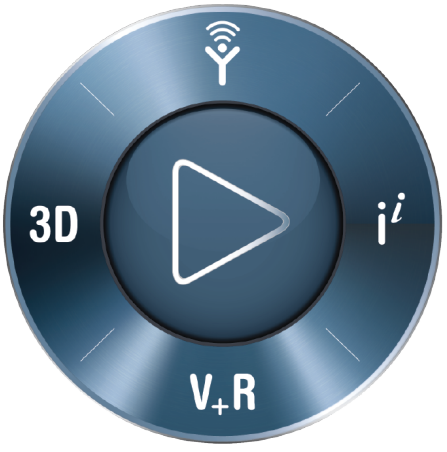
DASSAULT SYSTEMES | The 3DEXPERIENCE® Company

Course Catalog

3DEXPERIENCE R2019x & R2020x

16 June 2020



3DEXPERIENCE®

Learning Experience | Course Catalog

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Learning Experience | Course Catalog

3DEXCITE

CATIA

Cross-Brand

DELMIA

ENOVIA

GEOVIA

SIMULIA

3DEXCITE

Marketing Content Creation

3DEXCITE Marketing Experience Artist Essentials	
Course Code	3DX-en-XAR-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	7 hours
Course Material	English
Level	Fundamental
Audience	All users who want to create Marketing Experiences like BT Client base & their agencies. The direct users are professionals like 3D Artists, Software Developer, Engineers, Designers and Marketing Manager.
Description	This course will teach you the basics of the Marketing Experience Artist Role and the involved Application Creative Experience.
Objectives	Upon completion of this course you will be able to: - Know the purpose, basics and dependencies of the Marketing Experience Artist Role - Stage and properly highlight the product and its values with Lights, Ambiances and other elements - Animate the product with Behaviors and Natural Language - Build a user interface and interact with the product and scene
Prerequisites	Students attending this course should have taken the Gateway to the 3DEXPERIENCE Platform course and should be familiar with the Windows Operating System.
Available Online	Yes

3DEXCITE Marketing Experience Scripter	
Course Code	3DX-en-VRS-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	6 hours
Course Material	English
Level	Fundamental
Audience	Scripters
Description	This Course will introduce the reader to the usage of the Marketing Experience Scripter role (an extension to the Marketing Experience Artist role.) The course consists of reading material and exercises to learn and train the usage of the Creative Experience app scripting possiblities and explain the behaviour editor to add behaviour and interactivity into your experiences.
Objectives	Upon completion of this course you will be able to: - Create custom behaviors with custom parameters using the JavaScript API, - Insert 3D UI Actors with JavaScript scripts included, - Interconnect UI and experience behavior for a perfect user interaction experience, - Output a marketing experience with custom behaviors, - Present the product and environment in an immersive scenario, - Introduce behaviors and interactions to expand the immersive experience of the product and scenario in VR, - Output a marketing VR experience
Prerequisites	Students attending this course should have taken 3DEXCITE Marketing Experience Artist Essentials

3DEXCITE Marketing Experience Scripter	
	course and should be familiar with JavaScript language basic knowledge.
Available Online	Yes

CATIA

Electrical and Fluids Engineering

3DEXPERIENCE Assembly Design Added Exercises	
Course Code	CAT-en-ASD-X-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	6 hours
Course Material	English
Level	Exercise
Audience	Mechanical Designers
Description	This course 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 course you will be able to: - Practice your Assembly Design skills using selected scenarios - Apply the recommended methodology in various scenarios
Prerequisites	Students attending this course should be familiar with Part Design and Assembly Design.
Available Online	Yes

3DEXPERIENCE Part Design Added Exercises	
Course Code	CAT-en-PDG-X-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	13 hours
Course Material	English
Level	Exercise
Audience	Mechanical Designers
Description	This course 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	Apply your Mechanical skills in selected scenarios. - Employ the recommended methodology in various situations and efficiently use the Mechanical workbenches.
Prerequisites	Students attending this course must have completed the 3DEXPERIENCE Part Design and 3DEXPERIENCE Knowledge Fundamentals courses.
Available Online	Yes

3DEXPERIENCE Surface Design Added Exercises	
Course Code	CAT-en-GS1-X-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	8 hours
Course Material	English
Level	Exercise
Audience	Mechanical Surface Designers
Description	This course 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 3DEXPERIENCE Surface Design.
Available Online	Yes

CATIA 2D Layout for 3D Design Essentials	
Course Code	CAT-en-LO1-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	8 hours
Course Material	English
Level	Fundamental
Audience	Mechanical Designers
Description	In this course 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 course 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 course should have completed the Gateway to the 3DEXPERIENCE platform course and should be familiar with CATIA Part and Assembly Design.
Available Online	Yes

CATIA Assembly Design Expert	
Course Code	CAT-en-ASD-A-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	12 hours
Course Material	English
Level	Advanced
Audience	Mechanical Designers
Description	This course 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 course 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 course should have completed the Gateway to the 3DEXPERIENCE platform course and be familiar with CATIA Part Design and Assembly Design fundamentals.
Available Online	Yes

CATIA Assembly Design Fundamentals (ASD)	
Course Code	CAT-en-ASD-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	16 hours
Course Material	English
Level	Fundamental
Audience	Mechanical Designers
Description	This course will teach you how to create a simple product structure and how to 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: - 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 course should have completed the Gateway to the 3DEXPERIENCE platform course and should be familiar with Part Design in CATIA.
Available Online	Yes

CATIA Bent Part Design Essentials	
Course Code	CAT-en-SMB-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	6 hours
Course Material	English
Level	Fundamental
Audience	Mechanical Designer and Sheetmetal Designer
Description	This course 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 course 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 course should have completed the Gateway to the 3DEXPERIENCE platform course.
Available Online	Yes

CATIA Drafting Expert	
Course Code	CAT-en-GDR-A-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	12 hours
Course Material	English
Level	Advanced
Audience	Draftsmen
Description	This course 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 course 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 course should have completed the Gateway to the 3DEXPERIENCE platform course. Additionally, they should be familiar with Part Design and Assembly Design in CATIA.
Available Online	Yes

CATIA Drafting Fundamentals	
Course Code	CAT-en-GDR-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	6 hours
Course Material	English
Level	Fundamental
Audience	Draftsmen
Description	This course 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	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 course should have completed the Gateway to the 3DEXPERIENCE platform course. Additionally, they should be familiar with Part Design and Assembly Design in CATIA.
Available Online	Yes

CATIA Electrical 3D Design Essentials	
Course Code	CAT-en-EHI-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	24 hours
Course Material	English
Level	Fundamental
Audience	Electrical Engineers new to Electrical Physical System Design using the 3DEXPERIENCE platform.
Description	This course 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. You will also learn the 3D Master Approach of annotating the electrical physical system.
Objectives	Upon completion of this course you will be able to: - Create and use an Electrical Library using Data Setup - Create an Electrical Geometry - Route Conductors through the Electrical Geometry - Annotate the Electrical Physical System using the 3D Master Approach
Prerequisites	- Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform course. - They should also be familiar with Part Design and should know how to use an electrical catalog.

CATIA Electrical 3D Design Essentials	
Available Online	Yes

CATIA Engineering Templates Reuse Essentials	
Course Code	CAT-en-KT1-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	30 hours
Course Material	English
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 course should have completed the Gateway to the 3DEXPERIENCE platform course.
Available Online	Yes

CATIA Functional Plastic Parts Essentials	
Course Code	CAT-en-FMP-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	6 hours
Course Material	English
Level	Fundamental
Audience	Plastic Part Designers and Molded Part Designers
Description	This course 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 course you will be able to: - Create a molded plastic part - Add holes and protected areas - Add ribs and bosses
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform course and should be familiar with the Part Design app.
Available Online	Yes

CATIA Generative Wireframe and Surface Essentials	
Course Code	CAT-en-GS1-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	20 hours
Course Material	English
Level	Fundamental
Audience	Surface Designers
Description	This course 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 course 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 course should have completed the Gateway to the 3DEXPERIENCE Platform course.
Available Online	Yes

CATIA Mechanical Design Expert	
Course Code	CAT-en-3DE-A-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	32 hours
Course Material	English
Level	Advanced
Audience	Mechanical Designers
Description	This course will introduce you to complex modeling techniques. You will use advanced sketch-based and surface-based features to design parts and learn how to improve productivity by reusing existing features. You will also see how to design a product architecture and manage complex assembly structures, using advanced features to design parts within an assembly environment. Finally, you will learn how to analyze interferences and then create an assembly layout using advanced tools to dress-up and annotate the final drawing.
Objectives	Upon completion of this course you will be able to: - Create and manage complex parts - Create fully parameterized models - Create re-usable features - Analyze interferences, component links and relations - Manage complex product structures - Design new parts within a product - Create large assembly layouts with tables and bill of materials
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform course

CATIA Mechanical Design Expert	
	and in addition, they should be familiar with the Mechanical Design Fundamentals.
Available Online	Yes

CATIA Mechanical Design Fundamentals	
Course Code	CAT-en-3DF-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	32 hours
Course Material	English
Level	Fundamental
Audience	Mechanical and Sheet Metal Designers
Description	This course will teach you how to create simple parts, assemblies and drawings. You will learn how to use different feature-based tools to build, review and modify a model. You will also learn how to create and analyze assemblies and how to produce a drawing with different views. Finally, you will learn how to dimension the drawing and annotate the views.
Objectives	Upon completion of this course you will be able to: - Create a new PLM object - Create and constrain 2D sketches - Complete a 3D model using features - Review and edit the features - Create parameters and formulas in the 3D model - Create a new product and add components to it - Move the components within a product by positioning them using assembly constraints - Create simple projection views and section views of 3D parts - Position the views on a drawing sheet - Add dimensions and annotations to the views - Finalize the drawing sheet by adding borders and title blocks
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform course.

CATIA Mechanical Design Fundamentals	
Available Online	Yes

CATIA Mechanical Systems Design Essentials	
Course Code	CAT-en-KIM-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	4 hours
Course Material	English
Level	Fundamental
Audience	Mechanical Designers
Description	This course 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 course 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 course should have completed the Gateway to the 3DEXPERIENCE platform and should be familiar with the Assembly Design app.
Available Online	Yes

CATIA Natural Assembly Essentials	
Course Code	CAT-en-LCP-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	4 hours
Course Material	English
Level	Fundamental
Audience	Mechanical Engineers and Designers, and Design Architects
Description	This course 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 course 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 course should have completed the Gateway to the 3DEXPERIENCE platform course.
Available Online	Yes

CATIA Natural Shape Essentials	
Course Code	CAT-en-LSP-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	7 hours
Course Material	English
Level	Fundamental
Audience	Conceptual Designers, Stylists, Simulation and Manufacturing Engineers
Description	This course 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 course 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 course should have completed the Gateway to the 3DEXPERIENCE platform course.
Available Online	Yes

CATIA Part Design Expert	
Course Code	CAT-en-PDG-A-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	7 hours
Course Material	English
Level	Advanced
Audience	Mechanical and Sheet Metal Designers
Description	This course 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	Design parts with complex geometries - Create and manage robust part structures - Create fully parameterized models - Create re-usable features
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform course and be familiar with CATIA Part Design fundamentals.
Available Online	Yes

CATIA Part Design Fundamentals	
Course Code	CAT-en-PDG-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	16 hours
Course Material	English
Level	Fundamental
Audience	Mechanical and Sheet Metal Designers
Description	This course 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 completion of this course 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 course should have completed the Gateway to the 3DEXPERIENCE platform course.
Available Online	Yes

CATIA Quality Rules Reuse Essentials	
Course Code	CAT-en-KE1-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	5 hours
Course Material	English
Level	Fundamental
Audience	Mechanical Designers
Description	This course 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 course you will be able to: - Automate the design modifications - Analyze and create reports
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform course.
Available Online	Yes

Transition to the 3DEXPERIENCE Platform for Mechanical Designers	
Course Code	CAT-en-3DMT-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	12 hours
Course Material	English
Level	Fundamental
Audience	Designers who need to work with mechanical parts
Description	This course addresses the needs of Mechanical Designers. It will first teach you how to design a new part with the 3DEXPERIENCE platform, insert the part in a product then position and constrain it. You will learn how to assign material properties and compute weight, then complete a simple drawing. Finally, you will learn how to create a new part version, replace the original part and update the product. More advanced topics will also be covered: they will teach you how to manage complex product structures, create product features, manage catalogs and analyze assemblies.
Objectives	Upon completion of this course, 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

Transition to the 3DEXPERIENCE Platform for Mechanical Designers	
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform course. They should also be familiar with CATIA V5 Mechanical Design.
Available Online	Yes

CATIA

Mechanical Engineering

3DEXPERIENCE Assembly Design Added Exercises	
Course Code	CAT-en-ASD-X-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	6 hours
Course Material	English
Level	Exercise
Audience	Mechanical Designers
Description	This course 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 course you will be able to: - Practice your Assembly Design skills using selected scenarios - Apply the recommended methodology in various scenarios
Prerequisites	Students attending this course should be familiar with Part Design and Assembly Design.
Available Online	Yes

3DEXPERIENCE Generative Shape Design Essentials	
Course Code	CAT-en-GSD-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	8 hours
Course Material	English
Level	Fundamental
Audience	Surface Designers
Description	This course 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 course 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 course should have completed the Gateway to the 3DEXPERIENCE platform course.
Available Online	Yes

3DEXPERIENCE Part Design Added Exercises	
Course Code	CAT-en-PDG-X-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	13 hours
Course Material	English
Level	Exercise
Audience	Mechanical Designers
Description	This course 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	Apply your Mechanical skills in selected scenarios. - Employ the recommended methodology in various situations and efficiently use the Mechanical workbenches.
Prerequisites	Students attending this course must have completed the 3DEXPERIENCE Part Design and 3DEXPERIENCE Knowledge Fundamentals courses.
Available Online	Yes

3DEXPERIENCE Surface Design Added Exercises	
Course Code	CAT-en-GS1-X-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	8 hours
Course Material	English
Level	Exercise
Audience	Mechanical Surface Designers
Description	This course 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 3DEXPERIENCE Surface Design.
Available Online	Yes

3DEXPERIENCE Surface Design Expert Added Exercises	
Course Code	CAT-en-GSD-X-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	16 hours
Course Material	English
Level	Exercise
Audience	Mechanical Designers and Surface Designers
Description	This course 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 course 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 course should know the basic and advanced features of Surface Design.
Available Online	Yes

CATIA 2D Layout for 3D Design Essentials	
Course Code	CAT-en-LO1-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	8 hours
Course Material	English
Level	Fundamental
Audience	Mechanical Designers
Description	In this course 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 course 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 course should have completed the Gateway to the 3DEXPERIENCE platform course and should be familiar with CATIA Part and Assembly Design.
Available Online	Yes

CATIA 3D Annotation Insight Essentials	
Course Code	CAT-en-LFT-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	4 hours
Course Material	English
Level	Fundamental
Audience	Design, Quality and other such departments where interrogating and annotating the 3D model is a frequent or occasional requirement.
Description	This course 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 course 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 course should have taken the Gateway to the 3DEXPERIENCE platform course and should be familiar with the Windows Operating System.
Available Online	Yes

CATIA 3D Tolerancing and Annotation Essentials	
Course Code	CAT-en-FTA-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	12 hours
Course Material	English
Level	Fundamental
Audience	3D Master Designers
Description	This course 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 course 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 course should have completed the Gateway to the 3DEXPERIENCE platform course and should be familiar with CATIA Knowledgeware and basic CATIA Solid and Surface Design.
Available Online	Yes

CATIA Assembly Design Expert	
Course Code	CAT-en-ASD-A-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	12 hours
Course Material	English
Level	Advanced
Audience	Mechanical Designers
Description	This course 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 course 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 course should have completed the Gateway to the 3DEXPERIENCE platform course and be familiar with CATIA Part Design and Assembly Design fundamentals.
Available Online	Yes

CATIA Assembly Design Fundamentals (ASD)	
Course Code	CAT-en-ASD-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	16.1 hours
Course Material	English
Level	Fundamental
Audience	Mechanical Designers
Description	This course will teach you how to create a simple product structure and how to 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: - 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 course should have completed the Gateway to the 3DEXPERIENCE platform course and should be familiar with Part Design in CATIA.
Available Online	Yes

CATIA Bent Part Design Essentials	
Course Code	CAT-en-SMB-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	6 hours
Course Material	English
Level	Fundamental
Audience	Mechanical Designer and Sheetmetal Designer
Description	This course 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 course 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 course should have completed the Gateway to the 3DEXPERIENCE platform course.
Available Online	Yes

CATIA Drafting Expert	
Course Code	CAT-en-GDR-A-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	12 hours
Course Material	English
Level	Advanced
Audience	Draftsmen
Description	This course 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 course 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 course should have completed the Gateway to the 3DEXPERIENCE platform course. Additionally, they should be familiar with Part Design and Assembly Design in CATIA.
Available Online	Yes

CATIA Drafting Fundamentals	
Course Code	CAT-en-GDR-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	6 hours
Course Material	English
Level	Fundamental
Audience	Draftsmen
Description	This course 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	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 course should have completed the Gateway to the 3DEXPERIENCE platform course. Additionally, they should be familiar with Part Design and Assembly Design in CATIA.
Available Online	Yes

CATIA Engineering Templates Reuse Essentials	
Course Code	CAT-en-KT1-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	30 hours
Course Material	English
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 course should have completed the Gateway to the 3DEXPERIENCE platform course.
Available Online	Yes

CATIA Functional Plastic Parts Essentials	
Course Code	CAT-en-FMP-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	6 hours
Course Material	English
Level	Fundamental
Audience	Plastic Part Designers and Molded Part Designers
Description	This course 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 course you will be able to: - Create a molded plastic part - Add holes and protected areas - Add ribs and bosses
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform course and should be familiar with the Part Design app.
Available Online	Yes

CATIA Generative Shape Develop Essentials	
Course Code	CAT-en-DL1-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	2 hours
Course Material	English
Level	Fundamental
Audience	Surface Designers
Description	This course 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 course, 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 course should have completed the Gateway to the 3DEXPERIENCE platform course. They should also be familiar with Surface Design in CATIA.
Available Online	Yes

CATIA Generative Wireframe and Surface Essentials	
Course Code	CAT-en-GS1-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	20 hours
Course Material	English
Level	Fundamental
Audience	Surface Designers
Description	This course 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 course 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 course should have completed the Gateway to the 3DEXPERIENCE Platform course.
Available Online	Yes

CATIA Mechanical Design Expert	
Course Code	CAT-en-3DE-A-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	32 hours
Course Material	English
Level	Advanced
Audience	Mechanical Designers
Description	This course will introduce you to complex modeling techniques. You will use advanced sketch-based and surface-based features to design parts and learn how to improve productivity by reusing existing features. You will also see how to design a product architecture and manage complex assembly structures, using advanced features to design parts within an assembly environment. Finally, you will learn how to analyze interferences and then create an assembly layout using advanced tools to dress-up and annotate the final drawing.
Objectives	Upon completion of this course you will be able to: - Create and manage complex parts - Create fully parameterized models - Create re-usable features - Analyze interferences, component links and relations - Manage complex product structures - Design new parts within a product - Create large assembly layouts with tables and bill of materials
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform course

CATIA Mechanical Design Expert	
	and in addition, they should be familiar with the Mechanical Design Fundamentals.
Available Online	Yes

CATIA Mechanical Design Fundamentals	
Course Code	CAT-en-3DF-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	32 hours
Course Material	English
Level	Fundamental
Audience	Mechanical and Sheet Metal Designers
Description	This course will teach you how to create simple parts, assemblies and drawings. You will learn how to use different feature-based tools to build, review and modify a model. You will also learn how to create and analyze assemblies and how to produce a drawing with different views. Finally, you will learn how to dimension the drawing and annotate the views.
Objectives	Upon completion of this course you will be able to: - Create a new PLM object - Create and constrain 2D sketches - Complete a 3D model using features - Review and edit the features - Create parameters and formulas in the 3D model - Create a new product and add components to it - Move the components within a product by positioning them using assembly constraints - Create simple projection views and section views of 3D parts - Position the views on a drawing sheet - Add dimensions and annotations to the views - Finalize the drawing sheet by adding borders and title blocks
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform course.

CATIA Mechanical Design Fundamentals	
Available Online	Yes

CATIA Mechanical Systems Design Essentials	
Course Code	CAT-en-KIM-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	4 hours
Course Material	English
Level	Fundamental
Audience	Mechanical Designers
Description	This course 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 course 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 course should have completed the Gateway to the 3DEXPERIENCE platform and should be familiar with the Assembly Design app.
Available Online	Yes

CATIA Mechanical Systems Experience	
Course Code	CAT-en-KIN-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	9 hours
Course Material	English
Level	Fundamental
Audience	Mechanical Design Engineers
Description	This course 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 course 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 course should have completed the Gateway to the 3DEXPERIENCE platform and should be familiar with Mechanical Systems Design in CATIA.
Available Online	Yes

CATIA Natural Assembly Essentials	
Course Code	CAT-en-LCP-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	4 hours
Course Material	English
Level	Fundamental
Audience	Mechanical Engineers and Designers, and Design Architects
Description	This course 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 course 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 course should have completed the Gateway to the 3DEXPERIENCE platform course.
Available Online	Yes

CATIA Natural Shape Essentials	
Course Code	CAT-en-LSP-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	7 hours
Course Material	English
Level	Fundamental
Audience	Conceptual Designers, Stylists, Simulation and Manufacturing Engineers
Description	This course 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 course 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 course should have completed the Gateway to the 3DEXPERIENCE platform course.
Available Online	Yes

CATIA Part Design Expert	
Course Code	CAT-en-PDG-A-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	7 hours
Course Material	English
Level	Advanced
Audience	Mechanical and Sheet Metal Designers
Description	This course 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	Design parts with complex geometries - Create and manage robust part structures - Create fully parameterized models - Create re-usable features
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform course and be familiar with CATIA Part Design fundamentals.
Available Online	Yes

CATIA Part Design Fundamentals	
Course Code	CAT-en-PDG-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	16 hours
Course Material	English
Level	Fundamental
Audience	Mechanical and Sheet Metal Designers
Description	This course 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 completion of this course 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 course should have completed the Gateway to the 3DEXPERIENCE platform course.
Available Online	Yes

CATIA Quality Rules Reuse Essentials	
Course Code	CAT-en-KE1-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	5 hours
Course Material	English
Level	Fundamental
Audience	Mechanical Designers
Description	This course 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 course you will be able to: - Automate the design modifications - Analyze and create reports
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform course.
Available Online	Yes

CATIA Shape Healing Essentials	
Course Code	CAT-en-HA1-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	7 hours
Course Material	English
Level	Fundamental
Audience	Tooling Designers, Mechanical Designers and Surface Designers.
Description	This course introduces you to the user interface and basic tools of CATIA Shape Healing app. You will learn to analyze and repair the imported data (IGES 3D or CATIA V4 files). You will also learn how to compare two versions of a part and to customize the workbench, in order to suit your needs.
Objectives	Upon completion of this course, you will be able to: - Analyze the imported data - Repair the imported data - Compare two versions of a part - Customize the app
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform course and should be familiar with CATIA Surface Design.
Available Online	Yes

CATIA Sheet Metal Design Essentials	
Course Code	CAT-en-SMD-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	16 hours
Course Material	English
Level	Fundamental
Audience	Sheet Metal Designer
Description	This course 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 course 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 course should have completed the Gateway to the 3DEXPERIENCE platform course and should be familiar with Part Design app.
Available Online	Yes

CATIA Weld Design Essentials	
Course Code	CAT-en-WDG-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	4 hours
Course Material	English
Level	Fundamental
Audience	Mechanical Designers and Structural Designers
Description	This course 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 course you will be able to: - Define the welding resource - Create and manage welded assemblies - Generate weld reports - Create welding drawings
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform course and should be familiar with Assembly Design.
Available Online	Yes

Perform as Digital Mockup Review Engineer	
Course Code	CAT-en-DWP-F-15-201
Available Release	3DEXPERIENCE R2020x
Duration	3 hours
Course Material	English
Level	Fundamental
Audience	Design Reviewer, Design Review Manager
Description	Design verification and validation is an important phase in the lifecycle of product development. Design Reviewer helps analyze and communicate issues as well as resolution ideas with full traceability of how the development decisions were made. In this module, you will learn the key capabilities of the Design Review & Preparation 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 module should have completed the Perform as Business Innovator module. - 3DEXPERIENCE Roles: Collaborative Business Innovator and Collaborative Industry Innovator.
Available Online	Yes

Perform as Functional Generative Designer (GDE)	
Course Code	CAT-en-GDE-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	5 hours
Course Material	English
Level	Fundamental
Audience	Mechanical Designers or Structure Engineers
Description	The CATIA Functional Generative Design app provides an integrated design environment where the structural simulation (with SIMULIA), topology optimization (using TOSCA solver) and shape modeling are combined together in the same software. The various capabilities of 3DEXPERIENCE platform allow you to comprehensively refine concept shapes, validate them and reconstruct them collaboratively for additive manufacturing. The course will teach you to define functional specifications, analysis inputs, optimization target and constraints. You will also learn how to generate organic concept shapes automatically, validate their structural behavior and compare them to select the best possible solution. The intuitive workflow allows you to design components for additive layer manufacturing (ALM) easily.
Objectives	Upon completion of this course, 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

Perform as Functional Generative Designer (GDE)	
Prerequisites	- Knowledge: Students enrolling for this learning path should have completed the Operate Business Innovation course. 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.
Available Online	Yes

Perform as Mechanical and Shape Designer	
Course Code	CAT-en-MES-F-15-201
Available Release	3DEXPERIENCE R2020x
Duration	6 hours
Course Material	English
Level	Fundamental
Audience	Mechanical and Shape Designers
Description	In this learning module, you will learn the key capabilities of the Mechanical & Shape Designer Role 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 Perform as Business Innovator module. - 3DEXPERIENCE Roles: Collaborative Business Innovator and Collaborative Industry Innovator
Available Online	Yes

Perform as Mechanical Designer	
Course Code	CAT-en-MDG-F-15-201
Available Release	3DEXPERIENCE R2020x
Duration	6 hours
Course Material	English
Level	Fundamental
Audience	Mechanical Designers
Description	In this learning module, you will learn the key capabilities of the Mechanical Designer Role 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 Perform as Business Innovator module. - 3DEXPERIENCE Roles: Collaborative Business Innovator and Collaborative Industry Innovator
Available Online	Yes

Perform as Sheet Metal Designer	
Course Code	CAT-en-SMW-F-15-201
Available Release	3DEXPERIENCE R2020x
Duration	3 hours
Course Material	English
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 mechanical 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 module should have completed the Perform as Business Innovator module. - 3DEXPERIENCE Roles: Collaborative Business Innovator and Collaborative Industry Innovator
Available Online	Yes

Transition to the 3DEXPERIENCE Platform for Mechanical Designers	
Course Code	CAT-en-3DMT-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	12 hours
Course Material	English
Level	Fundamental
Audience	Designers who need to work with mechanical parts
Description	This course addresses the needs of Mechanical Designers. It will first teach you how to design a new part with the 3DEXPERIENCE platform, insert the part in a product then position and constrain it. You will learn how to assign material properties and compute weight, then complete a simple drawing. Finally, you will learn how to create a new part version, replace the original part and update the product. More advanced topics will also be covered: they will teach you how to manage complex product structures, create product features, manage catalogs and analyze assemblies.
Objectives	Upon completion of this course, 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

Transition to the 3DEXPERIENCE Platform for Mechanical Designers	
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform course. They should also be familiar with CATIA V5 Mechanical Design.
Available Online	Yes

Transition to the 3DEXPERIENCE platform for Surface Designers	
Course Code	CAT-en-3DST-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	7 hours
Course Material	English
Level	Fundamental
Audience	Designers who need to work with styled parts.
Description	This course addresses the needs of Surface Designers. It will first teach you how to design a new part with the 3DEXPERIENCE platform. You will also learn how to create a new part version, replace the original part and update the product.
Objectives	Upon completion of this course you will be able to: - Create new products and parts - Create a new part version - Replace a part and update a product
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform course. They should also be familiar with CATIA V5 Mechanical Design and Surface Design.
Available Online	Yes

What's New for Function Driven Generative Designers	
Course Code	CAT-en-WGDE-U-15-191
Available Release	3DEXPERIENCE R2019x
Duration	16 hours
Course Material	English
Level	Update
Audience	Function Driven Generative Designers
Description	This course introduces you to the enhancements and new functionalities in the Function Driven Generative Designer role. It is a self-paced course and does not require any software installation or additional data.
Objectives	Upon completion of this course, you will be able to: - Describe the impact of the new capabilities on the Function Driven Generative Designer role. - Use the enhancements that you have learnt.
Prerequisites	Students attending this course must be familiar with the Function Driven Generative Designer's role in the 3DEXPERIENCE platform R2018x release.
Available Online	Yes

What's New for Mechanical and Shape Designers	
Course Code	CAT-en-WMES-U-15-191
Available Release	3DEXPERIENCE R2019x
Duration	14.5 hours
Course Material	English
Level	Update
Audience	Mechanical and Shape Designers
Description	This course introduces you to the enhancements and new functionalities in the Mechanical and Shape Designer role. It is a self-paced course and does not require any software installation or additional data.
Objectives	Upon completion of this course, you will be able to: - Describe the impact of the new capabilities on the Mechanical and Shape Designer role. - Use the enhancements that you have learnt.
Prerequisites	Students attending this course must be familiar with the Mechanical and Shape Designer's role in the 3DEXPERIENCE platform R2018x release.
Available Online	Yes

What's New for Mechanical Designers	
Course Code	CAT-en-WMDG-U-15-191
Available Release	3DEXPERIENCE R2019x
Duration	12.5 hours
Course Material	English
Level	Update
Audience	Mechanical Designers
Description	This course introduces you to the enhancements and new functionalities in the Mechanical Designer role. It is a self-paced course and does not require any software installation or additional data.
Objectives	Upon completion of this course, you will be able to: - Describe the impact of the new capabilities on the Mechanical Designer role. - Use the enhancements that you have learnt.
Prerequisites	Students attending this course must be familiar with the Mechanical Designer role in the 3DEXPERIENCE platform R2018x release.
Available Online	Yes

What's New for Mechanical Part Designers	
Course Code	CAT-en-WMDD-U-15-191
Available Release	3DEXPERIENCE R2019x
Duration	2 hours
Course Material	English
Level	Update
Audience	Mechanical Part Designers
Description	This course introduces you to the enhancements and new functionalities in the Mechanical Part Designer role. It is self-paced course and does not require any software installation or additional data.
Objectives	Upon completion of this course, you will be able to: - Describe the impact of the new capabilities on the Mechanical Part Designer role. - Use the enhancements that you have learnt.
Prerequisites	Students attending this course must be familiar with the Mechanical Part Designer's role in the 3DEXPERIENCE platform R2018x release.
Available Online	Yes

What's New for Shape Designers	
Course Code	CAT-en-WSUA-U-15-191
Available Release	3DEXPERIENCE R2019x
Duration	4.5 hours
Course Material	English
Level	Update
Audience	Shape Designers
Description	This course introduces you to the enhancements and new functionalities in the Shape Designer role. It is a self-paced course and does not require any software installation or additional data.
Objectives	Upon completion of this course, you will be able to: - Describe the impact of the new capabilities on the Shape Designer role. - Use the enhancements that you have learnt.
Prerequisites	Students attending this course must be familiar with the Shape Designer's role in the 3DEXPERIENCE platform R2018x release.
Available Online	Yes

What's New for Sheet Metal Designers	
Course Code	CAT-en-WSMW-U-15-191
Available Release	3DEXPERIENCE R2019x
Duration	12.5 hours
Course Material	English
Level	Update
Audience	Sheet Metal Designers
Description	This course introduces you to the enhancements and new functionalities in the Sheet Metal Designer role. It is a self-paced course and does not require any software installation or additional data.
Objectives	Upon completion of this course, you will be able to: - Describe the impact of the new capabilities on the Sheet Metal Designer role. - Use the enhancements that you have learnt.
Prerequisites	Students attending this course must be familiar with the Sheet Metal Designer role in the 3DEXPERIENCE platform R2018x release.
Available Online	Yes

CATIA

Multi-Discipline Automated Engineering

3D Generative Innovator	
Course Code	CAT-en-XGG-F-15-201
Available Release	3DEXPERIENCE R2020x
Duration	10 hours
Course Material	English
Level	Fundamental
Audience	Architects, Engineers or BIM/VDC consultant
Description	This course explains the essentials of the application xGenerative Design through a series of exercises. Each one of them focuses on a specific aspect of the application, beginning with a quick description of the exercise, the strategy to achieve it and a video explaining all the steps. The combination of all of them should bring you the keys to start working on xGenerative Design, from simple small scale design to more complex models.
Objectives	Upon completion of this course you will be able to: - Get how both interfaces work with each other - Get fundamentals of visual scripting - Create a fully parametric model - Create and manage collections of objects and values - Re-use xGenerative Design in other contexts - Understand how it may be applicable to your business or your client's - How can it be mixed with current workflows - Develop your own logics that can be re-used within your company - Share knowledge inside your organization - Share feedbacks with Dassault Systemes on your experience

3D Generative Innovator	
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform.
Available Online	Yes

CATIA Engineering Rules Capture Essentials	
Course Code	CAT-en-KWA-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	10 hours
Course Material	English
Level	Fundamental
Audience	Mechanical Designers
Description	This course 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 errors and automate the modifications.
Objectives	Upon completion of this course you will be able to: - Customize the tree to display knowledgeware features - Create parametric models - Embed your design knowledge in the models - Automate the design and modification processes - Create design configurations using design tables
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform course and should be familiar with the Enterprise Knowledge Language (EKL) and Part Design.
Available Online	Yes

Introduction to Enterprise Knowledge Language	
Course Code	CAT-en-EKL-F-15-201
Available Release	3DEXPERIENCE R2020x
Duration	4.3 hours
Course Material	English
Level	Fundamental
Audience	Mechanical Engineers, Electrical Engineers and Piping Engineers
Description	This course will introduce you to the Enterprise Knowledge Language, used in different knowledgeware apps, which allows you to construct smart-models and automate design for maximum productivity.
Objectives	Upon completion of this course 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
Prerequisites	Students attending this course should be familiar with the 3DEXPERIENCE platform. They should also be familiar with Mechanical Design fundamentals.
Available Online	Yes

CATIA

Multi-Discipline Engineering

3DEXPERIENCE Assembly Design Added Exercises	
Course Code	CAT-en-ASD-X-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	6 hours
Course Material	English
Level	Exercise
Audience	Mechanical Designers
Description	This course 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 course you will be able to: - Practice your Assembly Design skills using selected scenarios - Apply the recommended methodology in various scenarios
Prerequisites	Students attending this course should be familiar with Part Design and Assembly Design.
Available Online	Yes

3DEXPERIENCE Generative Shape Design Essentials	
Course Code	CAT-en-GSD-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	8 hours
Course Material	English
Level	Fundamental
Audience	Surface Designers
Description	This course 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 course 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 course should have completed the Gateway to the 3DEXPERIENCE platform course.
Available Online	Yes

3DEXPERIENCE Part Design Added Exercises	
Course Code	CAT-en-PDG-X-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	13 hours
Course Material	English
Level	Exercise
Audience	Mechanical Designers
Description	This course 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	Apply your Mechanical skills in selected scenarios. - Employ the recommended methodology in various situations and efficiently use the Mechanical workbenches.
Prerequisites	Students attending this course must have completed the 3DEXPERIENCE Part Design and 3DEXPERIENCE Knowledge Fundamentals courses.
Available Online	Yes

3DEXPERIENCE Surface Design Added Exercises	
Course Code	CAT-en-GS1-X-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	8 hours
Course Material	English
Level	Exercise
Audience	Mechanical Surface Designers
Description	This course 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 3DEXPERIENCE Surface Design.
Available Online	Yes

3DEXPERIENCE Surface Design Expert Added Exercises	
Course Code	CAT-en-GSD-X-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	16 hours
Course Material	English
Level	Exercise
Audience	Mechanical Designers and Surface Designers
Description	This course 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 course 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 course should know the basic and advanced features of Surface Design.
Available Online	Yes

CATIA 2D Layout for 3D Design Essentials	
Course Code	CAT-en-LO1-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	8 hours
Course Material	English
Level	Fundamental
Audience	Mechanical Designers
Description	In this course 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 course 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 course should have completed the Gateway to the 3DEXPERIENCE platform course and should be familiar with CATIA Part and Assembly Design.
Available Online	Yes

CATIA 3D Annotation Insight Essentials	
Course Code	CAT-en-LFT-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	3.8 hours
Course Material	English
Level	Fundamental
Audience	Design, Quality and other such departments where interrogating and annotating the 3D model is a frequent or occasional requirement.
Description	This course 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 course 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 course should have taken the Gateway to the 3DEXPERIENCE platform course and should be familiar with the Windows Operating System.
Available Online	Yes

CATIA Assembly Design Expert	
Course Code	CAT-en-ASD-A-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	11.5 hours
Course Material	English
Level	Advanced
Audience	Mechanical Designers
Description	This course 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 course 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 course should have completed the Gateway to the 3DEXPERIENCE platform course and be familiar with CATIA Part Design and Assembly Design fundamentals.
Available Online	Yes

CATIA Assembly Design Fundamentals (ASD)	
Course Code	CAT-en-ASD-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	16 hours
Course Material	English
Level	Fundamental
Audience	Mechanical Designers
Description	This course will teach you how to create a simple product structure and how to 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: - 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 course should have completed the Gateway to the 3DEXPERIENCE platform course and should be familiar with Part Design in CATIA.
Available Online	Yes

CATIA Bent Part Design Essentials	
Course Code	CAT-en-SMB-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	6 hours
Course Material	English
Level	Fundamental
Audience	Mechanical Designer and Sheetmetal Designer
Description	This course 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 course 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 course should have completed the Gateway to the 3DEXPERIENCE platform course.
Available Online	Yes

CATIA Drafting Expert	
Course Code	CAT-en-GDR-A-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	12 hours
Course Material	English
Level	Advanced
Audience	Draftsmen
Description	This course 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 course 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 course should have completed the Gateway to the 3DEXPERIENCE platform course. Additionally, they should be familiar with Part Design and Assembly Design in CATIA.
Available Online	Yes

CATIA Drafting Fundamentals	
Course Code	CAT-en-GDR-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	6 hours
Course Material	English
Level	Fundamental
Audience	Draftsmen
Description	This course 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	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 course should have completed the Gateway to the 3DEXPERIENCE platform course. Additionally, they should be familiar with Part Design and Assembly Design in CATIA.
Available Online	Yes

CATIA Engineering Templates Reuse Essentials	
Course Code	CAT-en-KT1-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	30 hours
Course Material	English
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 course should have completed the Gateway to the 3DEXPERIENCE platform course.
Available Online	Yes

CATIA Functional Plastic Parts Essentials	
Course Code	CAT-en-FMP-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	6 hours
Course Material	English
Level	Fundamental
Audience	Plastic Part Designers and Molded Part Designers
Description	This course 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 course you will be able to: - Create a molded plastic part - Add holes and protected areas - Add ribs and bosses
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform course and should be familiar with the Part Design app.
Available Online	Yes

CATIA Generative Shape Develop Essentials	
Course Code	CAT-en-DL1-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	2 hours
Course Material	English
Level	Fundamental
Audience	Surface Designers
Description	This course 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 course, 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 course should have completed the Gateway to the 3DEXPERIENCE platform course. They should also be familiar with Surface Design in CATIA.
Available Online	Yes

CATIA Generative Wireframe and Surface Essentials	
Course Code	CAT-en-GS1-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	20 hours
Course Material	English
Level	Fundamental
Audience	Surface Designers
Description	This course 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 course 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 course should have completed the Gateway to the 3DEXPERIENCE Platform course.
Available Online	Yes

CATIA Mechanical Design Expert	
Course Code	CAT-en-3DE-A-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	32 hours
Course Material	English
Level	Advanced
Audience	Mechanical Designers
Description	This course will introduce you to complex modeling techniques. You will use advanced sketch-based and surface-based features to design parts and learn how to improve productivity by reusing existing features. You will also see how to design a product architecture and manage complex assembly structures, using advanced features to design parts within an assembly environment. Finally, you will learn how to analyze interferences and then create an assembly layout using advanced tools to dress-up and annotate the final drawing.
Objectives	Upon completion of this course you will be able to: - Create and manage complex parts - Create fully parameterized models - Create re-usable features - Analyze interferences, component links and relations - Manage complex product structures - Design new parts within a product - Create large assembly layouts with tables and bill of materials
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform course

CATIA Mechanical Design Expert	
	and in addition, they should be familiar with the Mechanical Design Fundamentals.
Available Online	Yes

CATIA Mechanical Design Fundamentals	
Course Code	CAT-en-3DF-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	32 hours
Course Material	English
Level	Fundamental
Audience	Mechanical and Sheet Metal Designers
Description	This course will teach you how to create simple parts, assemblies and drawings. You will learn how to use different feature-based tools to build, review and modify a model. You will also learn how to create and analyze assemblies and how to produce a drawing with different views. Finally, you will learn how to dimension the drawing and annotate the views.
Objectives	Upon completion of this course you will be able to: - Create a new PLM object - Create and constrain 2D sketches - Complete a 3D model using features - Review and edit the features - Create parameters and formulas in the 3D model - Create a new product and add components to it - Move the components within a product by positioning them using assembly constraints - Create simple projection views and section views of 3D parts - Position the views on a drawing sheet - Add dimensions and annotations to the views - Finalize the drawing sheet by adding borders and title blocks
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform course.

CATIA Mechanical Design Fundamentals	
Available Online	Yes

CATIA Mechanical Systems Design Essentials	
Course Code	CAT-en-KIM-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	4 hours
Course Material	English
Level	Fundamental
Audience	Mechanical Designers
Description	This course 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 course 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 course should have completed the Gateway to the 3DEXPERIENCE platform and should be familiar with the Assembly Design app.
Available Online	Yes

CATIA Mold Tooling Design Essentials (MTG)	
Course Code	CAT-en-MTG-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	8 hours
Course Material	English
Level	Fundamental
Audience	Mold Tooling Designers
Description	In this course, 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 course, you will be able to: - Import Components from the Catalog and Design Data - Prepare a Molded Part - Explain Conceptual Mold Design - Describe Detailed Core Cavity Design - Understand Detailed Mold Design
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform course and should be familiar with the Part Design app.
Available Online	Yes

CATIA Natural Assembly Essentials	
Course Code	CAT-en-LCP-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	4 hours
Course Material	English
Level	Fundamental
Audience	Mechanical Engineers and Designers, and Design Architects
Description	This course 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 course 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 course should have completed the Gateway to the 3DEXPERIENCE platform course.
Available Online	Yes

CATIA Natural Shape Essentials	
Course Code	CAT-en-LSP-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	7 hours
Course Material	English
Level	Fundamental
Audience	Conceptual Designers, Stylists, Simulation and Manufacturing Engineers
Description	This course 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 course 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 course should have completed the Gateway to the 3DEXPERIENCE platform course.
Available Online	Yes

CATIA Part Design Expert	
Course Code	CAT-en-PDG-A-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	7 hours
Course Material	English
Level	Advanced
Audience	Mechanical and Sheet Metal Designers
Description	This course 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	Design parts with complex geometries - Create and manage robust part structures - Create fully parameterized models - Create re-usable features
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform course and be familiar with CATIA Part Design fundamentals.
Available Online	Yes

CATIA Part Design Fundamentals	
Course Code	CAT-en-PDG-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	16 hours
Course Material	English
Level	Fundamental
Audience	Mechanical and Sheet Metal Designers
Description	This course 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 completion of this course 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 course should have completed the Gateway to the 3DEXPERIENCE platform course.
Available Online	Yes

CATIA Quality Rules Reuse Essentials	
Course Code	CAT-en-KE1-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	5 hours
Course Material	English
Level	Fundamental
Audience	Mechanical Designers
Description	This course 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 course you will be able to: - Automate the design modifications - Analyze and create reports
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform course.
Available Online	Yes

CATIA Shape Healing Essentials	
Course Code	CAT-en-HA1-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	7 hours
Course Material	English
Level	Fundamental
Audience	Tooling Designers, Mechanical Designers and Surface Designers.
Description	This course introduces you to the user interface and basic tools of CATIA Shape Healing app. You will learn to analyze and repair the imported data (IGES 3D or CATIA V4 files). You will also learn how to compare two versions of a part and to customize the workbench, in order to suit your needs.
Objectives	Upon completion of this course, you will be able to: - Analyze the imported data - Repair the imported data - Compare two versions of a part - Customize the app
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform course and should be familiar with CATIA Surface Design.
Available Online	Yes

CATIA Sheet Metal Design Essentials	
Course Code	CAT-en-SMD-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	16 hours
Course Material	English
Level	Fundamental
Audience	Sheet Metal Designer
Description	This course 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 course 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 course should have completed the Gateway to the 3DEXPERIENCE platform course and should be familiar with Part Design app.
Available Online	Yes

Transition to the 3DEXPERIENCE platform for Mechanical Designers	
Course Code	CAT-en-3DMT-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	12 hours
Course Material	English
Level	Fundamental
Audience	Designers who need to work with mechanical parts
Description	This course addresses the needs of Mechanical Designers. It will first teach you how to design a new part with the 3DEXPERIENCE platform, insert the part in a product then position and constrain it. You will learn how to assign material properties and compute weight, then complete a simple drawing. Finally, you will learn how to create a new part version, replace the original part and update the product. More advanced topics will also be covered: they will teach you how to manage complex product structures, create product features, manage catalogs and analyze assemblies.
Objectives	Upon completion of this course, 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

Transition to the 3DEXPERIENCE platform for Mechanical Designers	
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform course. They should also be familiar with CATIA V5 Mechanical Design.
Available Online	Yes

Transition to the 3DEXPERIENCE platform for Surface Designers	
Course Code	CAT-en-3DST-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	7 hours
Course Material	English
Level	Fundamental
Audience	Designers who need to work with styled parts.
Description	This course addresses the needs of Surface Designers. It will first teach you how to design a new part with the 3DEXPERIENCE platform. You will also learn how to create a new part version, replace the original part and update the product.
Objectives	Upon completion of this course you will be able to: - Create new products and parts - Create a new part version - Replace a part and update a product
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform course. They should also be familiar with CATIA V5 Mechanical Design and Surface Design.
Available Online	Yes

What's New for Product Enclosure Designers	
Course Code	CAT-en-WPED-U-15-191
Available Release	3DEXPERIENCE R2019x
Duration	12.5 hours
Course Material	English
Level	Update
Audience	Product Enclosure Designers
Description	This course introduces you to the enhancements and new functionalities in the Product Enclosure Designer role. It is a self-paced course and does not require any software installation or additional data.
Objectives	Upon completion of this course, you will be able to: - Describe the impact of the new capabilities on the Product Enclosure Designer role - Use the enhancements that you have learnt
Prerequisites	Students attending this course must be familiar with the Product Enclosure Designer's role in the 3DEXPERIENCE platform R2018x release.
Available Online	Yes

Cross-Brand

3DEXPERIENCE platform

Gateway to the 3DEXPERIENCE platform	
Course Code	CAT-en-GTX-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	4.0 Hours
Course Materials	english , french , german , japanese , russian
Level	Fundamental
Audience	Users of the 3DEXPERIENCE platform
Description	This course is the entry point to the 3DEXPERIENCE platform. Its purpose is to teach you how to connect to the platform, access your work environment, navigate, search, work on the data, manage your projects, manage the dashboard, collaborate with your peers and share content in communities. You will also learn about the latest modifications to the user interface and the new functionalities that are added to the 3DEXPERIENCE platform.
Objectives	Upon completion of this course, you will be able to: - Connect to the 3DEXPERIENCE platform and use the user interface - Access your Dashboard - Use the 6WTags for searching content - Share various documents with other users through 3DSpace - Use standard menus and commands - Explain the functionalities of various apps in the 3DEXPERIENCE platform - Import new data and export it as 3DXML files - Search for a 3D data using different methods - Explore and open 3D data - Manipulate the tree - Filter data
Prerequisites	There are no prerequisites for this course.

Gateway to the 3DEXPERIENCE platform	
Available Online	Yes

Perform as Collaborative Business Innovator	
Course Code	CRB-en-IFW-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	1.5 hours
Course Material	English
Level	Fundamental
Audience	Users of the 3DEXPERIENCE platform
Description	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 - Manage notification settings - Create user groups - Create a folder in 3DDrive - Add, download and share content from 3DDrive - Work with 3DDrive for windows - Create and manage a community - Add post, question, idea and media to a community - Exchange with Conversations - Create and manage a dashboard - Add and configure various widgets to a dashboard
Prerequisites	There are no prerequisites for this course.
Available Online	Yes

Cross-Brand

Business Modeling & Planning

Perform as 3DEXPERIENCE Platform Manager	
Course Code	CRB-en-PLMG-F-15-201
Available Release	3DEXPERIENCE R2020x
Duration	1.5 hours
Course Material	English
Level	Fundamental
Audience	Cloud administrator
Description	Learn how to parametrize the 3DEXPERIENCE platform on cloud to set a scalable environment and well-organized applications.
Objectives	Upon completion of this course, you will be able to: - Manage settings for 3DSwym, 3DDrive, 3DSearch and 3DSpace applications - Create custom roles and additional apps to allow the sharing of dashboards - Manage members on the platform - Set legal policy - Unify the vocabularies - Setup a network path
Prerequisites	Students attending this course should be familiar with Collaborative Business Innovator and Collaborative Industry Innovator roles.
Available Online	Yes

Cross-Brand

Business Network Innovation

Perform as Collaborative Industry Innovator	
Course Code	CRB-en-CSV-F-15-201
Available Releases	3DEXPERIENCE R2020x , 3DEXPERIENCE R2019x
Duration	1.6 hours
Course Material	English
Level	Fundamental
Audience	Users of the 3DEXPERIENCE platform
Description	Learn how to collaborate across disciplines with full flexibility and traceability to define and develop innovative products.
Objectives	Upon completion of this course, you will be able to: - Create and mange a collaborative space - Create a bookmark workspace - Create and manage bookmark folders - Save a bookmark workspace as a template - Create and manage a route - Create, edit and start a task - Report and manage an issue
Prerequisites	Students attending this course should be familiar with Collaborative Business Innovator role.
Available Online	Yes

Cross-Brand

Business Strategy, Planning and Execution

End to End Change Management	
Course Code	CRB-en-ECCM-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	3 hours
Course Material	English
Level	Fundamental
Audience	Design Engineers, Product Managers, Change Initiators
Description	This course will teach you how to use the end to end change management process across different industries to manage the engineering change process.
Objectives	Upon completion of this course you will be able to: - Create a Change Request to make the changes in a physical product part - Work Under Change Action to execute a Design Modification - View the Realized Changes - Review and Approve the Design changes - Complete Change Orders and Change Actions to implement the changes
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform and should be familiar with Variant Management and Engineering BOM Management in ENOVIA.
Available Online	Yes

Perform as Project Planner	
Course Code	CRB-en-XPP-F-15-201
Available Release	3DEXPERIENCE R2020x
Duration	20 hours
Course Material	English
Level	Fundamental
Audience	Users of the 3DEXPERIENCE platform
Description	Learn how to improve collaboration in a simple and assisted iterative planning, execution and monitoring.
Objectives	Upon completion of this course, you will be able to: - Create and manage projects - Create, manage and schedule project tasks - Create and manage sub-projects
Prerequisites	Students attending this learning module should be familiar with Collaborative Business Innovator role.
Available Online	Yes

Portfolio and Product Planning	
Course Code	CRB-en-PPP-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	4 hours
Course Material	English
Level	Fundamental
Audience	Design Engineers, Product Managers, Change Initiators
Description	This course helps the customers to deploy an efficient and cost killer standardization process, aligned with business policy while increasing product quality.
Objectives	Upon completion of this course you will be able to: - Create Models and Model Versions - Associate Configured context to configured instances - Set Effectivity for Instances - Create Manufacturing Assemblies along with their scope - Use Assembly Assignment Assistant - Create Manufacturing Plans - Create Change Requests - Work Under Change Action to execute a Design Modification
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform and should be familiar with Variant Management, Engineering BOM Management in ENOVIA.
Available Online	Yes

DELMIA

Digital Manufacturing

Perform as Additive Powder Bed Programmer (PBF)	
Course Code	DEL-en-PBF-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	2.5 hours
Course Material	English
Level	Fundamental
Audience	3D Printer Programmers. Product Designers
Description	The DELMIA Powder Bed Fabrication app is a compelling solution which enables you to optimize powder bed fusion manufacturing techniques. The capabilities of the 3DEXPERIENCE platform allow you to set up, optimize and re-use additive manufacturing processes. This course will teach you how to define the infrastructure and prepare the part for the additive manufacturing process. You will learn how to generate and analyze the scan path for a part. You will also learn how to export the slicing and geometry information into an output file.
Objectives	Upon completion of this course, 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 course should have completed the Operate Business Innovation course. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Powder Bed Programmer.

Perform as Additive Powder Bed Programmer (PBF)	
Available Online	Yes

Perform as Work Instructions Designer (WKD)	
Course Code	DEL-EN-WKD-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	2 hours
Course Material	English
Level	Fundamental
Audience	Simulation Engineers, Process Planners and Manufacturing Engineers
Description	The DELMIA Work Instructions app provides a 3D immersive environment that allows us to detail and document any process, from simple assembly prototyping scenarios to complex manufacturing or maintenance processes. In this module, you will validate the product build up and review the stack up of components in operations. You will learn to create textual instructions and 3D annotations to describe a process and steps involved in it. You will learn to complement the textual instructions with electronic documents and images. You will also learn how to review and deliver the work instructions to the team members on the shop floor through a manufacturing execution system, HTML or printed material.
Objectives	After completing this module, you will be able to: - validate the product build up - build the work instructions - create the 3D work instructions - review and enhance the work instructions
Prerequisites	- Knowledge: Students attending this course should have completed the Perform as Business Innovator and the Perform as Collaborative Industry Innovator

Perform as Work Instructions Designer (WKD)	
	modules. Additionally, they should be familiar with defining process planning in DELMIA. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Work Instructions Designer
Available Online	Yes

Use DELMIA Manufactured Item Definition (PRD)	
Course Code	DEL-en-PRD-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	3 hours
Course Material	English
Level	Fundamental
Audience	Process Planners, Manufacturing Planners
Description	In this module, you will learn how to define a manufacturing item structure or an MBOM structure for a product assembly. You will also learn to define a relation between the physical product and the MBOM structure. Further, you will assign the physical parts to MBOM objects and build the 3D representation of MBOM structure.
Objectives	By the end of this module, 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 using scope links - Create assemblies and sub-assemblies
Prerequisites	Students attending this course should have completed the Perform as Business Innovator and the Perform as Collaborative Industry Innovator courses. Additionally, they should be familiar with defining process planning in DELMIA , the concepts of EBOM, MBOM structure and resources.
Available Online	Yes

Use DELMIA Process Planning (MSD)	
Course Code	DEL-en-MSD-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	2.5 hours
Course Material	English
Level	Fundamental
Audience	Process Planners, Manufacturing Planners
Description	In this module, you will learn how to create and manage a process plan for an MBOM structure. You will learn how to create the scope between the MBOM and the respective system. You will also learn how to workload line balancing between various systems or stations of an assembly line.
Objectives	Upon completion of this course you will be able to: - Author system structures and create product flows - Manage system structures and operations - Manage the scope between the MBOM and the system - Assign MBOM to operations - Generate a system structure from the manufacturing item structure - Author operations and add constraints between operations - Assign MBOMs to operations - Analyze the workload and line balancing
Prerequisites	- Knowledge: Students attending this course should have completed the Perform as Business Innovator and the Perform as Collaborative Industry Innovator courses. Additionally, they should be familiar with defining process planning in DELMIA, the concepts of EBOM, MBOM structure and resources.

Use DELMIA Process Planning (MSD)	
	- 3DEXPERIENCE Roles: Collaborative Business Innovator and Collaborative Industry Innovator.
Available Online	Yes

DELMIA

Industrial Engineering

DELMIA Manufacturing Context Builder Essentials	
Course Code	DEL-en-MSB-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	6 hours
Course Material	English
Level	Fundamental
Audience	Process Planners
Description	In this course, 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	Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform course. They should also be familiar with Process Planning.
Available Online	Yes

DELMIA Milling Machining Essentials	
Course Code	DEL-en-SMG-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	11 hours
Course Material	English
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 Gateway to the 3DEXPERIENCE Platform course. Additionally, they should be familiar with the fundamentals of machining.
Available Online	Yes

DELMIA Multi-Axis Machining Essentials	
Course Code	DEL-en-MMG-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	9 hours
Course Material	English
Level	Fundamental
Audience	Numerical Control (NC) Programmers
Description	This course 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 course 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 course 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 course should have completed the Gateway to the 3DEXPERIENCE Platform course. Additionally, they should be familiar with the fundamentals of machining
Available Online	Yes

DELMIA Prismatic Machining Fundamentals	
Course Code	DEL-en-PMG-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	13 hours
Course Material	English
Level	Fundamental
Audience	NC Programmers
Description	This course 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 course 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	Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform course. Additionally, they should be familiar with the fundamentals of machining.
Available Online	Yes

Perform as Additive Powder Bed Programmer (PBF)	
Course Code	DEL-EN-PBF-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	2.5 hours
Course Material	English
Level	Fundamental
Audience	3D Printer Programmers. Product Designers
Description	The DELMIA Powder Bed Fabrication app is a compelling solution which enables you to optimize powder bed fusion manufacturing techniques. The capabilities of the 3DEXPERIENCE platform allow you to set up, optimize and re-use additive manufacturing processes. This course will teach you how to define the infrastructure and prepare the part for the additive manufacturing process. You will learn how to generate and analyze the scan path for a part. You will also learn how to export the slicing and geometry information into an output file.
Objectives	Upon completion of this course, 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 course should have completed the Operate Business Innovation course. - 3DEXPERIENCE Roles: Business and Industry Innovation and Powder Bed Programmer.

Perform as Additive Powder Bed Programmer (PBF)

Available Online	Yes

What's New for 3D Design Manufacturing Engineers	
Course Code	DEL-en-WDME-U-15-191
Available Release	3DEXPERIENCE R2019x
Duration	10.5 hours
Course Material	English
Level	Update
Audience	3D Design Manufacturing Engineers
Description	This course introduces you to the enhancements and new functionalities in the 3D Design Manufacturing Engineer role. It is a self-paced course and does not require any software installation or additional data.
Objectives	Upon completion of this course, you will be able to: - Describe the impact of the new capabilities on the 3D Design Manufacturing Engineer role. - Use the enhancements that you have learnt.
Prerequisites	Students attending this course must be familiar with the 3D Design Manufacturing Engineer's role in the 3DEXPERIENCE platform R2018x release.
Available Online	Yes

DELMIA

Manufacturing Engineering

DELMIA Equipment Allocation Essentials	
Course Code	DEL-en-MLB-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	8 hours
Course Material	English
Level	Fundamental
Audience	Process Planners, Resource Planners
Description	This course will teach you how to create and manage resource structure. You will learn how to assign an operation to a resource by using different assignment techniques. You will also learn how to balance operations between two or more working resources. Finally, you will learn how to simulate a plant to verify its feasibility.
Objectives	Upon completion of this course you will be able to: - Manage the scope between the resources and the systems - Assign resources to operations - Plan for capacity using the resource utilization Gantt chart - Define the working position - Validate the resource plant
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform course. Additionally, they should be familiar with defining process planning in DELMIA.
Available Online	Yes

DELMIA Manufactured Item Definition Essentials	
Course Code	DEL-en-PRD-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	6 hours
Course Material	English
Level	Fundamental
Audience	Mechanical Designers, Process Planners
Description	This course will teach you how to define and manage the manufactured product structure. You will also learn how to link the product components to each step of the plan using the simple drag-and-drop technique. Further, you will learn how to create catalogs and reuse a manufacturing bill of materials template.
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 using scope links - Create assemblies and sub-assemblies
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform course.
Available Online	Yes

DELMIA Manufacturing Context Builder Essentials	
Course Code	DEL-en-MSB-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	6 hours
Course Material	English
Level	Fundamental
Audience	Process Planners
Description	In this course, 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	Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform course. They should also be familiar with Process Planning.
Available Online	Yes

Perform as Work Instructions Designer (WKD)	
Course Code	DEL-EN-WKD-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	2 hours
Course Material	English
Level	Fundamental
Audience	Simulation Engineers, Process Planners and Manufacturing Engineers
Description	The DELMIA Work Instructions app provides a 3D immersive environment that allows us to detail and document any process, from simple assembly prototyping scenarios to complex manufacturing or maintenance processes. In this module, you will validate the product build up and review the stack up of components in operations. You will learn to create textual instructions and 3D annotations to describe a process and steps involved in it. You will learn to complement the textual instructions with electronic documents and images. You will also learn how to review and deliver the work instructions to the team members on the shop floor through a manufacturing execution system, HTML or printed material.
Objectives	After completing this module, you will be able to: - validate the product build up - build the work instructions - create the 3D work instructions - review and enhance the work instructions
Prerequisites	- Knowledge: Students attending this course should have completed the Perform as Business Innovator and the Perform as Collaborative Industry Innovator

Perform as Work Instructions Designer (WKD)	
	modules. Additionally, they should be familiar with defining process planning in DELMIA. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Work Instructions Designer
Available Online	Yes

What's New for Manufacturing Engineers	
Course Code	DEL-en-WPST-U-15-191
Available Release	3DEXPERIENCE R2019x
Duration	1.5 hours
Course Material	English
Level	Update
Audience	Process Planners, Manufacturing Engineers
Description	In this module, you will learn to display the process assembly in the 3D View Panel. You will learn to quickly navigating in the Assignment Manager. You will also learn to split general operation for fine balancing.
Objectives	Upon completion of this module, you will be able to - Describe the impact of the new capabilities on the Process Planner role - Put into practice the enhancements that you have learnt to apply and use them on the operations that you perform under this role
Prerequisites	Students attending this module must be familiar with the basics of the 3DEXPERIENCE platform and EBOM/MBOM concepts.
Available Online	Yes

What's New for Process Planners	
Course Code	DEL-en-WPPL-U-15-191
Available Release	3DEXPERIENCE R2019x
Duration	4 hours
Course Material	English
Level	Update
Audience	Process Planners, Manufacturing Engineers
Description	This course introduces you to the new and enhanced functionalities of the Process Planner role. It is a self-paced course and does not require any software installation or additional data.
Objectives	Upon completion of this module, you will be able to - Describe the impact of the new capabilities on the Process Planner role - Put into practice the enhancements that you have learnt to apply and use them on the operations that you perform under this role
Prerequisites	Students attending this module must be familiar with the basics of the 3DEXPERIENCE platform and EBOM/MBOM concepts.
Available Online	Yes

ENOVIA

Business Modeling & Planning

Perform as Project Manager	
Course Code	ENOV-en-DPM-F-15-201
Available Release	3DEXPERIENCE R2020x
Duration	4.5 hours
Course Material	English
Level	Fundamental
Audience	Project Managers, Project 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 course will help you learn and explore ENOVIA Project Management capabilities.
Objectives	By the end of this learning module, you will be able to: - Create Project Template - Define Project Schedule - Allocate Resource - Submit Weekly Time Sheets - Monitor Project Status - Track Project Financials
Prerequisites	- Students attending this module should have completed the Perform as Business Innovator and Perform as Business Industry Innovator modules. Additionally, they should be familiar with Collaboration and Approvals in ENOVIA. - 3DEXPERIENCE Roles: Collaborative Business Innovator and Collaborative Industry Innovator.
Available Online	Yes

Perform as Requirements Manager	
Course Code	ENOV-en-TRM-F-15-201
Available Release	3DEXPERIENCE R2020x
Duration	5.5 hours
Course Material	English
Level	Fundamental
Audience	Requirement Managers, Product Managers, Product Architects and Product Engineers.
Description	In today's fast-paced customer-driven environment, understanding the customer requirements is a key to deliver high quality products. Requirements Management helps to ensure project success by avoiding misunderstandings about the product expectations from the customer. This self-paced course will help you learn and explore ENOVIA Requirements Management capabilities.
Objectives	Upon completion of this course 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 course should have completed the 3DEXPERIENCE platform modules. Additionally, they should also be familiar with the Collaboration and Approvals in ENOVIA.
Available Online	Yes

ENOVIA

Business Network Innovation

ENOVIA Classify and Reuse Essentials	
Course Code	ENOV-en-CLRE-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	2 hours
Course Material	English
Level	Fundamental
Audience	3DEXPERIENCE Platform Users
Description	This course will teach you how to use the ENOVIA Classify and Reuse App to search and view different types of libraries as well as an objects' hierarchy. You will also learn how to manage the objects using these libraries. Based on a combination of videos, theory and simulations, you can take this course in a self-paced learning mode and is self-sufficient. However, if you want to practice, you will find a master exercise at the end of the course.
Objectives	Upon completion of this course, you will be able to: - Search and view different types of Libraries and their related hierarchy. - Search and view General Classes and Folders.
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform and should be familiar with Collaboration and Approvals in ENOVIA.
Available Online	Yes

ENOVIA Collaboration and Approvals Essentials	
Course Code	ENOV-en-BUPS-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	10 hours
Course Material	English
Level	Fundamental
Audience	3DEXPERIENCE platform users
Description	This course will teach you the common functionalities used across all ENOVIA apps, which enable you to manage your content as well as collaborate with other members in a team. You will learn how to create workspaces for managing your business related components, such as folders, members and tasks. You will also learn how to create various workflows using routes, subscribe to your task related events, and report issues for objects. Further, you will learn to create documents and version them, while maintaining a record for all its revisions.
Objectives	Upon completion of this course, you will be able to: - Illustrate the structure of ENOVIA Business Process Services - Create and manage your folders - Create workflows - Identify and manage your assigned tasks - Subscribe to various objects and events - Report and resolve issues in objects - Create, track and organize your documents
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform course.
Available Online	Yes

ENOVIA Collaboration for Microsoft Essentials	
Course Code	ENOV-en-COMI-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	6 hours
Course Material	English
Level	Fundamental
Audience	Project Managers, Design Engineers, Reviewers and Technical Writers.
Description	In this course, you will learn how to use the ENOVIA Collaboration for Microsoft app to access and manage the documents in the ENOVIA database using the Microsoft applications.
Objectives	Upon completion of this course you will be able to: - Access documents from the ENOVIA database using Microsoft applications - Create, manage and synchronize documents
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform course and should be familiar with Collaboration and Approvals in ENOVIA.
Available Online	Yes

What's New for Industry Innovation	
Course Code	ENOV-en-WCSV-U-15-191
Available Release	3DEXPERIENCE R2019x
Duration	1.5 hours
Course Material	English
Level	Update
Audience	3DEXPERIENCE platform users
Description	This course introduces you to the enhancements and new functionalities in the Industry Innovation role. It is a self-paced course and does not require any software installation or additional data.
Objectives	Upon completion of this course, you will be able to: - Describe the impact of the new capabilities on the Industry Innovation role. - Use the enhancements that you have learnt.
Prerequisites	Students attending this course must be familiar with the Industry Innovation role in the 3DEXPERIENCE platform R2018x release.
Available Online	Yes

ENOVIA

Business Strategy, Planning and Execution

ENOVIA Project Execution Essentials	
Course Code	ENOV-en-PREX-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	6 hours
Course Material	English
Level	Fundamental
Audience	Students attending this course should have completed the Gateway to the 3DEXPERIENCE Platform course and should be familiar with Collaboration and Approvals in ENOVIA.
Description	This course will teach you how to use the ENOVIA 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 course you will be able to: - Manage the project schedule - Record risks for tasks - Create and submit timesheets
Prerequisites	
Available Online	Yes

ENOVIA Project Management Advanced	
Course Code	ENOV-en-PRPR-A-15-191
Available Release	3DEXPERIENCE R2019x
Duration	8 hours
Course Material	English
Level	Advanced
Audience	Project Managers, Project Members and Reviewers
Description	This course focuses on the advanced functionalities of the ENOVIA 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 course 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	Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform and

ENOVIA Project Management Advanced	
	should be familiar with ENOVIA Project Management Fundamentals.
Available Online	Yes

ENOVIA Traceable Requirements Management Essentials	
Course Code	ENOV-en-RERE-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	5 hours
Course Material	English
Level	Fundamental
Audience	Requirement Managers, Product Managers, Product Architects and Product Engineers.
Description	This is a process-based course, which uses an industrial scenario to teach you how to use ENOVIA Traceable Requirements Management App for capturing, creating and managing the requirements. You will learn how to derive and decompose the requirements, create requirement specifications, associate requirements with models and products and validate the allocation status. You will also learn how to track the requirements using various traceability reports.
Objectives	Upon completion of this course 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 course should have completed the Gateway to the 3DEXPERIENCE platform

ENOVIA Traceable Requirements Management Essentials	
	course and should be familiar with Collaboration and Approvals in ENOVIA.
Available Online	Yes

ENOVIA Variant Management Essentials: Product Manager	
Course Code	ENOV-en-VAMAPDM-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	4 hours
Course Material	English
Level	Fundamental
Audience	Product Managers and Marketing Managers
Description	This course will teach you how to use the ENOVIA Variant Management app for creating and managing product configurations. You will learn how to create product portfolios and manage the product variability using various configuration features and rules.
Objectives	Upon completion of this course you will be able to: - Create the product structure - Define product portfolios based on product roadmaps - Create features and rules - Create product configurations
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform course and should be familiar with Collaboration and Approvals in ENOVIA.
Available Online	Yes

Perform as Project Planner (XPP)	
Course Code	CRB-en-XPP-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	1.5 hours
Course Material	English
Level	Fundamental
Audience	Users of the 3DEXPERIENCE platform
Description	Learn how to improve collaboration in a simple and assisted iterative planning, execution and monitoring.
Objectives	Upon completion of this course, you will be able to: - Create and manage projects - Create, manage and schedule project tasks - Create and manage sub-projects
Prerequisites	Students attending this learning module should be familiar with Business Innovation role.
Available Online	Yes

What's New for Project Managers	
Course Code	ENOV-en-WDPM-U-15-191
Available Release	3DEXPERIENCE R2019x
Duration	1.5 hours
Course Material	English
Level	Update
Audience	3DEXPERIENCE Platform Users
Description	This course introduces you to the enhancements and new functionalities in the Project Manager role. It is a self-paced course and does not require any software installation or additional data.
Objectives	Upon completion of this course, you will be able to: - Describe the impact of the new capabilities on the Project Manager role - Put in practice the enhancements that you have learned to apply them to the operations that you perform under this role
Prerequisites	Students attending this course must be familiar with the Project Manager's role in the 3DEXPERIENCE platform 2018x release.
Available Online	Yes

What's New for Project Team Members	
Course Code	ENOV-en-WDPJ-U-15-191
Available Release	3DEXPERIENCE R2019x
Duration	1 hours
Course Material	English
Level	Update
Audience	3DEXPERIENCE platform users
Description	This course introduces you to the enhancements and new functionalities in the Project Team Member role. It is a self-paced course and does not require any software installation or additional data.
Objectives	Upon completion of this course, you will be able to: - Describe the impact of the new capabilities on the Project Team Member role - Put in practice the enhancements that you have learned to apply them on the operations that you perform under this role
Prerequisites	Students attending this course must be familiar with the Project Team Member's role in the 3DEXPERIENCE platform R2018x release.
Available Online	Yes

ENOVIA

Global Product Development

ENOVIA Design Review Essentials	
Course Code	ENOV-en-REEV-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	6.5 hours
Course Material	English
Level	Fundamental
Audience	Mechanical Designers
Description	This course 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 course 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 course should have completed the Gateway to the 3DEXPERIENCE platform course.
Available Online	Yes

ENOVIA On-The-Go Essentials	
Course Code	ENOV-en-ONGO-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	1 hours
Course Material	English
Level	Fundamental
Audience	Users of the 3DEXPERIENCE platform
Description	This course will teach you how you can work in the offline mode in the 3DEXPERIENCE platform.
Objectives	Upon completion of this course 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 course should have completed the Gateway to the 3DEXPERIENCE platform course.
Available Online	Yes

What's New for Product Architects	
Course Code	ENOV-en-WPDA-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	4 hours
Course Material	English
Level	Fundamental
Audience	3DEXPERIENCE Platform Users
Description	This course introduces you to the enhancements and new functionalities in the Product Architect role. It is a self-paced course and does not require any software installation or additional data.
Objectives	Upon completion of this course, you will be able to: - Describe the impact of the new capabilities on the Product Architect role - Put in practice the enhancements that you have learnt to apply them on the operations that you perform under this role.
Prerequisites	Students attending this course must be familiar with the Product Architect's role in the 3DEXPERIENCE platform 2018x release.
Available Online	Yes

What's New for Product Managers	
Course Code	ENOV-en-WPDM-U-15-191
Available Release	3DEXPERIENCE R2019x
Duration	2 hours
Course Material	English
Level	Update
Audience	3DEXPERIENCE Platform Users
Description	This course introduces you to the enhancements and new functionalities in the Product Manager role. It is a self-paced course and does not require any software installation or additional data.
Objectives	Upon completion of this course, you will be able to: - Describe the impact of the new capabilities on the Product Manager role - Put in practice the enhancements that you have learnt to apply them on the operations that you perform under this role
Prerequisites	Students attending this course must be familiar with the Product Manager's role in the 3DEXPERIENCE platform 2018x release.
Available Online	Yes

ENOVIA

Intelligent Product Configurations

Perform as Classification Manager	
Course Code	ENOV-en-CCM-F-15-201
Available Release	3DEXPERIENCE R2020x
Duration	2.5 hours
Course Material	English
Level	Fundamental
Audience	Classification Managers, Securities Services Managers, Technical Writers, Business Administrators and System Administrators
Description	In an industrial scenario, it is important for the classification manager to organize and manage document libraries efficiently. This learning module will take you through the use of ENOVIA IP Classification app to create document libraries, part libraries and general libraries and use these libraries for organizing the parts and documents. 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 course, you will be able to: - Create different types of libraries and their related hierarchies - Create and manage documents and parts - Classify the library objects based on their features - Use the classification functionality
Prerequisites	Knowledge: Students attending this course should have completed the Perform as Business Innovator and Perform as Business Industry Innovator modules. Additionally, they should be familiar with Collaboration and Approvals. 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator, Classification Manager and Product Engineer role.

Perform as Classification Manager	
Available Online	Yes

ENOVIA

Intelligent V + R Product Configurations

3DEXPERIENCE 3D Component Designer for PLM Services Essentials	
Course Code	ENOV-EN-XCD-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	3 hours
Course Material	English
Level	Fundamental
Audience	Component Designers, Mechanical Designers, CAD users
Description	This course is based on the Power By approach, whereby Designers on all versions and solutions (CATIA V5, V6) or SOLIDWORKS learn how to leverage the power of the 3DEXPERIENCE platform for their projects and daily work. More specifically, in this course you will learn the various functionalities available with the 3D Component Designer role of the 3DEXPERIENCE platform. The 3D Component Designer connects CATIA V5 and SOLIDWORKS file-based CAD users to the 3DEXPERIENCE platform, enabling you to manage product designs and documents directly from the desktop authoring application. Moreover, you can leverage the platform's web-based apps to manage, annotate and visualize designs anywhere, anytime and on any device.
Objectives	Upon completion of this course you will be able to: - Review the Change Action - Connect to CATIA V5 and modify the design - Connect to SOLIDWORKS and modify the design - Create slides and markups - Create and browse annotations
Prerequisites	Students attending this course must be familiar with the fundamentals of CATIA V5, SOLIDWORKS and should

3DEXPERIENCE 3D Component Designer for PLM Services Essentials	
	have completed the Gateway to the 3DEXPERIENCE platform and the 3DEXPERIENCE Business Innovation Essentials courses.
Available Online	Yes

3DEXPERIENCE 3D Markup Engineer Essentials	
Course Code	ENOV-en-DRU-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	1.5 hours
Course Material	English
Level	Fundamental
Audience	Design Reviewers
Description	The course will teach you the various functionalities available with the 3D Markup Engineer role of the 3DEXPERIENCE platform. You will learn how to create digital mockup reviews that can be shared with and viewed by designers in real-time. You will learn how to critically analyze a 3D model, highlight issues and communicate solutions using different slides and markups. The course also provides insights on how to access the crucial design information like functional tolerances & annotations
Objectives	Upon completion of this course you will be able to: - Create a review for design validation - Create slides and markups - Measure various geometrical items - Browse and filter annotations
Prerequisites	Students attending this course must be familiar with the fundamentals of CATIA V5 and should have completed the Gateway to the 3DEXPERIENCE platform and the 3DEXPERIENCE Business Innovation Essentials courses.
Available Online	Yes

3DEXPERIENCE 3D Product Architect Essentials	
Course Code	ENOV-en-PAU-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	2 hours
Course Material	English
Level	Fundamental
Audience	3DEXPERIENCE platform users, CAD users
Description	This course is based on the Power By approach, whereby users on all versions and solutions (V5 and V6) learn how to leverage the power of the 3DEXPERIENCE platform for their projects and daily work. More specifically, in this course you will learn the various functionalities available with the 3D Product Architect role of the 3DEXPERIENCE platform. You will also learn how to create and modify a product structure and validate the modifications after reviewing them. The course offers an insight into the functionalities that help you collaborate with your team members using the various web-based applications available with the Product Architect role.
Objectives	In this course, you will learn how to: - Assign tasks to your team members - Explore and visualize products within a web-browser - Create and modify product structure of various components under governance of a change process - Create revisions and manage the lifecycle of the products - Modify the design - Review 3D models - Create and share design reviews

3DEXPERIENCE 3D Product Architect Essentials	
Prerequisites	Students attending this course must be familiar with the fundamentals of CATIA V5 and should have completed the Gateway to the 3DEXPERIENCE platform and the 3DEXPERIENCE Business Innovation Essentials for CAD Users courses.
Available Online	Yes

ENOVIA Design Review Essentials	
Course Code	ENOV-en-REEV-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	6.5 hours
Course Material	English
Level	Fundamental
Audience	Mechanical Designers
Description	This course 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 course 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 course should have completed the Gateway to the 3DEXPERIENCE platform course.
Available Online	Yes

ENOVIA Engineering BOM Management Essentials	
Course Code	ENOV-en-ENBO-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	8 hours
Course Material	English
Level	Fundamental
Audience	Design Engineers and Manufacturing Engineers
Description	This course will teach you how to use ENOVIA Engineering BOM Management to manage the engineering change process. You will learn how to create parts and specifications and raise Change Requests for the parts and specifications. You will also learn to create Change Orders to address the design modifications raised in Change Requests. Further, you will learn how to generate various types of reports.
Objectives	Upon completion of this course, you will be able to: - Create parts and specifications - Create and edit Bill of Materials - Create a Change Request to make the changes in a part or a specification - Complete Change Orders and Change Actions to implement the changes - Review and release the parts
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform and should be familiar with Collaboration and Approvals in ENOVIA.
Available Online	Yes

ENOVIA Engineering Release Management Essentials	
Course Code	ENOV-en-XEN-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	4 hours
Course Material	English
Level	Fundamental
Audience	Release Engineers
Description	This course 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 course, you will be able to: - View and Open Engineering Items - Use 6WTags to filter the data - 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	Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform course. Additionally, they should be familiar with Collaboration and Approvals in ENOVIA.
Available Online	Yes

ENOVIA IP Classification Essentials	
Course Code	ENOV-en-PACL-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	11 hours
Course Material	English
Level	Fundamental
Audience	Classification Managers, Securities Services Managers, Technical Writers, Business Administrators and System Administrators
Description	This course will teach you how to use the ENOVIA IP Classification app to create document libraries, part libraries and general libraries and use these libraries for organizing the parts and documents. 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 course, you will be able to: - Create different types of libraries and their related hierarchies - Create and manage documents and parts - Classify the library objects based on their features - Use the Classification functionality
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE Platform course. Additionally, they should be familiar with Collaboration and Approvals in ENOVIA.
Available Online	Yes

ENOVIA Traceable Requirements Management Essentials	
Course Code	ENOV-en-RERE-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	5 hours
Course Material	English
Level	Fundamental
Audience	Requirement Managers, Product Managers, Product Architects and Product Engineers.
Description	This is a process-based course, which uses an industrial scenario to teach you how to use ENOVIA Traceable Requirements Management App for capturing, creating and managing the requirements. You will learn how to derive and decompose the requirements, create requirement specifications, associate requirements with models and products and validate the allocation status. You will also learn how to track the requirements using various traceability reports.
Objectives	Upon completion of this course 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 course should have completed the Gateway to the 3DEXPERIENCE platform

ENOVIA Traceable Requirements Management Essentials	
	course and should be familiar with Collaboration and Approvals in ENOVIA.
Available Online	Yes

ENOVIA Variant Management Essentials : Product Architect	
Course Code	ENOV-en-VAMAPDA-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	6.5 hours
Course Material	English
Level	Fundamental
Audience	Product Managers, Product Architects, System Engineers, Design Engineers and Marketing Managers
Description	This course will teach you how to use the ENOVIA Variant Management app for creating and managing product configurations. You will learn how to create product portfolios and manage the product variability using various configuration features and rules. You will also learn how to generate a Bill of Materials and associate its parts with the features of a product.
Objectives	Upon completion of this course you will be able to: - Create the product structure - Define product architecture - Create and manage product configurations and design variants - Use Enterprise Changes to track and release features - Generate BOMs
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform course and should be familiar with Collaboration and Approvals in ENOVIA.
Available Online	Yes

ENOVIA X-CAD Design Management Essentials	
Course Code	ENOV-en-XCAD-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	13.5 hours
Course Material	English
Level	Fundamental
Audience	Product Engineers and Design Engineers - Business Administrators and System Administrators
Description	This course will teach you how to use the XCAD Design Management app for the CATIA V5 Connector. You will learn how to share and manage information related to engineering design and engineering change from CATIA V5 and ENOVIA. You will also learn how to view the details of CAD objects, search for data, perform lifecycle operations, create and synchronize the engineering bill of materials.
Objectives	Upon completion of this course, you will be able to: - Explore the ENOVIA X-CAD Design app - Initialize Design Templates - Store and retrieve the CATIA V5 files in ENOVIA - Create new components, drawings and Bill of Materials (BOM) - Review and release the CAD models - Purge old data, create and compare baselines
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE Platform course and should be familiar with Collaboration and Approvals in ENOVIA and CATIA V5 fundamentals.
Available Online	Yes

ENOVIA X-CAD Design Management for SolidWorks Essentials	
Course Code	ENOV-en-XCADS-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	7 hours
Course Material	English
Level	Fundamental
Audience	Product Engineers and Design Engineers - Business Administrators and System Administrators
Description	This course will teach you how to use the XCAD Design Management app for the SOLIDWORKS Connector. You will learn how to share and manage information related to engineering design and engineering change from SOLIDWORKS and ENOVIA. You will also learn how to view the details of CAD objects, search for data, perform lifecycle operations, create and synchronize the engineering bill of materials.
Objectives	Upon completion of this course you will be able to: - Explore the XCAD Design app - Initialize and work in the Embedded Integration mode - Store and retrieve the SOLIDWORKS files in ENOVIA - Create new components, drawings and Bill of Materials (BOM) - Review and release the CAD models - Modify the existing designs and create new revisions
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform course and should be familiar with Collaboration

ENOVIA X-CAD Design Management for SolidWorks Essentials	
	and Approvals in ENOVIA and SOLIDWORKS fundamentals.
Available Online	Yes

What's New for Classification Managers	
Course Code	ENOV-en-WCCM-U-15-191
Available Release	3DEXPERIENCE R2019x
Duration	30 hours
Course Material	English
Level	Update
Audience	3DEXPERIENCE platform users
Description	This course introduces you to the enhancements and new functionalities in the Classification Manager role. It is a self-paced course and does not require any software installation or additional data.
Objectives	Upon completion of this course, you will be able to: - Describe the impact of the new capabilities on the Classification Manager role. - Use the enhancements that you have learnt.
Prerequisites	Students attending this course must be familiar with the Classification Manager role in the 3DEXPERIENCE platform R2018x release.
Available Online	Yes

What's New for Product Engineers	
Course Code	ENOV-en-WPDE-U-15-191
Available Release	3DEXPERIENCE R2019x
Duration	2 hours
Course Material	English
Level	Update
Audience	3DEXPERIENCE platform users
Description	This course introduces you to the enhancements and new functionalities in the Product Engineer role. It is a self-paced course and does not require any software installation or additional data.
Objectives	Upon completion of this course, you will be able to: - Describe the impact of the new capabilities on the Product Engineer role - Put in practice the enhancements that you have learnt to apply them on the operations that you perform under this role
Prerequisites	Students attending this course must be familiar with the Product Engineer's role in the 3DEXPERIENCE platform R2018x release.
Available Online	Yes

ENOVIA

Product Planning and Program Management

ENOVIA Project Management Fundamentals	
Course Code	ENOV-en-PRPR-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	12 hours
Course Material	English
Level	Fundamental
Audience	Project Managers, Project Members and Reviewers.
Description	This course will teach you how to create and manage projects, assign project members, create tasks, create folder 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 course you will be able to: - Create programs and projects - Assign members to a project - Add tasks and assign project members to the tasks - Create folders 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	Students attending this course should have completed the Gateway to the 3DEXPERIENCE Platform course. Additionally, they should be familiar with Collaboration and Approvals in ENOVIA.
Available Online	Yes

ENOVIA

Strategic Customer Relationship Management

What's New for Requirements Managers	
Course Code	ENOV-en-WTRM-U-15-191
Available Release	3DEXPERIENCE R2019x
Duration	1 hours
Course Material	English
Level	Update
Audience	3DEXPERIENCE platform users
Description	This course introduces you to the enhancements and new functionalities in the Requirements Manager role. It is a self-paced course and does not require any software installation or additional data.
Objectives	Upon completion of this course, you will be able to: - Describe the impact of the new capabilities on the Requirements Manager role - Put in practice the enhancements that you have learned to apply them on the operations that you perform under this role
Prerequisites	Students attending this course must be familiar with the Requirements Manager's role in the 3DEXPERIENCE platform R2018x release.
Available Online	Yes

GEOVIA

Cities

GEOVIA City Discover	
Course Code	GEO-en-GCD-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	2 hours
Course Material	English
Level	Fundamental
Audience	City Referential Manager and City Contributor
Description	This course introduces you to the various functionalities available for the Business Innovation role on the 3DEXPERIENCE platform. You will learn how to collaborate and innovate effectively using the 3DEXPERIENCE platform. You will also learn how to navigate through cities using the City Discover App.
Objectives	Upon completion of this course, you will be able to: - Understand the 3DExperience interface - Connect to the 3DExperience platform - Access your Dashboard - Access your social communities on 3DSwym - Share documents with other users - Use City Discover with the city of Rennes
Prerequisites	None
Available Online	Yes

SIMULIA

Capture and Reuse Engineering Intent

SIMULIA Process Experience Studio Essentials	
Course Code	SIM-en-EXPS-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	2 hours
Course Material	English
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

SIMULIA Results Analytics Essentials	
Course Code	SIM-en-REII-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	8 hours
Course Material	English
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

Multidiscipline Simulation

SIMULIA Linear Dynamics Scenario Creation Essentials	
Course Code	SIM-en-DYNS-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	8 hours
Course Material	English
Level	Fundamental
Audience	This course is intended for the following roles: Structural Vibration Analyst Noise & Vibration Analys
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.
Objectives	Upon completion of this course you will be able to: - Perform linear dynamics simulations - Perform coupled structural-acoustic 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 Structural Model Creation Essentials	
Course Code	SIM-en-MECM-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	8 hours
Course Material	English
Level	Fundamental
Audience	This course is intended for the following roles: Mechanical Analyst Structural Vibration Analyst Noise & Vibration Analyst Multiphysics Simulation Researcher Structural Analysis Engineer Steel Ship Structural Analysis Engineer Finite Element Modeling & Assembly Specialist
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

SIMULIA

Multiphysics Simulation

SIMULIA Abaqus Study Essentials	
Course Code	SIM-en-ABQX-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	2 hours
Course Material	English
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 can be used to configure and run an Abaqus/Standard or an Abaqus/Explicit analysis while still providing the full 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.
Prerequisites	

SIMULIA Abaqus Study Essentials	
Available Online	Yes

SIMULIA Additive Manufacturing Scenario Essentials	
Course Code	SIM-en-MDA-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	8 hours
Course Material	English
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

SIMULIA Composites Simulation Engineer Essentials	
Course Code	SIM-en-SCI-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	8 hours
Course Material	English
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

SIMULIA Durability Engineer Essentials	
Course Code	SIM-en-FGA-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	8 hours
Course Material	English
Level	Fundamental
Audience	The course is intended for users with the Durability Engineer role
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 - Structural Scenario Creation Essentials
Available Online	Yes

SIMULIA Durability Validation Essentials	
Course Code	SIM-en-DURV-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	4 hours
Course Material	English
Level	Fundamental
Audience	Stress Engineer
Description	This course is an introduction to performing durability simulation to spur product and design innovation in the 3DEXPERIENCE Platform. The 3DEXPERIENCE Platform enables realistic durability simulation of parts/ assemblies under cyclic loading conditions 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 and open simulations in the database - Understand the class of durability loads that can be applied - Perform a durability simulation - Apply loading history to represent real-world usage - Understand when surface finish can be applied - Review simulations stored in a database and generate reports
Prerequisites	The following course is required prior to taking this one: Structural Validation Essentials
Available Online	Yes

SIMULIA Fluid Dynamics Engineer Essentials	
Course Code	SIM-en-FMK-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	16 hours
Course Material	English
Level	Fundamental
Audience	- This course is intended for the following roles: - Fluid Dynamics Engineer - Multiscale Systems Specialist
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

SIMULIA Linear Dynamics Scenario Creation Essentials	
Course Code	SIM-en-DYNS-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	8 hours
Course Material	English
Level	Fundamental
Audience	This course is intended for the following roles: Structural Vibration Analyst Noise & Vibration Analys
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.
Objectives	Upon completion of this course you will be able to: - Perform linear dynamics simulations - Perform coupled structural-acoustic 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 Linear Structural Scenario Creation Essentials	
Course Code	SIM-en-LNCS-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	8 hours
Course Material	English
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

SIMULIA Linear Structural Validation Essentials	
Course Code	SIM-en-LSDY-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	8 hours
Course Material	English
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

SIMULIA Material Calibration Essentials	
Course Code	SIM-en-MCAL-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	8 hours
Course Material	English
Level	Fundamental
Audience	- This course is intended for the following roles: - Mechanical Analyst - Structural Mechanics Engineer - Additive Manufacturing Researcher - Material Calibration Specialist
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

SIMULIA Material Calibration Essentials	
Prerequisites	The following course is required prior to taking this one: Structural Model Creation Essentials
Available Online	Yes

SIMULIA Mechanical Scenario Creation: Linear Dynamics	
Course Code	SIM-en-MECS2-F-15-201
Available Release	3DEXPERIENCE R2020x
Duration	8 hours
Course Material	English
Level	Fundamental
Audience	This course is intended for the following roles: Mechanical Analyst, 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

SIMULIA Mechanical Scenario Creation Essentials	
Course Code	SIM-en-MECS-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	16 hours
Course Material	English
Level	Fundamental
Audience	This course is intended for the following roles: Mechanical Analyst Multiphysics Simulation Researcher
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

SIMULIA Model Assembly Design Essentials	
Course Code	SIM-en-MSAM-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	4 hours
Course Material	English
Level	Fundamental
Audience	- This course is intended for the following roles: - Assembly Modeling Specialist - Finite Element Modeling & Assembly Specialist - Mechanical Analyst - 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

SIMULIA Multiscale Experiment Creation Essentials	
Course Code	SIM-en-MSEC-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	4 hours
Course Material	English
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

SIMULIA Multiscale Experiment Creation Essentials

Available Online	Yes

SIMULIA Physics Results Explorer Essentials	
Course Code	SIM-en-PHYR-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	4 hours
Course Material	English
Level	Fundamental
Audience	Simulation Results Analyst Mechanical Analyst Structural Vibration Analyst Noise & Vibration Analyst Fluid Mechanics Analyst Multiphysics Simulation Researcher Structural Analysis Engineer Steel Ship Structural Analysis 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

SIMULIA Plastic Mold Injection Essentials	
Course Code	SIM-en-PPM-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	8 hours
Course Material	English
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

SIMULIA Plastic Part Injection Essentials	
Course Code	SIM-en-PPI-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	8 hours
Course Material	English
Level	Fundamental
Audience	Plastic Injection Analysis Engineer
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 both the 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: - Perform Injection Molding simulations - View and evaluate simulation results
Prerequisites	None
Available Online	Yes

SIMULIA Simulation Model Design Essentials	
Course Code	SIM-en-SML-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	8 hours
Course Material	English
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

SIMULIA Structural Model Creation : Geometry and Meshing	
Course Code	SIM-en-MECM2-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	16 hours
Course Material	English
Level	Fundamental
Audience	- This course is intended for the following roles: - Mechanical Analyst - Multiphysics Simulation Researcher - Finite Element Modeling & Assembly Specialist - Structural Engineer - Structural Mechanics Engineer - Structural Professional 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

SIMULIA Structural Model Creation Essentials	
Course Code	SIM-en-MECM-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	8 hours
Course Material	English
Level	Fundamental
Audience	- This course is intended for the following roles: - Finite Element Modeling & Assembly Specialist - Mechanical Analyst - Multiphysics Simulation Researcher - Structural Engineer - Structural Mechanics Engineer - Structural Professional Engineer - Structural Functional Analysis 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

SIMULIA Structural Scenario Creation Essentials	
Course Code	SIM-en-EMCS-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	8 hours
Course Material	English
Level	Fundamental
Audience	This course is intended for the following roles: Structural Analysis Engineer Steel Ship Structural Analysis 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 Structural Validation Essentials	
Course Code	SIM-en-STRV-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	4 hours
Course Material	English
Level	Fundamental
Audience	This course is intended for the following role: Stress Engineer
Description	This course is an introduction to performing structural simulation to spur product and design innovation in the 3DEXPERIENCE Platform. The 3DEXPERIENCE Platform enables realistic structural simulation of parts/ assemblies under mechanical loading conditions 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 structural/frequency simulation using the Structural Validation app - Perform thermal and thermal-structural simulations the Structural Validation app - Review simulations stored in a database and generate reports
Prerequisites	None
Available Online	Yes

Structural Mechanics Engineer for SOLIDWORKS Users	
Course Code	SIM-en-SSUW-F-15-201
Available Release	3DEXPERIENCE R2020x
Duration	32 hours
Course Material	English
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

Structural Mechanics Engineer for SOLIDWORKS Users	
	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

Structural Professional Engineer for SOLIDWORKS Users	
Course Code	SIM-en-DRDW-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	24 hours
Course Material	English
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

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Platform Options

SIMULIA 3DPlay Simulation Experience Essentials	
Course Code	SIM-en-3DP-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	2 hours
Course Material	English
Level	Fundamental
Audience	This course is intended for the following roles: 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
Description	This course teaches you how to replay simulation experiences in 3DPlay leveraging lightweight results visualization.
Objectives	Upon completion of this course you will be able to: - Replay simulation experiences in 3DPlay - Perform lightweight visualization through web browsers
Prerequisites	None
Available Online	Yes

SIMULIA Performance Study Essentials	
Course Code	SIM-en-DISB-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	4 hours
Course Material	English
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

SIMULIA Performance Trade-off Essentials	
Course Code	SIM-en-TPO-F-15-201
Available Release	3DEXPERIENCE R2020x
Duration	4 hours
Course Material	English
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: - Visualize and compare simulation data - Conduct trade-off analyses - Select the best alternative
Prerequisites	none
Available Online	Yes

SIMULIA Process Composer Essentials	
Course Code	SIM-en-PRCW-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	8 hours
Course Material	English
Level	Fundamental
Audience	- This course is intended for the following roles: - Mechanical Analyst - Structural Vibration Analyst - Noise and Vibration Analyst - Fluid Mechanics Analyst - Finite Element Modeling and Assembly Specialist - Simulation Process Method Developer
Description	The 3DEXPERIENCE Platform offers a rich variety of tools enabling methods developers to capture processes and incorporate best practices within their organization. This enables automation and ensures that all within the organization follow best practices. This course provides an introduction to integrating the various tools (simulation, CAD, etc.) that might be available within an organization to create a Simulation Process.
Objectives	Upon completion of this course you will be able to: - Compose Simulation Processes - Produce Simulation Experiences
Prerequisites	None
Available Online	Yes

SIMULIA Simulation Companion Essentials	
Course Code	SIM-en-COMP-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	2 hours
Course Material	English
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


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