion of this course you will be able to: - View and evaluate simulation results
Prerequisites	None
Available Online	Yes

Practice SIMULIA Plastic Injection	
Course Code	SIM-en-PPM-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	Simulation Analysts
Description	This course is an introduction to performing injection molding simulation to spur product and design innovation in the 3DEXPERIENCE Platform. The 3DEXPERIENCE Platform enables realistic plastic injection molding simulation of the mold cooling, filling and packing manufacturing processes early in the design cycle, when the cost of design change is low and opportunity is high.
Objectives	Upon completion of this course you will be able to: - Performa plastic injection molding simulation of the mold cooling, filling and packing processes using the Plastic Mold Injection app · Understand simulation results from the molding process through to part warpage to produce highly efficient designs and/or optimize their performance
Prerequisites	None
Available Online	Yes

Practice SIMULIA Simulation Model Design	
Course Code	SIM-en-SML-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	Mechanical Analyst Structural Vibration Analyst Noise & Vibration Analyst Fluid Mechanics Analyst Multiphysics Simulation Researcher Finite Element Modeling & Assembly Specialist
Description	This course is an introduction to creating and assembling geometry in the 3DEXPERIENCE Platform. The focus is on techniques relevant to simulation.
Objectives	Upon completion of this course you will be able to: - Create basic native solid geometry. - Create basic native shell geometry. - Create assemblies of parts.
Prerequisites	None
Available Online	Yes

Practice SIMULIA Simulation Scripting	
Course Code	SIM-en-VBAUTO-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	40 hours
Course Material	
Level	Fundamental
Audience	- This course is intended for the following roles: - Structural Mechanics Engineer - Structural Performance Engineer
Description	Automation in the 3DEXPERIENCE platform is a powerful solution available for various domains and provides a complete set of dedicated APIs which allows users to create, model and execute the multiphysics simulations. The objective of modelling and simulation automation is to reduce the time required for re-execution of multiple finite element simulation cases with/without minor changes. 3DEXPERIENCE uses VBA as the tool for automation which can readily be integrated with other Microsoft Windows software tools empowering its functionality further. This course is intended for Simulation Analysts, Tech Support Engineers, Simulation Consultants, and Field Engineers who want to learn automation in the simulation domain. The training session starts with the basics of VB programming and then cover automation for basic 3DEXPERIENCE platform operations, geometric modelling, materials, mesh, simulation scenarios, simulation execution and post-processing. The goal is to introduce users to VBA and basic 3DX platform methods and services first before delving deep into the simulation aspects of the VB API. Users will get a good insight into the map between the 3DX specification tree, the interactive GUI and the VB API after attending this training. This will enable users to navigate through the API efficiently. The course will

Practice SIMULIA Simulation Scripting	
	also include GUI customization using VB for building the graphical user interface and the SIM Python API for reading/writing the SIM files. The training material will involve workshops to give hands-on experience to the end users.
Objectives	Upon completion of this course you will be able to: - Understand the 3DEXPERIENCE platform VB API concepts - Use the 3DEXPERIENCE Physics apps automation environment and documentation - Automate 3DEXPERIENCE Physics applications using Visual Basic - Read and Write SIM files using the SIM Python API
Prerequisites	- The following courses are required prior to taking this one: - Structural Model Creation Essentials, Structural Scenario Creation Essentials and Physics Results Explorer Essentials. - - Note that scripting in the 3DEXPERIENCE platform also requires a concurrent license of the Simulation Scripting role.
Available Online	Yes

Practice SIMULIA Structural Model Creation	
Course Code	SIM-en-MECM-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	- This course is intended for the following roles: - Structural Engineer - Structural Mechanics Engineer - Structural Performance Engineer
Description	This course is an introduction to finite element modeling in the 3DEXPERIENCE platform. It teaches you how to prepare finite element models for simulation.
Objectives	Upon completion of this course you will be able to: - Create complete Finite Element models for structural and thermal simulations
Prerequisites	None
Available Online	Yes

Practice SIMULIA Structural Model Creation: Geometry and Meshing	
Course Code	SIM-en-MECM2-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	16 hours
Course Material	
Level	Advanced
Audience	- This course is intended for the following roles: - - Structural Mechanics Engineer - Structural Performance Engineer
Description	This course provides an in-depth look at cleaning/ repairing geometry for the purpose of generating high quality meshes. It also offers a comprehensive discussion on meshing techniques. The focus is on techniques relevant to simulation.
Objectives	Upon completion of this course you will be able to: - Clean and repair native and imported geometry. - Use advanced meshing techniques.
Prerequisites	The following course is required prior to taking this one: Structural Model Creation Essentials
Available Online	Yes

Practice SIMULIA Structural Scenario Creation	
Course Code	SIM-en-EMCS-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	- This course is intended for the following roles: - Structural Performance Engineer
Description	This course is an introduction to structural and thermal simulation in the 3DEXPERIENCE Platform. It teaches you how to solve both linear and nonlinear static problems and basic linear dynamics problems.
Objectives	Upon completion of this course you will be able to: - Perform structural simulations (linear and nonlinear; statics and dynamics) - Perform thermal simulations - View and evaluate simulation results
Prerequisites	The following course is required prior to taking this one: Structural Model Creation Essentials
Available Online	Yes

SIMULIA

Platform Options

Practice SIMULIA Performance Study	
Course Code	SIM-en-DISB-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	3.25 hours
Course Material	
Level	Fundamental
Audience	Mechanical Analyst Structural Vibration Analyst Noise & Vibration Analyst Fluid Mechanics Analyst Finite Element Modeling & Assembly Specialist Structural Analysis Engineer Steel Ship Structural Analysis Engineer Stress Engineer Fluid Dynamics Engineer Simulation Process Method Developer Results Data Analyst
Description	This course is an introduction to the lightweight web-based tool in the 3DEXPERIENCE Platform that allows simulation analysts and engineers to run predefined Simulation Processes. The tool enables one to quickly search, run, and monitor existing Simulation Processes.
Objectives	Upon completion of this course you will be able to: - Instantiate Simulation Processes from Simulation Experiences - Run and monitor Simulation Processes - Manage Simulation Processes
Prerequisites	None
Available Online	Yes

Practice SIMULIA Simulation Companion	
Course Code	SIM-en-COMP-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	3.42 hours
Course Material	
Level	Fundamental
Audience	This course is intended for the Simulation Asset Management role.
Description	This course is an introduction to the light weight web-based tool in the 3DEXPERIENCE Platform that allows methods developers and engineers to quickly test and create ad-hoc simulation processes. This app provides tools and infrastructure to run a program and manage both the input and output data.
Objectives	Upon completion of this course you will be able to: - Complete basic ad-hoc simulation workflows using Simulation Companion - Set up a 3DDashboard experience for conducting ad-hoc simulation workflows - Initialize and manage a new ad-hoc simulation workflow - Configure and run simulation tools - Manage Simulation Companion processes
Prerequisites	None
Available Online	Yes

SIMULIA

Structures Simulation

3DEXPERIENCE Simulation Primer for Abaqus/CAE Users	
Course Code	SIM-en-CAEX-F-15-221
Available Release	3DEXPERIENCE R2022x
Duration	5.33 hours
Course Material	
Level	Fundamental
Audience	- This course is intended for the following roles: - Structural Engineer - Structural Performance Engineer - Structural Mechanics Engineer - Structural Analysis Engineer
Description	This 1-day course is intended to help experienced Abaqus/CAE users transition to simulation on the 3DEXPERIENCE platform. The course provides a high-level introduction to the complete simulation workflow on the 3DEXPERIENCE platform, and for each step compares back to the approach in Abaqus/CAE, allowing users to leverage their existing knowledge, whilst highlighting some key advantages of simulation on the 3DEXPERIENCE platform.
Objectives	Upon completion of this course you will be able to: - - * Leverage Abaqus/CAE knowledge to start - to navigate the 3DEXPERIENCE platform - - * Understand key differences in the simulation workflow on the 3DEXPERIENCE platform - - * Create and run a simulation and evaluate - the simulation results

3DEXPERIENCE Simulation Primer for Abaqus/CAE Users	
Prerequisites	- The following course is required prior to taking this one: - None
Available Online	Yes

Explore the Structural Performance Engineer Role	
Course Code	SIM-en-SFO-F-15-221
Available Release	3DEXPERIENCE R2022x
Duration	1.50 hours
Course Material	
Level	Fundamental
Audience	- This course is intended for the following role: - Structural Performance Engineer
Description	This course provides an overview on the Structural Performance Engineer role on the 3DEXPERIENCE platform. A step-by-step tutorial shows a typical simulation workflow for the role. Finally, the learning path delivering detailed training on the apps provided with the role is explained.
Objectives	Upon completion of this course you will be able to: - • Understand the major capabilities of the Structural Performance Engineer role - • Access geometry on the platform - • Create a FEM model - • Create and run a simulation - • Evaluate the results
Prerequisites	None
Available Online	Yes

Getting Started with Physics Simulation	
Course Code	SIM-en-GSPS-F-15-221
Available Release	3DEXPERIENCE R2022x
Duration	7 hours
Course Material	
Level	Fundamental
Audience	This course is intended for users on the 3DEXPERIENCE platform with roles enabling native apps including physics simulation in the disciplines of Structures, Fluids, Electromagnetics or Motion.
Description	Physics simulation on the 3DEXPERIENCE platform can include simulation in disciplines such as Structures, Fluids, Electromagnetics, Vibroacoustics or Motion. Using the apps to run the simulations requires a baseline knowledge of how to log in to the platform, use 3DSearch to find and filter data, how to explore the data and manage the maturity for the purposes of physics simulation. The 3DEXPERIENCE native apps and web interfaces (including dashboards) will be introduced in this course. This course is the prerequisite for other physics simulation courses in the learning paths for the roles shown here.
Objectives	Upon completion of this course you will be able to: - Log in to the 3DEXPERIENCE platform - Search for and explore physical products and simulation objects - Manage maturity of data on the platform, track revisions, and delete example data - Configure preferences and settings including default display units
Prerequisites	None

Getting Started with Physics Simulation	
Available Online	Yes

SolidWorks

3D Design

Explore the 3DEXPERIENCE DraftSight Role	
Course Code	SDW-en-DRA-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	0.75 hours
Course Material	
Level	Fundamental
Audience	
Description	Learn how the 3DEXPERIENCE DraftSight role can make drawings and project information accessible to the entire team anytime and anywhere. Turn 2D CAD design and document management from isolated activities to transparent collaboration and success with the 3DEXPERIENCE platform.
Objectives	Upon completion of the module you will be able to: - Learn how to securely connect the DraftSight Connected app to the 3DEXPERIENCE platform. - Open and save DraftSight objects on the 3DEXPERIENCE platform. - Create and assign a change action. - Work under a change action and modify the proposed drawing. - Learn how to replace revisions and review properties of objects saved on the platform.
Prerequisites	
Available Online	Yes

Explore the 3DEXPERIENCE SOLIDWORKS (PLM) Role	
Course Code	SDW-en-XWC-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	0.83 hours
Course Material	
Level	Fundamental
Audience	
Description	This learning path provides you a guided and systematic approach to learn about the 3DEXPERIENCE SOLIDWORKS role.
Objectives	Learn how to securely connect the SOLIDWORKS Connected app to the 3DEXPERIENCE platform. - Open and save SOLIDWORKS objects on the 3DEXPERIENCE platform. - Create and assign a change action. - Work under a change action and modify the proposed object. - Learn how to replace revisions and review properties of objects saved on the platform.
Prerequisites	
Available Online	Yes

Explore the 3D Mold Creator Role	
Course Code	SDW-en-XMO-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	0.75 hours
Course Material	
Level	Fundamental
Audience	
Description	3D Mold Creator is a role on the 3DEXPERIENCE platform that contains the xMold app for designing mold bodies. Learn the fully automatic and manual tools needed to create mold core, cavity, and inserts geometry
Objectives	The objectives of this course include: - Prepare an existing model with surfaces to create boundaries to separate the mold bodies. - Create and separate the mold bodies.
Prerequisites	
Available Online	Yes

Explore the 3D Motion Creator Role	
Course Code	SDW-en-XMD-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	1.17 hours
Course Material	
Level	Fundamental
Audience	
Description	The 3D Motion Creator role contains the xMotion Design application, a powerful browser-based application for simulating movement in rigid body systems. Leverage your existing assembly designs to understand how they would operate in real-world scenarios.
Objectives	In this learning module, you will: - * Understand the 3D Motion Creator role and the xMotion Design application. - * Analyze a structure in xMotion Design. - * Understand how to create many studies by branching the simulation at various points. - * Create kinematic simulations.
Prerequisites	
Available Online	Yes

Explore the 3D Structure Creator Role	
Course Code	SDW-en-XSU-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	0.92 hours
Course Material	
Level	Fundamental
Audience	
Description	3D Structure Creator is a role on the 3DEXPERIENCE Platform that contains the xFrame app for creating structures. Features include structural members, corner treatments, cut lists, and more.
Objectives	The objectives of the course include: - Understand the capabilities of the xFrame app - Learn how to save/open your structures. - Create structural members using sketch entities and model edges. - Apply various corner treatments using Trim Member tool.
Prerequisites	
Available Online	Yes

Explore the Drafter Role	
Course Code	SDW-en-WDR-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	0.33 hours
Course Material	
Level	Fundamental
Audience	
Description	Drafter enables you to quickly create and detail 2D drawings, and communicate how your design must be manufactured. Whenever a change occurs in your 3D model, all drawing views are automatically updated. Using Drafter's comprehensive dimension, tolerancing and annotation toolset accelerates the product development process by significantly reducing design-to-manufacturing time, while decreasing costs.
Objectives	In this lesson, you use the SOLIDWORKS Drawings app of the Drafter role on the 3DEXPERIENCE platform to create a part drawing and an assembly drawing. You learn how to: - Create drawing views and drawing sheets. - Add dimensions, annotations, and a bill of materials.
Prerequisites	N/A
Available Online	Yes

Explore the Product Document Creator Role	
Course Code	SDW-en-XMB-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	0.67 hours
Course Material	
Level	Fundamental
Audience	
Description	Product Document Creator is a role on the 3DEXPERIENCE platform that contains the xDocument app for creating annotation sets for existing physical products. Use the xDocument app to generate dimensions and annotations in 3D Views of a module to communicate manufacturing information.
Objectives	The objectives of this course include: - Learn the basic functions of the role and how to access and navigate the xDocument app. - Create 3D Views and annotations. - Modify dimensions and annotations.
Prerequisites	
Available Online	Yes

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