

Course Catalog

Library

17 September 2020



3DEXPERIENCE®

Learning Experience | Course Catalog

Learning Experiences for 3DEXPERIENCE WORKS - WKLX-OC	1
3DEXPERIENCE 3D Product Architect Essentials	2
3DEXPERIENCE Business Innovation Essentials	4
3DEXPERIENCE Business Innovation Essentials for CAD Users	5
3D Generative Innovator	7
CATIA Mechanical Design Expert	9
CATIA Mechanical Design Fundamentals	11
CATIA Mold Tooling Design Essentials (MTG)	13
CATIA Shape Healing Essentials	14
Collaborate from Design to Manufacturing in Additive Manufacturing	15
DELMIA V5 to 3DEXPERIENCE Machining Transition	16
Discover the Digital Factory	18
ENOVIA Classify and Reuse Essentials	19
ENOVIA Collaboration and Approvals Essentials	20
ENOVIA Collaboration for Microsoft Essentials	21
ENOVIA Engineering Release Management Essentials	22
Explore the 3D Pattern Shape Creator Role	23
Explore the 3D Product Architect Role	24
Explore the 3D Render Role	26
Explore the 3D SheetMetal Creator Role	27
Explore the 3D Tolerancing and Annotation Designer Role	28
Explore the Change Manager Role	29
Explore the Collaborative Designer for CATIA V5 Role	30
Explore the Collaborative Designer for SOLIDWORKS Role	32
Explore the Collaborative Industry Innovator Role	34
Explore the Creative Designer Role	35
Explore the Drafter Role	37
Explore the Electrical 3D Systems Designer Role	38
Explore the Fluid 3D Systems Designer Role	39
Explore the Fluid Dynamics Engineer Role	40
Explore the Function Driven Generative Designer Role (GDE)	41
Explore the Lean Team Player Role	43

Learning Experience | Course Catalog

Explore the Manufacturing Items Engineer Role	44
Explore the Mechanical Designer Role	45
Explore the Mold and Tooling Designer Role	46
Explore the NC Prismatic Machine Programmer Role	47
Explore the Product Release Engineer Role	48
Explore the Social Business Analyst Role	49
Explore the Visual Experience Designer Role	50
Master CATIA Assembly Design	52
Master CATIA Drafting	53
Master CATIA Part Design	54
Perform as Project Planner (XPP)	55
Practice CATIA 2D Layout for 3D Design	56
Practice CATIA 3D Annotation Insight	57
Practice CATIA 3D Tolerancing and Annotation	59
Practice CATIA Assembly Design (ASD)	60
Practice CATIA Assembly Design - Added Exercises	61
Practice CATIA Bent Part Design	62
Practice CATIA Drafting	63
Practice CATIA Electrical 3D Design	64
Practice CATIA Engineering Templates Reuse	65
Practice CATIA FreeStyle Shape Design	66
Practice CATIA Functional Plastic Parts	67
Practice CATIA Generative Wireframe and Surface	68
Practice CATIA Imagine and Shape (IMA)	69
Practice CATIA Live Rendering	70
Practice CATIA Mechanical Systems Design	71
Practice CATIA Natural Assembly	72
Practice CATIA Natural Shape	74
Practice CATIA Natural Sketch	75
Practice CATIA Part Design	76
Practice CATIA Part Design - Added Exercises	77
Practice CATIA Piping and Tubing 3D Design	78
Practice CATIA Piping and Tubing Setup	79
Practice CATIA Quality Rules Reuse	80
Practice CATIA Sheet Metal Design	81
Practice CATIA Surface Design - Added Exercises	82

Learning Experience | Course Catalog

Practice CATIA Weld Design	83
Practice DELMIA Machining Validation	84
Practice DELMIA Manufacturing Context Builder	85
Practice DELMIA Prismatic Machining	86
Practice ENOVIA Change Action Management	88
Practice ENOVIA Collaborative Lifecycle Management	89
Practice ENOVIA Design Review	90
Practice ENOVIA Engineering Release	91
Practice ENOVIA Exchanges Management	92
Practice ENOVIA On-The-Go	93
Practice ENOVIA Project Execution	94
Practice SIMULIA Linear Structural Scenario Creation	95
Practice SIMULIA Linear Structural Validation	96
Practice SIMULIA Material Calibration	97
Practice SIMULIA Mechanical Scenario Creation	99
Practice SIMULIA Mechanical Scenario Creation: Linear Dynamics	100
Practice SIMULIA Model Assembly Design	101
Practice SIMULIA Performance Trade-off	102
Practice SIMULIA Physics Results Explorer	103
Practice SIMULIA Physics Simulation Review	104
Practice SIMULIA Plastic Injection	105
Practice SIMULIA Structural Model Creation	106
Practice SIMULIA Structural Model Creation : Geometry and Meshing	107
Practice SIMULIA Structural Scenario Creation	108
SIMULIA 3DPlay Simulation Experience Essentials	109
SIMULIA Durability Validation Essentials	110
SIMULIA Performance Study Essentials	111
SIMULIA Structural Validation Essentials	112
Transition to the 3DEXPERIENCE platform for Mechanical Designers	113
Transition to the 3DEXPERIENCE platform for Mechanical Designers	115
Understand Lean Fundamentals	117
What's New for Function Driven Generative Designers	118
What's New for Industry Innovation	119
What's New for Mechanical Designers	120

Learning Experience | Course Catalog

Learning Experiences for Design and Engineering - DELX-OC	121
3D Alignment Creation	122
3DEXCITE Marketing Experience Artist Essentials	123
3DEXCITE Marketing Experience Scripter	124
3DEXPERIENCE Business Innovation Essentials	126
3DEXPERIENCE Business Innovation Essentials for CAD Users	127
3D Generative Innovator	129
CATIA Generative Shape Develop Essentials	131
CATIA Mechanical Design Expert	132
CATIA Mechanical Design Fundamentals	134
CATIA Mechanical Systems Experience	136
CATIA Mold Tooling Design Essentials (MTG)	137
CATIA Shape Healing Essentials	138
Collaborate from Design to Manufacturing in Additive Manufacturing	139
ENOVIA Classify and Reuse Essentials	140
ENOVIA Collaboration and Approvals Essentials	141
ENOVIA Collaboration for Microsoft Essentials	142
Explore the 3D Pattern Shape Creator Role	143
Explore the 3D Render Role	144
Explore the 3D SheetMetal Creator Role	145
Explore the 3D Tolerancing and Annotation Designer Role	146
Explore the Collaborative Industry Innovator Role	147
Explore the Composites Designer Role	148
Explore the Creative Designer Role	149
Explore the Drafter Role	151
Explore the Dynamic Systems Engineer Role	152
Explore the Electrical 3D Systems Designer Role	153
Explore the Fluid 3D Systems Designer Role	154
Explore the Function Driven Generative Designer Role (GDE)	155
Explore the Mechanical and Shape Designer Role	157
Explore the Mechanical Designer Role	159
Explore the Mold and Tooling Designer Role	160
Explore the SheetMetal Designer Role	161
Explore the Visual Experience Designer Role	162
Introduction to Enterprise Knowledge Language	164
Master CATIA Assembly Design	165

Learning Experience | Course Catalog

Master CATIA Drafting	166
Master CATIA Part Design	167
Perform as Digital Mockup Review Engineer	168
Practice CATIA 2D Layout for 3D Design	169
Practice CATIA 3D Annotation Insight	170
Practice CATIA 3D Tolerancing and Annotation	172
Practice CATIA Assembly Design (ASD)	173
Practice CATIA Assembly Design - Added Exercises	174
Practice CATIA Bent Part Design	175
Practice CATIA Composites Design	176
Practice CATIA Drafting	177
Practice CATIA Dymola Behavior Modeling	178
Practice CATIA Electrical 3D Design	180
Practice CATIA Engineering Rules Capture	181
Practice CATIA Engineering Templates Capture	182
Practice CATIA Engineering Templates Reuse	183
Practice CATIA FreeStyle Shape Design	184
Practice CATIA Functional Plastic Parts	185
Practice CATIA Generative Shape Design	186
Practice CATIA Generative Shape Design - Added Exercises	187
Practice CATIA Generative Wireframe and Surface	188
Practice CATIA Imagine and Shape (IMA)	189
Practice CATIA Live Rendering	190
Practice CATIA Mechanical Systems Design	191
Practice CATIA Natural Assembly	192
Practice CATIA Natural Shape	194
Practice CATIA Natural Sketch	195
Practice CATIA Part Design	196
Practice CATIA Part Design - Added Exercises	197
Practice CATIA Piping and Tubing 3D Design	198
Practice CATIA Piping and Tubing Setup	199
Practice CATIA Quality Rules Capture	200
Practice CATIA Quality Rules Reuse	201
Practice CATIA Sheet Metal Design	202
Practice CATIA Surface Design - Added Exercises	203
Practice CATIA Weld Design	204

Learning Experience | Course Catalog

Practice ENOVIA Collaborative Lifecycle Management	205
Practice ENOVIA Design Review	206
Practice ENOVIA Exchanges Management	207
Practice ENOVIA On-The-Go	208
Practice ENOVIA Project Execution	209
SIMULIA Plastic Part Filling Essentials	210
SIMULIA Static Study Essentials	211
Transition to the 3DEXPERIENCE platform for Mechanical Designers	212
Transition to the 3DEXPERIENCE platform for Mechanical Designers	214
Transition to the 3DEXPERIENCE platform for Surface Designers	216
Transition to the 3DEXPERIENCE platform for Surface Designers	217
Understand Systems Thinking and Model-Based Systems Engineering Approach	218
What's New for Function Driven Generative Designers	220
What's New for Industry Innovation	221
What's New for Mechanical and Shape Designers	222
What's New for Mechanical Designers	223
What's New for Mechanical Part Designers	224
What's New for Product Enclosure Designers	225
What's New for Shape Designers	226
What's New for Sheet Metal Designers	227

Learning Experiences for Governance and Lifecycle - GVLX-OC	228
3DEXPERIENCE 3D Component Designer for PLM Services Essentials	229
3DEXPERIENCE 3D Markup Engineer Essentials	231
3DEXPERIENCE 3D Product Architect Essentials	232
3DEXPERIENCE Business Innovation Essentials	234
3DEXPERIENCE Business Innovation Essentials for CAD Users	235
ENOVIA Classify and Reuse Essentials	237
ENOVIA Collaboration and Approvals Essentials	238
ENOVIA Collaboration for Microsoft Essentials	239
ENOVIA Engineering BOM Management Essentials	240
ENOVIA Engineering Release Management Essentials	241
ENOVIA Project Execution Essentials	242
ENOVIA Project Management Fundamentals	243
ENOVIA Variant Management Essentials : Product Architect	245

Learning Experience | Course Catalog

ENOVIA Variant Management Essentials: Product Manager	246
ENOVIA X-CAD Design Management Essentials	247
ENOVIA X-CAD Design Management for SolidWorks Essentials	248
Explore the 3D Product Architect Role	250
Explore the Change Manager Role	252
Explore the Classification Manager Role	253
Explore the Collaborative Designer for CATIA V5 Role	254
Explore the Collaborative Designer for SOLIDWORKS Role	256
Explore the Collaborative Industry Innovator Role	258
Explore the Lean Team Player Role	259
Explore the Product Manager Role	260
Explore the Product Release Engineer Role	261
Explore the Project Manager Role	262
Explore the Requirements Engineer Role	263
Master ENOVIA Project Management	265
Master ENOVIA Project Management	267
Perform as Classification Manager	269
Perform as Project Manager	271
Perform as Project Planner (XPP)	272
Perform as Requirements Manager	273
Practice CATIA 3D Annotation Insight	274
Practice ENOVIA Artwork Connector	276
Practice ENOVIA Change Action Management	278
Practice ENOVIA Design Review	279
Practice ENOVIA Engineering Release	280
Practice ENOVIA IP Classification	281
Practice ENOVIA IP Classification	282
Practice ENOVIA Project Execution	283
Practice ENOVIA Project Management	284
Practice ENOVIA Traceable Requirements Management	286
Practice ENOVIA Traceable Requirements Management – Added Exercise	288
Practice ENOVIA Variant Management: Product Manager	289
Understand Lean Fundamentals	290
What's New for Classification Managers	291
What's New for Industry Innovation	292
What's New for Product Architects	293

Learning Experience | Course Catalog

What's New for Product Engineers	294
What's New for Product Managers	295
What's New for Project Managers	296
What's New for Project Team Members	297
What's New for Requirements Managers	298

Learning Experiences for Manufacturing and Production - MPLX-OC	299
3DEXPERIENCE Business Innovation Essentials	300
3DEXPERIENCE Business Innovation Essentials for CAD Users	301
CATIA Mechanical Design Expert	303
CATIA Mechanical Design Fundamentals	305
Collaborate from Design to Manufacturing in Additive Manufacturing	307
DELMIA Equipment Allocation Essentials	308
DELMIA Milling Machining Essentials	309
DELMIA Multi-Axis Machining Essentials	310
DELMIA V5 to 3DEXPERIENCE Machining Transition	311
Discover the Digital Factory	313
ENOVIA Classify and Reuse Essentials	314
ENOVIA Collaboration and Approvals Essentials	315
ENOVIA Collaboration for Microsoft Essentials	316
Explore the Collaborative Industry Innovator Role	317
Explore the Lean Team Player Role	318
Explore the Manufacturing Engineer Role	319
Explore the Manufacturing Items Engineer Role	320
Explore the NC Prismatic and Mill-Turn Programmer Role	321
Explore the NC Prismatic Machine Programmer Role	323
Explore the Powder Bed Programmer Role (PBF)	324
Explore the Process Engineer Role for Complex Assembly	325
Master CATIA Assembly Design	326
Master CATIA Drafting	327
Master CATIA Part Design	328
Orchestrate Process Planning in the Digital Factory	329
Orchestrate the Digital Factory	330
Perform as Work Instructions Designer (WKD)	331
Practice CATIA 2D Layout for 3D Design	333

Learning Experience | Course Catalog

Practice CATIA Assembly Design (ASD)	334
Practice CATIA Assembly Design - Added Exercises	335
Practice CATIA Drafting	336
Practice CATIA Engineering Templates Reuse	337
Practice CATIA Generative Wireframe and Surface	338
Practice CATIA Mechanical Systems Design	339
Practice CATIA Natural Shape	340
Practice CATIA Part Design	341
Practice CATIA Part Design - Added Exercises	342
Practice CATIA Quality Rules Reuse	343
Practice CATIA Surface Design - Added Exercises	344
Practice DELMIA Machining Validation	345
Practice DELMIA Manufacturing Context Builder	346
Practice DELMIA Planning Structure	347
Practice DELMIA Prismatic and Turning Machining	348
Practice DELMIA Prismatic Machining	350
Practice ENOVIA Design Review	352
Practice ENOVIA Project Execution	353
Transition to the 3DEXPERIENCE platform for Mechanical Designers	354
Transition to the 3DEXPERIENCE platform for Mechanical Designers	356
Understand Lean Fundamentals	358
Understand Process Planning in the Digital Factory	359
Use DELMIA Equipment Allocation (MLB)	360
Use DELMIA Manufactured Item Definition (PRD)	361
Use DELMIA Process Planning (MSD)	362
What's New for 3D Design Manufacturing Engineers	364
What's New for Industry Innovation	365
What's New for Manufacturing Engineers	366
What's New for Process Planners	367

Learning Experiences for Simulation - SMLX-OC	368
3DEXPERIENCE Business Innovation Essentials	369
3DEXPERIENCE Business Innovation Essentials for CAD Users	370
ENOVIA Classify and Reuse Essentials	372
ENOVIA Collaboration and Approvals Essentials	373

Learning Experience | Course Catalog

ENOVIA Collaboration for Microsoft Essentials	374
Explore the Collaborative Industry Innovator Role	375
Explore the Fluid Dynamics Engineer Role	376
Master CATIA Assembly Design	377
Master CATIA Part Design	378
Practice CATIA Assembly Design (ASD)	379
Practice CATIA Assembly Design - Added Exercises	380
Practice CATIA Dymola Behavior Modeling	381
Practice CATIA Engineering Templates Reuse	383
Practice CATIA Generative Wireframe and Surface	384
Practice CATIA Natural Shape	385
Practice CATIA Part Design	386
Practice CATIA Part Design - Added Exercises	387
Practice CATIA Quality Rules Reuse	388
Practice CATIA Surface Design - Added Exercises	389
Practice ENOVIA Collaborative Lifecycle Management	390
Practice ENOVIA Exchanges Management	391
Practice ENOVIA On-The-Go	392
Practice ENOVIA Project Execution	393
Practice SIMULIA Additive Manufacturing Scenario	394
Practice SIMULIA Linear Structural Scenario Creation	395
Practice SIMULIA Linear Structural Validation	396
Practice SIMULIA Material Calibration	397
Practice SIMULIA Mechanical Scenario Creation	399
Practice SIMULIA Mechanical Scenario Creation: Linear Dynamics	400
Practice SIMULIA Model Assembly Design	401
Practice SIMULIA Performance Trade-off	402
Practice SIMULIA Physics Results Explorer	403
Practice SIMULIA Physics Simulation Review	404
Practice SIMULIA Plastic Injection	405
Practice SIMULIA Structural Model Creation	406
Practice SIMULIA Structural Model Creation : Geometry and Meshing	407
Practice SIMULIA Structural Scenario Creation	408
SIMULIA 3DPlay Simulation Experience Essentials	409
SIMULIA Abaqus Study Essentials	410
SIMULIA Composites Simulation Engineer Essentials	412

Learning Experience | Course Catalog

SIMULIA Durability Engineer Essentials	413
SIMULIA Durability Validation Essentials	414
SIMULIA Linear Dynamics Scenario Creation Essentials	415
SIMULIA Multiscale Experiment Creation Essentials	416
SIMULIA Performance Study Essentials	418
SIMULIA Plastic Part Injection Essentials	419
SIMULIA Process Composer Essentials	420
SIMULIA Process Experience Studio Essentials	421
SIMULIA Results Analytics Essentials	422
SIMULIA Simulation Companion Essentials	423
SIMULIA Simulation Model Design Essentials	424
SIMULIA Structural Validation Essentials	425
Structural Professional Engineer for SOLIDWORKS Users	426
Transition to the 3DEXPERIENCE platform for Mechanical Designers	427
Transition to the 3DEXPERIENCE platform for Mechanical Designers	429
What's New for Industry Innovation	431

Learning Experiences for 3DEXPERIENCE WORKS - WKLX-OC

3DEXPERIENCE 3D Product Architect Essentials	
Course Code	ENOV-en-PAU-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	2 hours
Course Material	
Level	Fundamental
Audience	3DEXPERIENCE platform users, CAD users
Description	<p>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.</p>
Objectives	<p>In this course, you will learn how to:</p> <ul style="list-style-type: none"> - 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

3DEXPERIENCE Business Innovation Essentials	
Course Code	CRB-en-IFW-F-15-191
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x
Duration	2.5 hours
Course Material	
Level	Fundamental
Audience	3DEXPERIENCE platform users
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.
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - Understand the 3DEXPERIENCE interface - Connect to the 3DEXPERIENCE platform - Access your Dashboard - Use the 6WTags for searching content - Share various documents with other users through - Collaborate using capabilities of the 3DEXPERIENCE platform
Prerequisites	There is no pre-requisite for this course.
Available Online	Yes

3DEXPERIENCE Business Innovation Essentials for CAD Users

Course Code	CRB-en-IFWC-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	5.5 hours
Course Material	
Level	Fundamental
Audience	3DEXPERIENCE platform users
Description	<p>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 design a model using CATIA V5 or SOLIDWORKS launched from the 3DEXPERIENCE platform. In addition, you will learn about configuring the 3DEXPERIENCE Platform Management dashboard.</p>
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - - Access the 3DEXPERIENCE Platform Management dashboard - - Configure the 3DEXPERIENCE Platform Management dashboard - - Understand the 3DEXPERIENCE interface - - Connect to the 3DEXPERIENCE platform - - Access your Dashboard - - Access your social communities on 3DSwym - - Share various documents with other users - - Collaborate using capabilities of 3DEXPERIENCE platform - - Design using CATIA V5 Connector or SOLIDWORKS Connector

3DEXPERIENCE Business Innovation Essentials for CAD Users

Prerequisites

There is no pre-requisite for this course.

Available Online

Yes

3D Generative Innovator	
Course Code	CAT-en-XGG-F-15-201
Available Releases	3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	10 hours
Course Material	
Level	Fundamental
Audience	Architects, Engineers or BIM/VDC consultant
Description	<p>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.</p>
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - 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 Mechanical Design Expert	
Course Code	CAT-en-3DE-A-15-201
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	32 hours
Course Material	
Level	Advanced
Audience	Mechanical Designers
Description	<p>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.</p>
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - 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 R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	32 hours
Course Material	
Level	Fundamental
Audience	Mechanical and Sheet Metal Designers
Description	<p>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.</p>
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - 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 Mold Tooling Design Essentials (MTG)	
Course Code	CAT-en-MTG-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	8 hours
Course Material	
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	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - 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 Shape Healing Essentials	
Course Code	CAT-en-HA1-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	7 hours
Course Material	
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	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - 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

Collaborate from Design to Manufacturing in Additive Manufacturing	
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	2.8 hours
Course Material	
Level	Fundamental
Audience	Additive Manufacturing Designer, Additive Manufacturing Programmer, Mechanical Designers
Description	In this module, you will learn how to apply the end-to-end process from the design optimization through to the virtual print of the part.
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Design a part for additive manufacturing - Setup the manufacturing built for additive manufacturing process - Simulate the manufacturing setup for virtual printing
Prerequisites	<ul style="list-style-type: none"> - Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. They must be familiar with the CATIA Part Design, and the CATIA Imagine and Shape apps. - - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator, Functional Driven Generative Designer, Powder Bed Programmer, Additive Manufacturing Researcher and Reverse Shape Optimizer.
Available Online	Yes

DELMIA V5 to 3DEXPERIENCE Machining Transition

Course Code	DEL-en-PMGT-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2021x
Duration	12.2 hours
Course Material	
Level	Fundamental
Audience	NC Programmers
Description	<p>This module will teach you what are the differences between the Machining PPR Structure of CATIA V5 and DELMIA 3DEXPERIENCE and how to migrate the CATIA V5 Machining data to DELMIA 3DEXPERIENCE. You will also learn how to create a PPRContext, assign an NC Machine, insert and mount an NC Machine accessory, and then mount the workpiece. This module will also teach you how to define a tool assembly and its advanced parameters. You will learn how to define a Prismatic Machining Operation, replay the toolpath, and generate the NC Output.</p>
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Use the DELMIA 3DEXPERIENCE Machining product to define a Machining Process - Create Tools, Holders and Tool Assemblies - Define a Machining Operation - Generate a Numerical Control (NC) Output - Store and retrieve a Machining Process from the 3DEXPERIENCE database - Migrate CATIA V5 Machining objects to DELMIA 3DEXPERIENCE
Prerequisites	Students attending this course should have completed the Explore the Business Innovator module.

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

Discover the Digital Factory	
Available Release	3DEXPERIENCE R2021x
Duration	40 hours
Course Material	
Level	Fundamental
Audience	Manufacturing Engineers
Description	In this module, you will discover why the digital factory is key to coping with the global scale of planning and production that we see in the modern experience economy.
Objectives	<p>Upon completion of this learning module, you will learn:</p> <ul style="list-style-type: none"> - What digital factory is - How the digital factory works - How digital factory can help keep all stakeholders involved on the same page - How digital factory enables digital continuity to overcome companies challenges
Prerequisites	
Available Online	Yes

ENOVIA Classify and Reuse Essentials	
Course Code	ENOV-en-CLRE-F-15-191
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x
Duration	2 hours
Course Material	
Level	Fundamental
Audience	3DEXPERIENCE Platform Users
Description	<p>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.</p>
Objectives	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - Search and view different types of Libraries and their related hierarchy. - Search and view General Classes and Folders.
Prerequisites	<p>Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform and should be familiar with Collaboration and Approvals in ENOVIA.</p>
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	
Level	Fundamental
Audience	3DEXPERIENCE platform users
Description	<p>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.</p>
Objectives	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - 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	
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	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - 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

ENOVIA Engineering Release Management Essentials	
Course Code	ENOV-en-XEN-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	4 hours
Course Material	
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	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - 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

Explore the 3D Pattern Shape Creator Role

Course Code	CAT-en-XGG-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	72 hours
Course Material	
Level	Fundamental
Audience	Mechanical designers, Architects, Engineers or BIM/VDC consultants
Description	3D Pattern Shape Creator lets you design shapes and patterns through interactive panel by using parametric modeling.
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - Get how both interfaces (Graph & 3D Model) work with each other - Get fundamentals of visual scripting - Create a fully parametric model - Understand how it may be applicable to your business or your client's - Develop your own logics that can be re-used within your company - Share knowledge inside your organization - Build user interface and explore design variation using monitor
Prerequisites	
Available Online	Yes

Explore the 3D Product Architect Role	
Course Code	ENOV-en-PAU-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	90 hours
Course Material	
Level	Fundamental
Audience	3DEXPERIENCE platform users, 3D Product Architects, CAD users
Description	<p>This learning module provides you a guided and systematic approach to learn about the functionalities available in the 3D Product Architect role of the 3DEXPERIENCE platform. You will also learn how to create and modify a product structure and validate the designs. This module offers an insight into the functionalities that helps build an organized structure using various web-based applications available with the 3D Product Architect role.</p>
Objectives	<p>In this module, you will learn how to:</p> <ul style="list-style-type: none"> - Explore and visualize products within a web-browser - Create and modify product structure of various components - Create revisions and manage the lifecycle of the products - Modify the design - Review 3D models
Prerequisites	<ul style="list-style-type: none"> - Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator, 3D Product Architect and Mechanical Designer

Explore the 3D Product Architect Role

Available Online

Yes

Explore the 3D Render Role	
Course Code	3DX-en-DPA-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	35 hours
Course Material	
Level	Fundamental
Audience	
Description	Discover how to use xStudio to create photo-realistic rendered images from your designs in the 3DEXPERIENCE platform.
Objectives	<p>Objectives of the course include:</p> <ul style="list-style-type: none"> - Create xStudio experiences from physical products on the 3DEXPERIENCE Platform. - Apply materials to make your designs feel lifelike. - Use ambiances to envision how your products will look and behave in the real world. - Capture the moment with scenes. - Render images on server computers to free up your time and resources.
Prerequisites	N/A
Available Online	Yes

Explore the 3D SheetMetal Creator Role	
Course Code	SDW-en-XBT-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	70 hours
Course Material	
Level	Fundamental
Audience	
Description	Learn about working in the 3D SheetMetal Creator role and the xSheetMetal app.
Objectives	<p>The objectives of this course include:</p> <ul style="list-style-type: none"> - Discover how to access the 3D SheetMetal Creator Dashboard. - Explore aspects of the xSheetMetal User Interface. - Explore how to use common workflows for sheet metal design. - Learn about the features and options available in the xSheetMetal app.
Prerequisites	
Available Online	Yes

Explore the 3D Tolerancing and Annotation Designer Role	
Course Code	CAT-en-TAD-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	120 hours
Course Material	
Level	Fundamental
Audience	3D Master Designer, Reviewer, Project Manager
Description	This learning module provides you with a guided and systematic approach to learn about the 3D Tolerancing & Annotation Designer role. You will explore how to add the annotations using Tolerancing Advisor which are standard compliant. You will also learn to review the annotations and generate 2D representations.
Objectives	<p>Upon the completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Add dimensions and tolerances using Tolerancing Advisor - Add assembly specifications - Validate the annotations in non-authoring context - Generate 2D representations and drawings - Review Annotations using 3DPlay
Prerequisites	<ul style="list-style-type: none"> - Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. - Essential 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and 3D Tolerancing & Annotation Designer
Available Online	Yes

Explore the Change Manager Role	
Course Code	ENOV-en-CHG-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	120 hours
Course Material	
Level	Fundamental
Audience	Change Managers and Product Managers
Description	As a Change Manager, your goal is to clearly communicate change decisions and assignments to all impacted organizations. In this module you will learn to establish a governance-monitored change implementation process across the global teams.
Objectives	<p>Upon the completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Create a Change Management dashboard - Create a Change Order & Add Proposed changes - Create a standalone Change Action - Add Change Dependencies - Perform Change Assessment and Impact Analysis - Add assignee's for Change Actions - Review and Approve change
Prerequisites	<ul style="list-style-type: none"> - Knowledge: Students attending this course should have completed the Explore the Business Innovator Role and Explore the Industry Innovator Role modules. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator, Change Management and Mechanical Designer.
Available Online	Yes

Explore the Collaborative Designer for CATIA V5 Role

Course Code	ENOV-en-UE5-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	72 hours
Course Material	
Level	Fundamental
Audience	Designers working on CATIA V5
Description	This learning module provides you with a guided and systematic approach to learn about the Collaborative Designer for CATIA V5 role. You will learn how to securely connect CATIA V5 to the 3DEXPERIENCE platform. You will modify and save CATIA V5 objects on the 3DEXPERIENCE platform. You will also learn how to replace revisions and review properties of objects saved on the platform.
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Modify and save CATIA V5 objects on the 3DEXPERIENCE platform - Replace revisions of a part in CATIA V5 - Modify and review properties of a part - Verify the modifications
Prerequisites	<ul style="list-style-type: none"> - Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. They must be familiar with the basic mechanical engineering concepts and the basics of CATIA V5. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Collaborative Designer for CATIA V5. - Additional: CATIA V5-6R2019 SP5 (Native)

Explore the Collaborative Designer for CATIA V5 Role

Available Online

Yes

Explore the Collaborative Designer for SOLIDWORKS Role

Course Code	ENOV-en-UES-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	70 hours
Course Material	
Level	Fundamental
Audience	Designers working on SOLIDWORKS
Description	<p>This learning module provides you with a guided and systematic approach to learn about the Collaborative Designer for SOLIDWORKS role. You will learn how to securely connect SOLIDWORKS to the 3DEXPERIENCE platform. You will modify and save SOLIDWORKS objects on the 3DEXPERIENCE platform. You will also learn how to replace revisions and review properties of objects saved on the platform.</p>
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Modify and save SOLIDWORKS objects on the 3DEXPERIENCE platform - Replace revisions of a part in SOLIDWORKS - Modify and review properties of a part
Prerequisites	<ul style="list-style-type: none"> - Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role and the Explore the Collaborative Industry Innovator Role modules. They must be familiar with the basic mechanical engineering concepts and the basics of SOLIDWORKS. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Collaborative Designer for SOLIDWORKS.

Explore the Collaborative Designer for SOLIDWORKS Role	
	- Additional: SOLIDWORKS (Native)
Available Online	Yes

Explore the Collaborative Industry Innovator Role	
Course Code	CRB-en-CSV-F-15-211
Available Releases	3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	108 hours
Course Material	
Level	Fundamental
Audience	Users of the 3DEXPERIENCE platform
Description	In this module, you will learn how to collaborate across disciplines with full flexibility and traceability to define and develop innovative products.
Objectives	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - Create and manage a collaborative space - Create a bookmark workspace - Create and manage bookmark folders - Manage MS Office documents into 3DEXPERIENCE Platform using Collaboration for Microsoft - Manage data collaboratively using Collaborative Lifecycle. - Report and manage an issue - Manage and track a change action - Create, edit and start a task - Create and manage a route
Prerequisites	Students attending this course should be familiar with Collaborative Business Innovator role.
Available Online	Yes

Explore the Creative Designer Role	
Course Code	CAT-en-CCS-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	180 hours
Course Material	
Level	Fundamental
Audience	Creative Designers
Description	<p>This learning module provides you with a guided and systematic approach to learn about the Creative Designer role. It will teach you how to import the 2D sketch and explore ideas by sketching in 3D. It will also teach you, how to sculpt in 3D with ultra-fast virtual clay modelling using the subdivision surface technology. It will also teach you how to create precise shapes with NURBS surface modeling and direct solid modeling.</p>
Objectives	<p>Upon the completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Create 3D Concept sketches using the Natural Sketch app - Sculpt the concept shapes using the subdivision surface technology - Add technical details on the concept designs - Assemble and modify parts using direct modeling methods - Create high quality rendering images for life like experience
Prerequisites	<ul style="list-style-type: none"> - Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Creative Designer

Explore the Creative Designer Role

Available Online

Yes

Explore the Drafter Role	
Course Code	SDW-en-WDR-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	20 hours
Course Material	
Level	Fundamental
Audience	
Description	Drafter enables you to quickly create and detail 2D drawings, and communicate how your design must be manufactured. Whenever a change occurs in your 3D model, all drawing views are automatically updated. Using Drafter's comprehensive dimension, tolerancing and annotation toolset accelerates the product development process by significantly reducing design-to-manufacturing time, while decreasing costs.
Objectives	<p>In this lesson, you use the SOLIDWORKS Drawings app of the Drafter role on the 3DEXPERIENCE platform to create a part drawing and an assembly drawing. You learn how to:</p> <ul style="list-style-type: none"> - Create drawing views and drawing sheets. - Add dimensions, annotations, and a bill of materials.
Prerequisites	N/A
Available Online	Yes

Explore the Electrical 3D Systems Designer Role	
Course Code	CAT-en-ELG-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	90 hours
Course Material	
Level	Fundamental
Audience	Electrical 3D Systems Designers
Description	This learning module provides you with a guided and systematic approach to learn about the use of the Electrical 3D Systems Designer role. It will teach you how to synchronize and place electrical components using logical design. It will also teach you how to route branch geometries and wires through them.
Objectives	<p>Upon the completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Place Electrical components in the Physical design using Logical to Physical capabilities - Create and manage branch geometries to connect the electrical devices and equipment - Check network connectivity between the branches and connectors - Route wires through the branch geometries and assign electrical properties to them
Prerequisites	Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Electrical 3D Systems Designer
Available Online	Yes

Explore the Fluid 3D Systems Designer Role	
Course Code	CAT-en-FLG-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	120 hours
Course Material	
Level	Fundamental
Audience	Fluid 3D System Designers, Piping & Tubing Designers and Fluid Designers
Description	Fluid 3D Systems Designer role provides an integrated 3D environment for the physical design of tubing, piping and HVAC systems in the context of the Digital Mockup. Users can take advantage of generative and specification driven design and automated part placement capabilities to ensure compliance with industry standards. In addition, its tools make it possible to quickly query design information and generate reports based on any component parameters.
Objectives	<p>Upon completion of this module you will be able to</p> <ul style="list-style-type: none"> - Create and manage the fluidic system - Place the parts manually and automatically - Validate the fluidic design using various tools - Prepare the data for manufacturing
Prerequisites	Knowledge: Students attending this learning module should have completed the Explore the Business Innovator Role module. 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Fluid 3D Systems Designer
Available Online	Yes

Explore the Fluid Dynamics Engineer Role

Course Code	SIM-en-FMK-F-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	16 hours
Course Material	
Level	Fundamental
Audience	<ul style="list-style-type: none"> - This course is intended for the following roles: - Fluid Dynamics Engineer
Description	This course is a comprehensive introduction to fluid mechanics simulation in the 3DEXPERIENCE Platform. In this course, you will learn how to solve computational fluid dynamics (CFD) problems.
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - Set up and create CFD simulations in the 3DEXPERIENCE Platform - Perform incompressible and compressible CFD analyses - Perform fully coupled conjugate heat transfer (CHT) analyses - Postprocess results
Prerequisites	None
Available Online	Yes

Explore the Function Driven Generative Designer Role (GDE)	
Course Code	CAT-en-GDE-F-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	5 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers or Structure Engineers
Description	In this module, you will learn how to generate optimized conceptual parts from a functional specification and also to generate multiple variations to compare and analyze.
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Capture a set of functional specifications for conceptual exploration - Generate conceptual shapes on target and constraints - Manage concept variants and perform trade-off study - Design and validate the detailed design for additive layer manufacturing
Prerequisites	<ul style="list-style-type: none"> - Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. They must be familiar with the CATIA Part Design, and the CATIA Imagine and Shape apps. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator, Function Driven Generative Designer and Simulation Collaborator.

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

Explore the Lean Team Player Role	
Course Code	DEL-en-PTW-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	50 hours
Course Material	
Level	Fundamental
Audience	
Description	In this module, you will learn how the digitization of your team routines will improve the overall performance and skills of your team.
Objectives	<p>Upon completion of this learning module, you will be able to:</p> <ul style="list-style-type: none"> - Create and manage 3DLean Board - Prepare and organize Leangets - Create and manage actions - Create and manage problems - Prepare and launch a Flash 5' Meeting
Prerequisites	
Available Online	Yes

Explore the Manufacturing Items Engineer Role

Course Code	DEL-en-MFN-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	45 hours
Course Material	
Level	Fundamental
Audience	Manufacturing Engineers
Description	This learning module provides you a guided and systematic approach to learn about the functionalities available in the Manufacturing Items Engineer role of the 3DEXPERIENCE platform. You will also learn how to create, modify and update a manufacturing items structure using the web-based application.
Objectives	<p>In this learning module, you will learn how to:</p> <ul style="list-style-type: none"> - Explore and visualize products within a web-browser - Create and modify manufacturing items structures - Create revisions - Create change actions - Track changes and update manufacturing bill of materials
Prerequisites	
Available Online	Yes

Explore the Mechanical Designer Role	
Course Code	CAT-en-MDG-F-15-211
Available Releases	3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	6 hours
Course Material	
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 design project.
Objectives	<p>Upon the completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - Knowledge: Students attending this module should have completed the Explore the Business Innovator Role module. They must be familiar with the basic mechanical engineering concepts. - - 3DEXPERIENCE Roles: Collaborative Business Innovator and Collaborative Industry Innovator
Available Online	Yes

Explore the Mold and Tooling Designer Role

Course Code	CAT-en-MTG-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	6 hours
Course Material	
Level	Fundamental
Audience	Mold & Tooling Designers
Description	This learning module provides you with a guided and systematic approach to learn about the Mold & Tooling Design role. You will learn how to import design data and prepare a mold project. You will create molded part from the design part and also create the mold tools. Finally, you will learn how to add additional components from the catalog.
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Import components from the catalog - Prepare a molded part - Create conceptual mold design - Create detailed core cavity design - Create detailed mold design - Create the cooling circuits - Analyze the design
Prerequisites	<ul style="list-style-type: none"> - Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. They must be familiar with the basic mold tool design concepts. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Mold & Tooling Designer
Available Online	Yes

Explore the NC Prismatic Machine Programmer Role	
Course Code	DEL-en-NPM-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	3 hours
Course Material	
Level	Fundamental
Audience	NC Programmers
Description	In this module gives you an overview of the 3DEXPERIENCE NC Prismatic Machine Programmer Role that enables you to create a machining operation and simulate the tool path. You will learn how to simulate the machines, detect clashes and analyze them. It will also teach you to generate the NC output for an NC program.
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Define the infrastructure required for machining - Create tools and tool assemblies - Define prismatic machining operations - Replay and simulate tool paths - Simulate a machine using a simulation object - Generate the Numerical Control (NC) output
Prerequisites	<ul style="list-style-type: none"> - Knowledge: Students attending this course should have completed the Explore the Business Innovator module. Additionally, they should be familiar with the fundamentals of machining. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and NC Prismatic Machine Programmer.
Available Online	Yes

Explore the Product Release Engineer Role

Course Code	ENOV-en-XEN-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	90 hours
Course Material	
Level	Fundamental
Audience	
Description	This learning module provides you with a guided and systematic approach to learn about the Product Release Engineer role. In this module, you will create a new engineering definition by duplicating the existing product assembly and release it with the help of the ENOVIA Engineering Release widget.
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - View and Open Engineering Items - Evaluate the geometry in 3DPlay - Create a new Engineering definition - Set the re-use and duplicate components - Assign the design responsibilities - Release the Engineering definition
Prerequisites	Knowledge: Students attending this course should have completed the Explore the Business Innovator module. 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator, Product Release Engineer and Mechanical Designer.
Available Online	Yes

Explore the Social Business Analyst Role	
Course Code	NET-en-NBA-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	70 hours
Course Material	
Level	Fundamental
Audience	
Description	Learn how the 3DEXPERIENCE Platform and it's game changing online content aggregation and analysis apps help companies make better decisions faster.
Objectives	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - Build dashboards to leverage your business analysis and make your insights actionable. - Managing sources with the Library App - Monitor specifics sources with the Tracked Topic App - Leverage the Social Analytics app to analyze what matters to you - Enhance your analysis by comparing data with the Metrics Reader App - Make your insights actionable: reporting and sharing via Potions and 3DSwYm
Prerequisites	
Available Online	Yes

Explore the Visual Experience Designer Role	
Course Code	CAT-en-CSX-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	90 hours
Course Material	
Level	Fundamental
Audience	Visual Experience Designers, Design Engineers
Description	<p>This learning module provides you with a guided and systematic approach to learn about the Visual Experience Designer Role. In this module, you will learn how to create realistic renderings with high end visualization by applying materials, ambiances. In addition, you will learn to create and position cameras and lights to enhance the brightness. You will also learn how to validate and modify designs in context with the realistic visualization to ensure aesthetic quality of the design.</p>
Objectives	<p>Upon the completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Create and apply custom materials from templates - Create ambiance environment using HDR 360 degree image - Create and position multiple cameras and lights in the scene - Produce highly realistic render in Global Illumination and manipulate render settings - Applying sectioning, measurements and modifications on Native CAD model
Prerequisites	<ul style="list-style-type: none"> - Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. They must be familiar with the basic mechanical engineering concepts.

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

Master CATIA Assembly Design	
Course Code	CAT-en-ASD-A-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	12 hours
Course Material	
Level	Advanced
Audience	Mechanical Designers
Description	This module will introduce you to complex assembly modeling techniques. You will learn how to design a product architecture and manage complex assembly structures. You will also learn how to use advanced features to design parts within an assembly environment and how to analyze interferences.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Analyze interferences - Analyze component links and relations - Design complex products - Design new parts within a product - Manage complex product structures
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and be familiar with the CATIA Part Design and Assembly Design fundamentals.
Available Online	Yes

Master CATIA Drafting	
Course Code	CAT-en-GDR-A-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	12 hours
Course Material	
Level	Advanced
Audience	Draftsmen
Description	This module will teach you how to manage drawing sheets and views in the Drafting app. You will also learn how to use advanced tools to dress-up, annotate views and customize the Drafting app.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Finalize the drawing sheet - Work with large assemblies - Customize the drafting app - Perform administrative tasks - Add Bill of Material
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. Additionally, they should be familiar with Part Design and Assembly Design in CATIA.
Available Online	Yes

Master CATIA Part Design	
Course Code	CAT-en-PDG-A-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	7 hours
Course Material	
Level	Advanced
Audience	Mechanical and Sheet Metal Designers
Description	This module will introduce you to complex 3D modeling techniques, using advanced sketch-based and surface-based features. You will learn how to manage complex part structures and how to improve productivity by reusing existing features. Finally, you will learn how to use parameters and tables to drive the design of a model.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Design parts with complex geometries - Create and manage robust part structures - Create fully parameterized models - Create re-usable features
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and be familiar with CATIA Part Design fundamentals.
Available Online	Yes

Perform as Project Planner (XPP)	
Course Code	CRB-en-XPP-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	1.5 hours
Course Material	
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	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - 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

Practice CATIA 2D Layout for 3D Design	
Course Code	CAT-en-LO1-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	In this module you will learn how to create 2D layout views in a 3D model and use them to design the part in the 3D environment.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create 2D layout views in a 3D environment - Export 2D geometry into a 3D environment - Create drawings using the 2D layout views
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with CATIA Part and Assembly Design.
Available Online	Yes

Practice CATIA 3D Annotation Insight	
Course Code	CAT-en-LFT-F-15-211
Available Releases	3DEXPERIENCE R2014x , 3DEXPERIENCE R2015x , 3DEXPERIENCE R2016x , 3DEXPERIENCE R2017x , 3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2021x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	Design, Quality and other such departments where interrogating and annotating the 3D model is a frequent or occasional requirement.
Description	This module teaches how to use the 3D Annotation Insight app to review and filter 3D annotations information contained within part and assembly documents. Students will learn how to hide / show annotations and captures, use the dimensioning and tolerancing annotations to enhance understanding and improve the decision making.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Access and visualize the view, capture and annotation review features - Query and filter 3D annotations - Show/Hide individual as well as all annotations of a given type - Display FTA captures - Remove the FTA clipping plane of a capture - Filter 3D annotations
Prerequisites	Students attending this learning module should have taken the Explore the Collaborative Business Innovator Role module and should be familiar with the Windows Operating System.

Practice CATIA 3D Annotation Insight	
Available Online	Yes

Practice CATIA 3D Tolerancing and Annotation	
Course Code	CAT-en-FTA-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	12 hours
Course Material	
Level	Fundamental
Audience	3D Master Designers
Description	<p>This module will teach you how to annotate a 3D part. You will learn how to create annotation planes and how to add and manage 3D annotations on these planes. You will also learn how to create 3D views and use them to create 2D drawing views. You will also be able to create annotations on assemblies.</p>
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Add 3D annotations to a part - Manage and position the annotations - Manage the 3D geometry associated to the annotations
Prerequisites	<p>Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with CATIA Knowledgeware and basic CATIA Solid and Surface Design.</p>
Available Online	Yes

Practice CATIA Assembly Design (ASD)	
Course Code	CAT-en-ASD-F-15-211
Available Releases	3DEXPERIENCE R2015x , 3DEXPERIENCE R2016x , 3DEXPERIENCE R2017x , 3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	480 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	This module 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	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - Create a new product and add components - Position components within a product - Modify a product structure - Analyze weight distribution - Replace components
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and be familiar with the CATIA Part Design fundamentals
Available Online	Yes

Practice CATIA Assembly Design - Added Exercises

Course Code	CAT-en-ASD-X-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	360 hours
Course Material	
Level	Exercise
Audience	Mechanical Designers
Description	This module provides you with exercises for additional practice on the 3DEXPERIENCE Assembly Design app. The exercises have been created based on Industry practices. You will practice creating assembly structure, positioning components, constraining components using engineering connections and modifying parts in assembly context.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Practice your Assembly Design skills using selected scenarios - Apply the recommended methodology in various scenarios
Prerequisites	Students attending this learning module should be familiar with Part Design and Assembly Design.
Available Online	Yes

Practice CATIA Bent Part Design	
Course Code	CAT-en-SMB-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	6 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designer and Sheetmetal Designer
Description	This module will teach you how to use the Bent Part Design app to create and modify a sheetmetal part. You will learn how to define the sheetmetal parameters and create features such as walls, bends, cutouts and corners. You will also learn different techniques for multi-selecting the objects and constraining the parts.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Define and modify the sheetmetal parameters - Create a sheetmetal part using the wall and bend features - Manage the folded and unfolded views of parts - Create cutouts, chamfers and corners - Constrain the parts
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Drafting	
Course Code	CAT-en-GDR-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	360 hours
Course Material	
Level	Fundamental
Audience	Draftsmen
Description	This module will teach you how to create drawings using the Drafting app. You will learn how to create projection views and section views of a 3D model or an assembly and add the required dimensions.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create simple projection views and section views of 3D parts and assemblies - Position the views on a drawing sheet - Add dimensions and annotations to the views
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. Additionally, they should be familiar with Part Design and Assembly Design in CATIA.
Available Online	Yes

Practice CATIA Electrical 3D Design	
Course Code	CAT-en-EHI-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	1440 hours
Course Material	
Level	Fundamental
Audience	Electrical Engineers new to Electrical Physical System Design using the 3DEXPERIENCE platform.
Description	This module will teach you how to create electrical geometry in the 3DEXPERIENCE platform and thereby help you in designing the electrical physical systems. You will work with electrical catalogs to place the components from electrical libraries. You will learn the routing of branches for creating electrical branch geometries, managing the electrical geometry content, and routing conductors through the electrical geometry.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create and use an Electrical Library using Data Setup - Create an Electrical Geometry - Route Conductors through the Electrical Geometry
Prerequisites	<ul style="list-style-type: none"> - Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. - They should also be familiar with Part Design and should know how to use an electrical catalog.
Available Online	Yes

Practice CATIA Engineering Templates Reuse	
Course Code	CAT-en-KT1-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	30 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	In this course, you will learn how to create customized features by reusing the power copy and user feature.
Objectives	Upon completion of this course you will be able to: <ul style="list-style-type: none"> - Create customized features using templates.
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA FreeStyle Shape Design	
Course Code	CAT-en-FSS-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2021x
Duration	765 hours
Course Material	
Level	Fundamental
Audience	Industrial Designers and Creative Designers
Description	This module will teach you how to create flawless, styled shapes from scratch using 3D free-form curves and surfaces or using digitized data. You will also learn how to analyze and enhance the quality of existing curves and surfaces.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create styled shapes using digitized data - Create surfaces using the curve-based and the surface-based approaches - Analyze and enhance the quality of curves and surfaces
Prerequisites	Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. Additionally, they should be familiar with Generative Surface Design in CATIA.
Available Online	Yes

Practice CATIA Functional Plastic Parts	
Course Code	CAT-en-FMP-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2021x
Duration	6 hours
Course Material	
Level	Fundamental
Audience	Plastic Part Designers and Molded Part Designers
Description	This module will teach you how to use the Functional Plastic Parts app to create molded parts. You will also learn how to create a core and a cavity using styling data. You will be able to create a detailed design by adding holes, stiffening ribs, bosses and additional fixtures. You will also be able to modify the design and complete the final part with additional draft and fillet features.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create a molded plastic part - Add holes and protected areas - Add ribs and bosses
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with the Part Design app.
Available Online	Yes

Practice CATIA Generative Wireframe and Surface	
Course Code	CAT-en-GS1-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	1200 hours
Course Material	
Level	Fundamental
Audience	Surface Designers
Description	This module will teach you how to use the Generative Wireframe and Surface app to create curves and surfaces. You will learn how to assemble, re-limit and connect the geometries smoothly. You will also learn how to analyze the wireframe and the surface quality and rectify the detected defects.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create curves and improve the quality of the imported wireframes - Create surfaces based on the wireframe geometries - Assemble, re-limit and connect the surfaces smoothly to achieve the topology - Analyze the surface quality and heal the defects
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Imagine and Shape (IMA)	
Course Code	CAT-en-IMA-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2021x
Duration	16 hours
Course Material	
Level	Fundamental
Audience	Shape Designers, Product Stylists and Industrial Designers
Description	This module will teach you how to use the CATIA Imagine & Shape app to create, modify and improve product shapes and styles. You will learn how to use the Sketch Tracer app to import stylist's images in the 3DEXPERIENCE platform. You will also learn how to create an environment for a designed model and render it.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create subdivision surfaces using tools specific to the Imagine and Shape app - Modify the style surfaces using Generative Shape Design tools - Create the required environment around a model - Apply materials to the created models
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. Additionally, they should be familiar with the fundamentals of CATIA Mechanical and Shape Design.
Available Online	Yes

Practice CATIA Live Rendering	
Course Code	CAT-en-LRE-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2021x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	Visual Experience Designers
Description	<p>This module will introduce you to the CATIA Live Rendering app and its working environment. You will learn how to create highly realistic renderings and visualizations by application of customized materials, ambiances, cameras and lights. You will also learn about various other tools and options that you can use for creating rendered images and videos.</p>
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Create and apply materials and stickers to 3D models. - Enhance a 3D Scene by adding dome ambiances and HDRi lights. - Create Cameras and animations for realistic visualizations and renderings - Render batches of images and animations - Export rendered images and generate videos - Add 3D environment and visualize the model
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Mechanical Systems Design	
Course Code	CAT-en-KIM-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	This module will teach you how to create the architecture of a mechanism using simple wireframe elements and then complete the mechanism by adding 3D representations. You will also learn how to create a more complex mechanism using existing mechanisms, and finally how to animate the result.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create a new mechanism - Manage the mechanism behavior - Include alternative representations to complete the mechanism - Create a new macro mechanism from existing sub-mechanisms - Animate the mechanism
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with the Assembly Design app.
Available Online	Yes

Practice CATIA Natural Assembly	
Course Code	CAT-en-LCP-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2021x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	Mechanical Engineers and Designers, and Design Architects
Description	<p>This module will teach you how to create and manage product structures. You will explore a product and modify its structure by adding new products and exploding existing products. You will then scan the structure to activate a working product level, search for and add existing parts and use constraints to position the parts. Finally, you will create a new sub-product from a components list and use it to complete the product.</p>
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Explore a product and modify its structure using Natural Assembly - Select the product levels using the Ladder functionality - Search for a product and insert it in an existing assembly - Position the parts using constraints - Create a new sub-product from a component's list and use it to complete the product
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.

Practice CATIA Natural Assembly

Available Online

Yes

Practice CATIA Natural Shape	
Course Code	CAT-en-LSP-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	7 hours
Course Material	
Level	Fundamental
Audience	Conceptual Designers, Stylists, Simulation and Manufacturing Engineers
Description	This module will introduce you to the CATIA Natural Shape app and its unique working environment. You will learn how to use the app to conceptualize, create and modify mechanical parts and shapes. The course features short-duration demos followed by exercises which will allow you to practice. You will also learn the related theory, tips and recommendations while performing the exercises.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create a conceptual design directly in 3D - Use the hybrid design environment to conceptualize your designs - Work on the structure to create the 3D parts - Navigate through the structure and position the parts - Reuse the existing designs in the 3D models
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Natural Sketch	
Course Code	CAT-en-NTS-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2021x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	Creative Designers
Description	<p>This module contains both videos and exercises. After a short introduction to the app and the user interface, videos will be used to demonstrate the sketching techniques and the use of the sketch tools. You will use the exercises that follow the videos to practice what you have learned and familiarize yourself with the available tools.</p>
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Sketch curves or primitives in 2D and 3D - Trace and refine vector or primitive curves - Sketch on a surface - Import and edit images - Transform curves and images
Prerequisites	<p>Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. They should also be familiar with basic sketching techniques.</p>
Available Online	Yes

Practice CATIA Part Design	
Course Code	CAT-en-PDG-F-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	960 hours
Course Material	
Level	Fundamental
Audience	Mechanical and Sheet Metal Designers
Description	This module will teach you how to create a 3D model using the CATIA Part Design app. You will learn how to use different feature-based tools to build a 3D model. You will also learn how to add parameters, then review, measure and modify a model.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create new parts - Create and constrain 2D sketches - Complete a 3D model using basic features - Parameterize a model - Review and measure a model - Reuse existing features
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Part Design - Added Exercises	
Course Code	CAT-en-PDG-X-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	780 hours
Course Material	
Level	Exercise
Audience	Mechanical Designers
Description	<p>This module provides you with an exercise database for additional practice on the 3DEXPERIENCE Part Design app. The exercises have been arranged in increasing order of difficulty. The fundamental exercises will check and refresh your basic Part Design skills before you move on to more complex topics. The advanced exercises will make you practice the recommended design methodologies using realistic parts.</p>
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Apply your Mechanical skills in selected scenarios. - Employ the recommended methodology in various situations and efficiently use the Mechanical workbenches.
Prerequisites	Students attending this learning module should be familiar with CATIA Part Design.
Available Online	Yes

Practice CATIA Piping and Tubing 3D Design	
Course Code	CAT-en-PIP-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2021x
Duration	960 hours
Course Material	
Level	Fundamental
Audience	Piping or Tubing Designers
Description	<p>This module will teach you how to route a pipe or a tube, and place the piping components. You will learn how to detail the design and modify the network. You will also learn how to validate the design and prepare it for manufacturing. The module also features exercises that enable you to practice creating a piping system design.</p>
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Route straight pipes or tubes - Position piping or tubing parts - Adjust the design of a piping or a tubing network - Validate the piping and tubing design - Prepare the piping and tubing design for manufacturing
Prerequisites	Students attending this module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Piping and Tubing Setup	
Course Code	CAT-en-PTS-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2021x
Duration	1440 hours
Course Material	
Level	Fundamental
Audience	Fluid Systems Solution Administrators
Description	This module will teach you how to set up fluid systems resources and create piping components. You will learn how to manage component catalogs, design validation rules, and global naming conventions. You will also learn how to customize the generative view style file for drawings and standards for P&ID.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create and manage resources for fluid systems design - Build equipment, supports, and components - Reuse the piping standard data for design setup - Create and manage component catalogs - Define the global naming conventions - Create the checks and rules for design validation - Create templates for generating reports - Customize the drafting standards and settings - Define symbols and annotations for piping and instrumentation diagrams
Prerequisites	Students attending this module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Quality Rules Reuse	
Course Code	CAT-en-KE1-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	5 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	This module will show you how to share corporate knowledge stored in the rule bases and leverage it across the company to ensure design compliance with the established standards. You will also learn to create reports and manage their template.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Automate the design modifications - Analyze and create reports
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Sheet Metal Design	
Course Code	CAT-en-SMD-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2021x
Duration	16 hours
Course Material	
Level	Fundamental
Audience	Sheet Metal Designer
Description	This module will teach you how to create a sheet metal part using standard wall, bend and stamping features. You will see how user features can be incorporated into the design and how to use both standard and user-defined materials. Finally you will learn how to create a flat pattern and produce a detailed, annotated drawing.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create a sheet metal part using wall and bend features - Manage folded and unfolded views - Use pre-defined sheet metal parameters - Create stamped features - Create duplicating features and use the multi-body methodology - Creating drawings of sheet metal parts - Export a finished flat pattern
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and be familiar with the CATIA Part Design app.
Available Online	Yes

Practice CATIA Surface Design - Added Exercises	
Course Code	CAT-en-GS1-X-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	8 hours
Course Material	
Level	Exercise
Audience	Mechanical Surface Designers
Description	This module provides you with an exercise database for additional practice on 3DEXPERIENCE Surface Design. The exercises have been created based on Industry practices. You will get to practice skills such as creating wireframes and surfaces, creating surfacic shells and solid parts, and working with multiple parts that are referencing a common part.
Objectives	<p>These exercises will allow you to put your Shape skills into practice on selected scenarios.</p> <ul style="list-style-type: none"> - You will apply the recommended methodology in various situations. - You will enhance your understanding and usage of the Shape apps.
Prerequisites	Students attending this course should be familiar with Surface Design.
Available Online	Yes

Practice CATIA Weld Design	
Course Code	CAT-en-WDG-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2021x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers and Structural Designers
Description	This module will teach you how to create a welded assembly. You will learn how to join parts using appropriate weld features and how to generate associative weld drawings and weld reports. This course will teach you how to define the welding resource in the Data Setup app and use it to create welds.
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Define the welding resource - Create and manage welded assemblies - Generate weld reports - Create welding drawings
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with Assembly Design.
Available Online	Yes

Practice DELMIA Machining Validation	
Course Code	DEL-en-MSG-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2021x
Duration	360 hours
Course Material	
Level	Fundamental
Audience	NC Programmers
Description	<p>This module will teach you how to simulate an NC machine using tool path and NC code. You will learn how to create probes in the simulation object environment and use them to detect the clashes that occur during a machine simulation. You will also learn how to perform a fault analysis to detect, analyze and eliminate the clashes.</p>
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create a simulation object - Simulate the machine using tool path and NC code - Create Probes to detect clashes during the machine simulation - Analyze and eliminate the clashes
Prerequisites	<p>Students attending this course should have completed the Explore the Business Innovator module. Additionally, they should be familiar with the fundamentals of machining and the DELMIA Prismatic Machining. ap3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator, NC Prismatic Machine Programmer and NC MachineCode Validation Specialist.p.</p>
Available Online	Yes

Practice DELMIA Manufacturing Context Builder	
Course Code	DEL-en-MSB-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2021x
Duration	348 hours
Course Material	
Level	Fundamental
Audience	Process Planners
Description	In this module, you will learn to explore the PPR context. You will also learn to manage the documents in the spreadsheet view. You will learn to use the Compare command to compare structures of different versions of a PPR object like products, manufactured items, resources, systems or operations.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - Knowledge: Students attending this module should have completed the Explore the Business Innovator module. Additionally, they should be familiar with the fundamentals of Process Planning. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Process Engineer.
Available Online	Yes

Practice DELMIA Prismatic Machining	
Course Code	DEL-en-PMG-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2021x
Duration	12.8 hours
Course Material	
Level	Fundamental
Audience	NC Programmers
Description	This module will teach you how to use the common functionalities available in the machining apps of DELMIA. It will also teach you the fundamentals of creating and simulating a tool path. You will learn how to create tool paths for 2 and 2.5-axis machining operations. You will also learn how to create probes in the simulation object and how to simulate the machines, detect clashes and analyze them.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - Knowledge: Students attending this course should have completed the Explore the Business Innovator module. Additionally, they should be familiar with the fundamentals of machining. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and NC Prismatic Machine Programmer and Mechanical Designer.

Practice DELMIA Prismatic Machining	
Available Online	Yes

Practice ENOVIA Change Action Management	
Course Code	ENOV-en-NCHA-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2021x
Duration	5.5 hours
Course Material	
Level	Fundamental
Audience	Change Initiators, Design Engineers and Product Managers
Description	This module will teach you how to use the ENOVIA Change Action Management app to manage the engineering change process. You will learn how to create change actions and add Proposed changes to it. You will also learn to work with change actions and view the Realized changes to complete the change process.
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Initiate a Change Action - Add Proposed Changes to a Change Action - Work Under Change Action to execute a Design Modification - View the Realized Changes - Review and Approve the Design changes
Prerequisites	Students attending this module should have completed the Explore the Collaborative Business Innovator and Explore the Collaborative Industry Innovator modules.
Available Online	Yes

Practice ENOVIA Collaborative Lifecycle Management	
Course Code	ENOV-en-LIIN-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2021x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	CAD designers, engineers in charge of product development
Description	In this module, you will learn how to use the ENOVIA Collaborative Lifecycle Management app to manage the complete lifecycle of an object in order to achieve concurrent engineering. You will also learn to manage the access and ownership of objects for collaboration of members on the same platform.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create a new product structure - Use different sections of the Action bar effectively - Manage the changes in a product structure - Save the product structure in the database
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice ENOVIA Design Review	
Course Code	ENOV-en-REEV-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	6.5 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	This module will teach you how to create different slides for various positions of an assembly to create exploded views. You will also learn how to create sections and measures, and export them as parts or drawings. You will also learn how to compare 3D objects and how to create multi-context reviews.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create a design review and add markups to it - Create slides and add markers - Create and export sections and measures - Compare 3D Objects and 2D Drawings - Create multi-context reviews
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice ENOVIA Engineering Release	
Course Code	ENOV-en-ENXENG-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	Release Engineers
Description	This module will teach you to analyze the engineering items and create a new engineering definition using the ENOVIA Engineering Release widget. You will play the role of a Product Release Engineer in building a new engineering definition from early definition to final validation in collaboration with engineering ecosystem.
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - View and Open Engineering Items - Evaluate the geometry in 3DPlay - Explore revision history - Create a new Engineering definition - Set the re-use and duplicate components - Set the Part Number and update its quantity - Add and review the design specification document - Assign the design responsibilities - Release the Engineering definition
Prerequisites	Knowledge: Students attending this course should have completed the Explore the Business Innovator module. 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator, Product Release Engineer and Mechanical Designer.
Available Online	Yes

Practice ENOVIA Exchanges Management	
Course Code	ENOV-en-EXCH-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2021x
Duration	2 hours
Course Material	
Level	Fundamental
Audience	CAD Designers and Platform Contributors
Description	This module will teach you how to use the import / export tools in 3DEXPERIENCE. You will also manage the mastership between V5 files and 3DEXPERIENCE files.
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Import and export 3DXML files - Import and export CATIA V5 files - Manage the Mastership of imported objects
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice ENOVIA On-The-Go	
Course Code	ENOV-en-ONGO-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2021x
Duration	60 hours
Course Material	
Level	Fundamental
Audience	Users of the 3DEXPERIENCE platform
Description	This module will teach you how you can work in the offline mode in the 3DEXPERIENCE platform.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Work in the offline mode - Return to the online mode - Restore the last session - Create the offline content in the online mode
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice ENOVIA Project Execution	
Course Code	ENOV-en-PREX-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	150 hours
Course Material	
Level	Fundamental
Audience	
Description	This module will teach you how to use the Project Execution app to manage your assigned tasks. You will be able to manage the project schedule, modify the tasks, record the risks and create timesheets.
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Manage the project schedule - Record risks for tasks - Create and submit timesheets
Prerequisites	<p>Knowledge: Students attending this course should have completed the Explore the Business Innovator and Explore the Industry Innovator module. Additionally, they should be familiar with the Practice the Project Management module. 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Project Team Member.</p>
Available Online	Yes

Practice SIMULIA Linear Structural Scenario Creation

Course Code	SIM-en-LNCS-F-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	<ul style="list-style-type: none"> - 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	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - Perform linear and frequency simulations - Perform thermal simulations - View and evaluate simulation results
Prerequisites	<ul style="list-style-type: none"> - The following course is required prior to taking this one: - Structural Model Creation Essentials
Available Online	Yes

Practice SIMULIA Linear Structural Validation	
Course Code	SIM-en-LSDY-F-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	480 hours
Course Material	
Level	Fundamental
Audience	<ul style="list-style-type: none"> - The course is intended for the following audience: - Structural Designer
Description	<p>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.</p>
Objectives	<p>The course covers the following topics:</p> <ul style="list-style-type: none"> - Searching and managing simulation data. - Performing a structural simulation using the Linear Structural Validation app, including: Linear statics, Natural frequency extraction, Thermal (steady-state). - Review the results of the simulation using contour plots, animations and other visualization features.
Prerequisites	None
Available Online	Yes

Practice SIMULIA Material Calibration	
Course Code	SIM-en-MCAL-F-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	480 hours
Course Material	
Level	Fundamental
Audience	<ul style="list-style-type: none"> - This course is intended for the following roles: - Material Calibration Specialist - Structural Mechanics Engineer
Description	<p>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.</p>
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - Import and plot material test data - Configure and calibrate material models - Use optimization settings - Generate additional outputs - Create a core material in the 3DEXPERIENCE platform - Export materials for use in an Abaqus input file
Prerequisites	The following course is required prior to taking this one: Structural Model Creation Essentials

Practice SIMULIA Material Calibration

Available Online

Yes

Practice SIMULIA Mechanical Scenario Creation	
Course Code	SIM-en-MECS-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	16 hours
Course Material	
Level	Fundamental
Audience	<ul style="list-style-type: none"> - This course is intended for the following roles: - Structural Mechanics Engineer
Description	This course is an introduction to mechanical and thermal simulation in the 3DEXPERIENCE Platform. It teaches you how to solve both linear and nonlinear static and dynamics problems and view simulation results.
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - Perform structural simulations (linear and nonlinear; statics and dynamics) - Perform thermal simulations - View and evaluate simulation results
Prerequisites	The following course is required prior to taking this one: Structural Model Creation Essentials
Available Online	Yes

Practice SIMULIA Mechanical Scenario Creation: Linear Dynamics	
Course Code	SIM-en-MECS2-F-15-211
Available Releases	3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	<ul style="list-style-type: none"> - This course is intended for the following roles: - Structural Mechanics Engineer
Description	<p>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. .</p>
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - Perform linear dynamics simulations - Perform coupled structural-acoustic simulations - Perform complex eigenvalue simulations - View and evaluate simulation results
Prerequisites	<ul style="list-style-type: none"> - The following course is required prior to taking this one: - Mechanical Scenario Creation Essentials
Available Online	Yes

Practice SIMULIA Model Assembly Design	
Course Code	SIM-en-MSAM-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	<ul style="list-style-type: none"> - This course is intended for the following roles: - Structural Performance Engineer - Structural Mechanics Engineer
Description	<p>This course is 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.</p>
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - Create external simulation representations. - Perform automated modeling
Prerequisites	Structural Model Creation: Geometry and Meshing
Available Online	Yes

Practice SIMULIA Performance Trade-off	
Course Code	SIM-en-PTO-F-15-211
Available Releases	3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	<ul style="list-style-type: none"> - 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	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - - Visualize and compare simulation data - Conduct trade-off analyses - Select the best alternative
Prerequisites	none
Available Online	Yes

Practice SIMULIA Physics Results Explorer	
Course Code	SIM-en-PHYR-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	<ul style="list-style-type: none"> - This course is intended for the following roles: - Fluid Dynamics Engineer - Structural Engineer - Structural Mechanics Engineer - Structural Performance Engineer
Description	The 3DEXPERIENCE Platform offers a rich variety of simulation tools and provides a new paradigm in results visualization. This course is an introduction to the high-performance visualization tool in the 3DEXPERIENCE Platform that allows simulation analysts and engineers to view and evaluate simulation results.
Objectives	Upon completion of this course you will be able to: <ul style="list-style-type: none"> - View and evaluate simulation results
Prerequisites	None
Available Online	Yes

Practice SIMULIA Physics Simulation Review	
Course Code	SIM-en-PSR-F-15-211
Available Releases	3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	130 hours
Course Material	
Level	Fundamental
Audience	This course is intended for all simulation roles.
Description	This course teaches you how to view simulation experience content in the Physics Simulation Review app, providing lightweight results visualization.
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - - • Replay simulation experiences in Physics Simulation Review for both native simulations and externally generated simulation results. - - • Perform lightweight visualization through web browsers
Prerequisites	None
Available Online	Yes

Practice SIMULIA Plastic Injection	
Course Code	SIM-en-PPM-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	Simulation Analysts
Description	This course is an introduction to performing injection molding simulation to spur product and design innovation in the 3DEXPERIENCE Platform. The 3DEXPERIENCE Platform enables realistic plastic injection molding simulation of the mold cooling, filling and packing manufacturing processes early in the design cycle, when the cost of design change is low and opportunity is high.
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - Perform a plastic injection molding simulation of the mold cooling, filling and packing processes using the Plastic Mold Injection app - Understand simulation results from the molding process through to part warpage to produce highly efficient designs and/or optimize their performance
Prerequisites	None
Available Online	Yes

Practice SIMULIA Structural Model Creation	
Course Code	SIM-en-MECM-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	<ul style="list-style-type: none"> - This course is intended for the following roles: - Structural Engineer - Structural Mechanics Engineer - Structural Performance Engineer
Description	This course is an introduction to finite element modeling in the 3DEXPERIENCE platform. It teaches you how to prepare finite element models for simulation.
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - Create complete Finite Element models for structural and thermal simulations
Prerequisites	None
Available Online	Yes

Practice SIMULIA Structural Model Creation : Geometry and Meshing	
Course Code	SIM-en-MECM2-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	16 hours
Course Material	
Level	Fundamental
Audience	<ul style="list-style-type: none"> - This course is intended for the following roles: - - Structural Mechanics Engineer - Structural Performance Engineer
Description	This course provides an in-depth look at cleaning/repairing geometry for the purpose of generating high quality meshes. It also offers a comprehensive discussion on meshing techniques. The focus is on techniques relevant to simulation.
Objectives	Upon completion of this course you will be able to: <ul style="list-style-type: none"> - Clean and repair native and imported geometry. - Use advanced meshing techniques.
Prerequisites	The following course is required prior to taking this one: Structural Model Creation Essentials
Available Online	Yes

Practice SIMULIA Structural Scenario Creation	
Course Code	SIM-en-EMCS-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	<ul style="list-style-type: none"> - This course is intended for the following roles: - Structural Performance Engineer
Description	This course is an introduction to structural and thermal simulation in the 3DEXPERIENCE Platform. It teaches you how to solve both linear and nonlinear static problems and basic linear dynamics problems.
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - 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 3DPlay Simulation Experience Essentials

Course Code	SIM-en-3DP-F-15-191
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x
Duration	2 hours
Course Material	
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: <ul style="list-style-type: none"> - Replay simulation experiences in 3DPlay - Perform lightweight visualization through web browsers
Prerequisites	None
Available Online	Yes

SIMULIA Durability Validation Essentials	
Course Code	SIM-en-DURV-F-15-191
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	Stress Engineer
Description	<p>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.</p>
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - 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 Performance Study Essentials	
Course Code	SIM-en-DISB-F-15-201
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	Mechanical Analyst Structural Vibration Analyst Noise & Vibration Analyst Fluid Mechanics Analyst Finite Element Modeling & Assembly Specialist Structural Analysis Engineer Steel Ship Structural Analysis Engineer Stress Engineer Fluid Dynamics Engineer Simulation Process Method Developer Results Data Analyst
Description	This course is an introduction to the lightweight web-based tool in the 3DEXPERIENCE Platform that allows simulation analysts and engineers to run predefined Simulation Processes. The tool enables one to quickly search, run, and monitor existing Simulation Processes.
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - Instantiate Simulation Processes from Simulation Experiences - Run and monitor Simulation Processes - Manage Simulation Processes
Prerequisites	None
Available Online	Yes

SIMULIA Structural Validation Essentials	
Course Code	SIM-en-STRV-F-15-191
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x
Duration	4 hours
Course Material	
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	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - 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

Transition to the 3DEXPERIENCE platform for Mechanical Designers

Course Code	CAT-en-3DMTVS-F-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2021x
Duration	12 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	<p>This module addresses the needs of Mechanical Designers working on cloud. 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.</p>
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - 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
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business

Transition to the 3DEXPERIENCE platform for Mechanical Designers

Innovator Role module. They should also be familiar with CATIA V5 Mechanical Design.

Available Online

Yes

Transition to the 3DEXPERIENCE platform for Mechanical Designers

Course Code	CAT-en-3DMT-F-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	12.1 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	<p>This module 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.</p>
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - 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 learning module should have completed the Explore the Collaborative Business Innovator Role module. They should also be familiar with CATIA V5 Mechanical Design.

Available Online

Yes

Understand Lean Fundamentals	
Available Release	3DEXPERIENCE R2021x
Duration	210 hours
Course Material	
Level	Fundamental
Audience	
Description	In this module, you will learn about the fundamentals of lean to achieve operational practices transformation, target excellence and development.
Objectives	Learn Lean fundamentals and how to successfully articulate Lean tools.
Prerequisites	
Available Online	Yes

What's New for Function Driven Generative Designers	
Course Code	CAT-en-WGDE-U-15-191
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x
Duration	16 hours
Course Material	
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	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - 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 Industry Innovation	
Course Code	ENOV-en-WCSV-U-15-191
Available Release	3DEXPERIENCE R2019x
Duration	1.5 hours
Course Material	
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	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - 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

What's New for Mechanical Designers	
Course Code	CAT-en-WMDG-U-15-191
Available Release	3DEXPERIENCE R2019x
Duration	12.5 hours
Course Material	
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	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - 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

Learning Experiences for Design and Engineering - DELX-OC

3D Alignment Creation	
Available Release	3DEXPERIENCE R2019x
Duration	165 hours
Course Material	
Level	Fundamental
Audience	
Description	In this module, you will create horizontal alignment, vertical alignment, excavation and filling and generate 3D alignment.
Objectives	<p>Upon completion of the course, you will be able to:</p> <ul style="list-style-type: none"> - Create horizontal alignment and import the Start data and map images. - Create vertical alignment, alignment points and excavation and filling. - Generate 3D alignment in the combination of horizontal and vertical alignments
Prerequisites	
Available Online	Yes

3DEXCITE Marketing Experience Artist Essentials	
Course Code	3DX-en-XAR-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	7 hours
Course Material	
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	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - 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	5.7 hours
Course Material	
Level	Fundamental
Audience	Scripters
Description	<p>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 possibilities and explain the behaviour editor to add behaviour and interactivity into your experiences.</p>
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - 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

3DEXPERIENCE Business Innovation Essentials	
Course Code	CRB-en-IFW-F-15-191
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x
Duration	2.5 hours
Course Material	
Level	Fundamental
Audience	3DEXPERIENCE platform users
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.
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - Understand the 3DEXPERIENCE interface - Connect to the 3DEXPERIENCE platform - Access your Dashboard - Use the 6WTags for searching content - Share various documents with other users through - Collaborate using capabilities of the 3DEXPERIENCE platform
Prerequisites	There is no pre-requisite for this course.
Available Online	Yes

3DEXPERIENCE Business Innovation Essentials for CAD Users

Course Code	CRB-en-IFWC-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	5.5 hours
Course Material	
Level	Fundamental
Audience	3DEXPERIENCE platform users
Description	<p>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 design a model using CATIA V5 or SOLIDWORKS launched from the 3DEXPERIENCE platform. In addition, you will learn about configuring the 3DEXPERIENCE Platform Management dashboard.</p>
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - - Access the 3DEXPERIENCE Platform Management dashboard - - Configure the 3DEXPERIENCE Platform Management dashboard - - Understand the 3DEXPERIENCE interface - - Connect to the 3DEXPERIENCE platform - - Access your Dashboard - - Access your social communities on 3DSwym - - Share various documents with other users - - Collaborate using capabilities of 3DEXPERIENCE platform - - Design using CATIA V5 Connector or SOLIDWORKS Connector

3DEXPERIENCE Business Innovation Essentials for CAD Users	
Prerequisites	There is no pre-requisite for this course.
Available Online	Yes

3D Generative Innovator	
Course Code	CAT-en-XGG-F-15-201
Available Releases	3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	10 hours
Course Material	
Level	Fundamental
Audience	Architects, Engineers or BIM/VDC consultant
Description	<p>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.</p>
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - 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 Generative Shape Develop Essentials	
Course Code	CAT-en-DL1-F-15-191
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x
Duration	2 hours
Course Material	
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	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - 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 Mechanical Design Expert	
Course Code	CAT-en-3DE-A-15-201
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	32 hours
Course Material	
Level	Advanced
Audience	Mechanical Designers
Description	<p>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.</p>
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - 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 R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	32 hours
Course Material	
Level	Fundamental
Audience	Mechanical and Sheet Metal Designers
Description	<p>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.</p>
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - 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 Experience	
Course Code	CAT-en-KIN-F-15-191
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x
Duration	9 hours
Course Material	
Level	Fundamental
Audience	Mechanical Design Engineers
Description	<p>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.</p>
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - 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	<p>Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform and should be familiar with Mechanical Systems Design in CATIA.</p>
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	
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	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - 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 Shape Healing Essentials	
Course Code	CAT-en-HA1-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	7 hours
Course Material	
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	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - 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

Collaborate from Design to Manufacturing in Additive Manufacturing

Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	2.8 hours
Course Material	
Level	Fundamental
Audience	Additive Manufacturing Designer, Additive Manufacturing Programmer, Mechanical Designers
Description	In this module, you will learn how to apply the end-to-end process from the design optimization through to the virtual print of the part.
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Design a part for additive manufacturing - Setup the manufacturing built for additive manufacturing process - Simulate the manufacturing setup for virtual printing
Prerequisites	<ul style="list-style-type: none"> - Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. They must be familiar with the CATIA Part Design, and the CATIA Imagine and Shape apps. - - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator, Functional Driven Generative Designer, Powder Bed Programmer, Additive Manufacturing Researcher and Reverse Shape Optimizer.
Available Online	Yes

ENOVIA Classify and Reuse Essentials	
Course Code	ENOV-en-CLRE-F-15-191
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x
Duration	2 hours
Course Material	
Level	Fundamental
Audience	3DEXPERIENCE Platform Users
Description	<p>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.</p>
Objectives	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - Search and view different types of Libraries and their related hierarchy. - Search and view General Classes and Folders.
Prerequisites	<p>Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform and should be familiar with Collaboration and Approvals in ENOVIA.</p>
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	
Level	Fundamental
Audience	3DEXPERIENCE platform users
Description	<p>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.</p>
Objectives	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - 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	
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	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - 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

Explore the 3D Pattern Shape Creator Role

Course Code	CAT-en-XGG-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	72 hours
Course Material	
Level	Fundamental
Audience	Mechanical designers, Architects, Engineers or BIM/VDC consultants
Description	3D Pattern Shape Creator lets you design shapes and patterns through interactive panel by using parametric modeling.
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - Get how both interfaces (Graph & 3D Model) work with each other - Get fundamentals of visual scripting - Create a fully parametric model - Understand how it may be applicable to your business or your client's - Develop your own logics that can be re-used within your company - Share knowledge inside your organization - Build user interface and explore design variation using monitor
Prerequisites	
Available Online	Yes

Explore the 3D Render Role	
Course Code	3DX-en-DPA-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	35 hours
Course Material	
Level	Fundamental
Audience	
Description	Discover how to use xStudio to create photo-realistic rendered images from your designs in the 3DEXPERIENCE platform.
Objectives	<p>Objectives of the course include:</p> <ul style="list-style-type: none"> - Create xStudio experiences from physical products on the 3DEXPERIENCE Platform. - Apply materials to make your designs feel lifelike. - Use ambiances to envision how your products will look and behave in the real world. - Capture the moment with scenes. - Render images on server computers to free up your time and resources.
Prerequisites	N/A
Available Online	Yes

Explore the 3D SheetMetal Creator Role	
Course Code	SDW-en-XBT-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	70 hours
Course Material	
Level	Fundamental
Audience	
Description	Learn about working in the 3D SheetMetal Creator role and the xSheetMetal app.
Objectives	<p>The objectives of this course include:</p> <ul style="list-style-type: none"> - Discover how to access the 3D SheetMetal Creator Dashboard. - Explore aspects of the xSheetMetal User Interface. - Explore how to use common workflows for sheet metal design. - Learn about the features and options available in the xSheetMetal app.
Prerequisites	
Available Online	Yes

Explore the 3D Tolerancing and Annotation Designer Role	
Course Code	CAT-en-TAD-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	120 hours
Course Material	
Level	Fundamental
Audience	3D Master Designer, Reviewer, Project Manager
Description	This learning module provides you with a guided and systematic approach to learn about the 3D Tolerancing & Annotation Designer role. You will explore how to add the annotations using Tolerancing Advisor which are standard compliant. You will also learn to review the annotations and generate 2D representations.
Objectives	<p>Upon the completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Add dimensions and tolerances using Tolerancing Advisor - Add assembly specifications - Validate the annotations in non-authoring context - Generate 2D representations and drawings - Review Annotations using 3DPlay
Prerequisites	<ul style="list-style-type: none"> - Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. - Essential 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and 3D Tolerancing & Annotation Designer
Available Online	Yes

Explore the Collaborative Industry Innovator Role	
Course Code	CRB-en-CSV-F-15-211
Available Releases	3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	108 hours
Course Material	
Level	Fundamental
Audience	Users of the 3DEXPERIENCE platform
Description	In this module, you will learn how to collaborate across disciplines with full flexibility and traceability to define and develop innovative products.
Objectives	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - Create and manage a collaborative space - Create a bookmark workspace - Create and manage bookmark folders - Manage MS Office documents into 3DEXPERIENCE Platform using Collaboration for Microsoft - Manage data collaboratively using Collaborative Lifecycle. - Report and manage an issue - Manage and track a change action - Create, edit and start a task - Create and manage a route
Prerequisites	Students attending this course should be familiar with Collaborative Business Innovator role.
Available Online	Yes

Explore the Composites Designer Role

Course Code	CAT-en-CDE-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	270 hours
Course Material	
Level	Fundamental
Audience	Composites Designers
Description	The Composites Designer role offers composites design engineers with a complete set of process-oriented features to engineer composites parts. This learning module lets you explore and practice the key capabilities of the Composites Designer role. You will also learn how to design composites parts using the Manual and Grid Approach.
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Define Composites Parameters - Create Manual Plies - Analyze and Modify Plies - Create a Solid from Plies - Analyze Composites Parts for Producibility - Generate a Ply Book - Create Preliminary and Detailed Grid Design
Prerequisites	<p>Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. They should be familiar with the basics of composites design.</p> <p>3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Composites Designer</p>
Available Online	Yes

Explore the Creative Designer Role	
Course Code	CAT-en-CCS-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	180 hours
Course Material	
Level	Fundamental
Audience	Creative Designers
Description	<p>This learning module provides you with a guided and systematic approach to learn about the Creative Designer role. It will teach you how to import the 2D sketch and explore ideas by sketching in 3D. It will also teach you, how to sculpt in 3D with ultra-fast virtual clay modelling using the subdivision surface technology. It will also teach you how to create precise shapes with NURBS surface modeling and direct solid modeling.</p>
Objectives	<p>Upon the completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Create 3D Concept sketches using the Natural Sketch app - Sculpt the concept shapes using the subdivision surface technology - Add technical details on the concept designs - Assemble and modify parts using direct modeling methods - Create high quality rendering images for life like experience
Prerequisites	<ul style="list-style-type: none"> - Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Creative Designer

Explore the Creative Designer Role

Available Online

Yes

Explore the Drafter Role	
Course Code	SDW-en-WDR-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	20 hours
Course Material	
Level	Fundamental
Audience	
Description	Drafter enables you to quickly create and detail 2D drawings, and communicate how your design must be manufactured. Whenever a change occurs in your 3D model, all drawing views are automatically updated. Using Drafter's comprehensive dimension, tolerancing and annotation toolset accelerates the product development process by significantly reducing design-to-manufacturing time, while decreasing costs.
Objectives	<p>In this lesson, you use the SOLIDWORKS Drawings app of the Drafter role on the 3DEXPERIENCE platform to create a part drawing and an assembly drawing. You learn how to:</p> <ul style="list-style-type: none"> - Create drawing views and drawing sheets. - Add dimensions, annotations, and a bill of materials.
Prerequisites	N/A
Available Online	Yes

Explore the Dynamic Systems Engineer Role	
Course Code	CAT-en-SNK-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	120 hours
Course Material	
Level	Fundamental
Audience	Dynamic Systems Engineers
Description	In this module, you will explore the key capabilities of the Dynamic Systems Engineer Role. You will learn about the complete process of modeling dynamic behavior, simulating model and analyzing results. You will also learn how to use the behavior model in the component architecture.
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Define the component architecture - Create a new requirement - Create the dynamic model using Modelica libraries - Simulate the model and analyze the results
Prerequisites	<ul style="list-style-type: none"> - Knowledge: Students attending this learning module should have completed the Explore the Business Innovator Role module. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator, Dynamic Systems Engineer, Systems Battery Library and Systems Electrified Power Train Library
Available Online	Yes

Explore the Electrical 3D Systems Designer Role	
Course Code	CAT-en-ELG-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	90 hours
Course Material	
Level	Fundamental
Audience	Electrical 3D Systems Designers
Description	This learning module provides you with a guided and systematic approach to learn about the use of the Electrical 3D Systems Designer role. It will teach you how to synchronize and place electrical components using logical design. It will also teach you how to route branch geometries and wires through them.
Objectives	<p>Upon the completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Place Electrical components in the Physical design using Logical to Physical capabilities - Create and manage branch geometries to connect the electrical devices and equipment - Check network connectivity between the branches and connectors - Route wires through the branch geometries and assign electrical properties to them
Prerequisites	Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Electrical 3D Systems Designer
Available Online	Yes

Explore the Fluid 3D Systems Designer Role

Course Code	CAT-en-FLG-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	120 hours
Course Material	
Level	Fundamental
Audience	Fluid 3D System Designers, Piping & Tubing Designers and Fluid Designers
Description	Fluid 3D Systems Designer role provides an integrated 3D environment for the physical design of tubing, piping and HVAC systems in the context of the Digital Mockup. Users can take advantage of generative and specification driven design and automated part placement capabilities to ensure compliance with industry standards. In addition, its tools make it possible to quickly query design information and generate reports based on any component parameters.
Objectives	<p>Upon completion of this module you will be able to</p> <ul style="list-style-type: none"> - Create and manage the fluidic system - Place the parts manually and automatically - Validate the fluidic design using various tools - Prepare the data for manufacturing
Prerequisites	Knowledge: Students attending this learning module should have completed the Explore the Business Innovator Role module. 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Fluid 3D Systems Designer
Available Online	Yes

Explore the Function Driven Generative Designer Role (GDE)	
Course Code	CAT-en-GDE-F-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	5 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers or Structure Engineers
Description	In this module, you will learn how to generate optimized conceptual parts from a functional specification and also to generate multiple variations to compare and analyze.
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Capture a set of functional specifications for conceptual exploration - Generate conceptual shapes on target and constraints - Manage concept variants and perform trade-off study - Design and validate the detailed design for additive layer manufacturing
Prerequisites	<ul style="list-style-type: none"> - Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. They must be familiar with the CATIA Part Design, and the CATIA Imagine and Shape apps. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator, Function Driven Generative Designer and Simulation Collaborator.

Explore the Function Driven
Generative Designer Role (GDE)

Available Online

Yes

Explore the Mechanical and Shape Designer Role	
Course Code	CAT-en-MES-F-15-211
Available Releases	3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	360 hours
Course Material	
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	<p>Upon the completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. They must be familiar with the basic mechanical engineering concepts. - - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Mechanical and Shape Designer

Explore the Mechanical and Shape Designer Role

Available Online

Yes

Explore the Mechanical Designer Role	
Course Code	CAT-en-MDG-F-15-211
Available Releases	3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	6 hours
Course Material	
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 design project.
Objectives	<p>Upon the completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - Knowledge: Students attending this module should have completed the Explore the Business Innovator Role module. They must be familiar with the basic mechanical engineering concepts. - - 3DEXPERIENCE Roles: Collaborative Business Innovator and Collaborative Industry Innovator
Available Online	Yes

Explore the Mold and Tooling Designer Role

Course Code	CAT-en-MTG-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	6 hours
Course Material	
Level	Fundamental
Audience	Mold & Tooling Designers
Description	<p>This learning module provides you with a guided and systematic approach to learn about the Mold & Tooling Design role. You will learn how to import design data and prepare a mold project. You will create molded part from the design part and also create the mold tools. Finally, you will learn how to add additional components from the catalog.</p>
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Import components from the catalog - Prepare a molded part - Create conceptual mold design - Create detailed core cavity design - Create detailed mold design - Create the cooling circuits - Analyze the design
Prerequisites	<ul style="list-style-type: none"> - Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. They must be familiar with the basic mold tool design concepts. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Mold & Tooling Designer
Available Online	Yes

Explore the SheetMetal Designer Role	
Course Code	CAT-en-SMW-F-15-211
Available Releases	3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	180 hours
Course Material	
Level	Fundamental
Audience	Sheet Metal Designer
Description	In this module, you will explore the key capabilities of the Sheet Metal Designer Role. You will learn complete process of sheet metal design from conceptual design to detailed design. You will also learn how to prepare the sheet metal part for manufacturing.
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Explore and Modify the product structure - Design a sheet metal part - Create conceptual design of a sheet metal part - Create detailed design of the sheet metal part - Prepare the sheet metal part for manufacturing
Prerequisites	<ul style="list-style-type: none"> - Knowledge: Students attending this learning module should have completed the Explore the Business Innovator Role module. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and SheetMetal Designer
Available Online	Yes

Explore the Visual Experience Designer Role

Course Code	CAT-en-CSX-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	90 hours
Course Material	
Level	Fundamental
Audience	Visual Experience Designers, Design Engineers
Description	<p>This learning module provides you with a guided and systematic approach to learn about the Visual Experience Designer Role. In this module, you will learn how to create realistic renderings with high end visualization by applying materials, ambiances. In addition, you will learn to create and position cameras and lights to enhance the brightness. You will also learn how to validate and modify designs in context with the realistic visualization to ensure aesthetic quality of the design.</p>
Objectives	<p>Upon the completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Create and apply custom materials from templates - Create ambiance environment using HDR 360 degree image - Create and position multiple cameras and lights in the scene - Produce highly realistic render in Global Illumination and manipulate render settings - Applying sectioning, measurements and modifications on Native CAD model
Prerequisites	<ul style="list-style-type: none"> - Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. They must be familiar with the basic mechanical engineering concepts.

Explore the Visual Experience Designer Role	
	<ul style="list-style-type: none">- 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Visual Experience Designer
Available Online	Yes

Introduction to Enterprise Knowledge Language	
Course Code	CAT-en-EKL-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	258 hours
Course Material	
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	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - 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

Master CATIA Assembly Design	
Course Code	CAT-en-ASD-A-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	12 hours
Course Material	
Level	Advanced
Audience	Mechanical Designers
Description	This module will introduce you to complex assembly modeling techniques. You will learn how to design a product architecture and manage complex assembly structures. You will also learn how to use advanced features to design parts within an assembly environment and how to analyze interferences.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Analyze interferences - Analyze component links and relations - Design complex products - Design new parts within a product - Manage complex product structures
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and be familiar with the CATIA Part Design and Assembly Design fundamentals.
Available Online	Yes

Master CATIA Drafting	
Course Code	CAT-en-GDR-A-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	12 hours
Course Material	
Level	Advanced
Audience	Draftsmen
Description	This module will teach you how to manage drawing sheets and views in the Drafting app. You will also learn how to use advanced tools to dress-up, annotate views and customize the Drafting app.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Finalize the drawing sheet - Work with large assemblies - Customize the drafting app - Perform administrative tasks - Add Bill of Material
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. Additionally, they should be familiar with Part Design and Assembly Design in CATIA.
Available Online	Yes

Master CATIA Part Design	
Course Code	CAT-en-PDG-A-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	7 hours
Course Material	
Level	Advanced
Audience	Mechanical and Sheet Metal Designers
Description	This module will introduce you to complex 3D modeling techniques, using advanced sketch-based and surface-based features. You will learn how to manage complex part structures and how to improve productivity by reusing existing features. Finally, you will learn how to use parameters and tables to drive the design of a model.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Design parts with complex geometries - Create and manage robust part structures - Create fully parameterized models - Create re-usable features
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and be familiar with CATIA Part Design fundamentals.
Available Online	Yes

Perform as Digital Mockup Review Engineer	
Course Code	CAT-en-DWP-F-15-201
Available Release	3DEXPERIENCE R2020x
Duration	3 hours
Course Material	
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	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Explore Product Structures - Create Reference Geometries - Create Reviews - Manage Interferences - Validate Reviews - Analyze Technical Attributes
Prerequisites	<ul style="list-style-type: none"> - 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

Practice CATIA 2D Layout for 3D Design	
Course Code	CAT-en-LO1-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	In this module you will learn how to create 2D layout views in a 3D model and use them to design the part in the 3D environment.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create 2D layout views in a 3D environment - Export 2D geometry into a 3D environment - Create drawings using the 2D layout views
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with CATIA Part and Assembly Design.
Available Online	Yes

Practice CATIA 3D Annotation Insight

Course Code	CAT-en-LFT-F-15-211
Available Releases	3DEXPERIENCE R2014x , 3DEXPERIENCE R2015x , 3DEXPERIENCE R2016x , 3DEXPERIENCE R2017x , 3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2021x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	Design, Quality and other such departments where interrogating and annotating the 3D model is a frequent or occasional requirement.
Description	This module teaches how to use the 3D Annotation Insight app to review and filter 3D annotations information contained within part and assembly documents. Students will learn how to hide / show annotations and captures, use the dimensioning and tolerancing annotations to enhance understanding and improve the decision making.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Access and visualize the view, capture and annotation review features - Query and filter 3D annotations - Show/Hide individual as well as all annotations of a given type - Display FTA captures - Remove the FTA clipping plane of a capture - Filter 3D annotations
Prerequisites	Students attending this learning module should have taken the Explore the Collaborative Business Innovator Role module and should be familiar with the Windows Operating System.

Practice CATIA 3D Annotation Insight

Available Online

Yes

Practice CATIA 3D Tolerancing and Annotation	
Course Code	CAT-en-FTA-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	12 hours
Course Material	
Level	Fundamental
Audience	3D Master Designers
Description	<p>This module will teach you how to annotate a 3D part. You will learn how to create annotation planes and how to add and manage 3D annotations on these planes. You will also learn how to create 3D views and use them to create 2D drawing views. You will also be able to create annotations on assemblies.</p>
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Add 3D annotations to a part - Manage and position the annotations - Manage the 3D geometry associated to the annotations
Prerequisites	<p>Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with CATIA Knowledgeware and basic CATIA Solid and Surface Design.</p>
Available Online	Yes

Practice CATIA Assembly Design (ASD)	
Course Code	CAT-en-ASD-F-15-211
Available Releases	3DEXPERIENCE R2015x , 3DEXPERIENCE R2016x , 3DEXPERIENCE R2017x , 3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	480 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	This module 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	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - Create a new product and add components - Position components within a product - Modify a product structure - Analyze weight distribution - Replace components
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and be familiar with the CATIA Part Design fundamentals
Available Online	Yes

Practice CATIA Assembly Design - Added Exercises	
Course Code	CAT-en-ASD-X-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	360 hours
Course Material	
Level	Exercise
Audience	Mechanical Designers
Description	This module provides you with exercises for additional practice on the 3DEXPERIENCE Assembly Design app. The exercises have been created based on Industry practices. You will practice creating assembly structure, positioning components, constraining components using engineering connections and modifying parts in assembly context.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Practice your Assembly Design skills using selected scenarios - Apply the recommended methodology in various scenarios
Prerequisites	Students attending this learning module should be familiar with Part Design and Assembly Design.
Available Online	Yes

Practice CATIA Bent Part Design	
Course Code	CAT-en-SMB-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	6 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designer and Sheetmetal Designer
Description	This module will teach you how to use the Bent Part Design app to create and modify a sheetmetal part. You will learn how to define the sheetmetal parameters and create features such as walls, bends, cutouts and corners. You will also learn different techniques for multi-selecting the objects and constraining the parts.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Define and modify the sheetmetal parameters - Create a sheetmetal part using the wall and bend features - Manage the folded and unfolded views of parts - Create cutouts, chamfers and corners - Constrain the parts
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Composites Design	
Course Code	CAT-en-CPE-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2021x
Duration	480 hours
Course Material	
Level	Fundamental
Audience	Composites Designers
Description	<p>The CATIA Composites Design app offers composites design engineers with a complete set of process-oriented features to engineer composites parts. This learning module lets you practice the various approaches used to design a composites part. You will also learn how to analyze composites design and generate production documents.</p>
Objectives	<p>Upon the completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Define Composites Parameters - Import Composites Design Directly from an Excel File - Design a Composite Part using the Grid Approach - Design a Composite Part using the Zone Approach with Solid Slicing - Perform and inspect the Producibility Analysis - Export and import the Ply Design Data - Create a Ply Book
Prerequisites	Students attending this module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with CATIA Drafting.
Available Online	Yes

Practice CATIA Drafting	
Course Code	CAT-en-GDR-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	360 hours
Course Material	
Level	Fundamental
Audience	Draftsmen
Description	This module will teach you how to create drawings using the Drafting app. You will learn how to create projection views and section views of a 3D model or an assembly and add the required dimensions.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create simple projection views and section views of 3D parts and assemblies - Position the views on a drawing sheet - Add dimensions and annotations to the views
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. Additionally, they should be familiar with Part Design and Assembly Design in CATIA.
Available Online	Yes

Practice CATIA Dymola Behavior Modeling	
Course Code	CAT-en-DBD-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2021x
Duration	660 hours
Course Material	
Level	Fundamental
Audience	Dynamic Systems Designers
Description	<p>This module will teach you how to model and simulate the dynamic behavior of a multi-engineering system. You will learn how to search, open and manage the Dymola Behavior libraries. You will also learn how to manage the link between a logical component and a Dymola model.</p>
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Search and open the Dymola behavior library - Edit and simulate an existing dynamic behavior model - Create a new dynamic model - Insert the model into a functional or logical component - Generate the Dymola model from the mechanism - Simulate the logical component with a behavior in the Functional & Logical Design app
Prerequisites	<ul style="list-style-type: none"> - Knowledge: Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with Functional & Logical Design fundamentals. -

Practice CATIA Dymola Behavior Modeling	
	- 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Dynamic Systems Designer
Available Online	Yes

Practice CATIA Electrical 3D Design	
Course Code	CAT-en-EHI-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	1440 hours
Course Material	
Level	Fundamental
Audience	Electrical Engineers new to Electrical Physical System Design using the 3DEXPERIENCE platform.
Description	This module will teach you how to create electrical geometry in the 3DEXPERIENCE platform and thereby help you in designing the electrical physical systems. You will work with electrical catalogs to place the components from electrical libraries. You will learn the routing of branches for creating electrical branch geometries, managing the electrical geometry content, and routing conductors through the electrical geometry.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create and use an Electrical Library using Data Setup - Create an Electrical Geometry - Route Conductors through the Electrical Geometry
Prerequisites	<ul style="list-style-type: none"> - Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. - They should also be familiar with Part Design and should know how to use an electrical catalog.
Available Online	Yes

Practice CATIA Engineering Rules Capture	
Course Code	CAT-en-KWA-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	600 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	This module will teach you how to create knowledgeware objects in order to embed parameters and design rules within your models. You will also learn how to check the models, reduce design errors and automate the modifications.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create parametric models - Embed your design knowledge in the models - Automate the design and modification processes - Create design configurations using design tables - Customize the specification tree to display knowledgeware features
Prerequisites	Students attending this module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with the Enterprise Knowledge Language (EKL) and Part Design.
Available Online	Yes

Practice CATIA Engineering Templates Capture	
Course Code	CAT-en-PKT-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2021x
Duration	120 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	This module will teach you how to create and store engineering templates and then reuse and adapt them in a new context.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create engineering templates - Reuse the templates in a new context
Prerequisites	Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. They should also be familiar with Part Design and Engineering Rules Capture.
Available Online	Yes

Practice CATIA Engineering Templates Reuse	
Course Code	CAT-en-KT1-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	30 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	In this course, you will learn how to create customized features by reusing the power copy and user feature.
Objectives	Upon completion of this course you will be able to: <ul style="list-style-type: none"> - Create customized features using templates.
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA FreeStyle Shape Design	
Course Code	CAT-en-FSS-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2021x
Duration	765 hours
Course Material	
Level	Fundamental
Audience	Industrial Designers and Creative Designers
Description	This module will teach you how to create flawless, styled shapes from scratch using 3D free-form curves and surfaces or using digitized data. You will also learn how to analyze and enhance the quality of existing curves and surfaces.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create styled shapes using digitized data - Create surfaces using the curve-based and the surface-based approaches - Analyze and enhance the quality of curves and surfaces
Prerequisites	Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. Additionally, they should be familiar with Generative Surface Design in CATIA.
Available Online	Yes

Practice CATIA Functional Plastic Parts	
Course Code	CAT-en-FMP-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2021x
Duration	6 hours
Course Material	
Level	Fundamental
Audience	Plastic Part Designers and Molded Part Designers
Description	This module will teach you how to use the Functional Plastic Parts app to create molded parts. You will also learn how to create a core and a cavity using styling data. You will be able to create a detailed design by adding holes, stiffening ribs, bosses and additional fixtures. You will also be able to modify the design and complete the final part with additional draft and fillet features.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create a molded plastic part - Add holes and protected areas - Add ribs and bosses
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with the Part Design app.
Available Online	Yes

Practice CATIA Generative Shape Design	
Course Code	CAT-en-GSD-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	480 hours
Course Material	
Level	Fundamental
Audience	Surface Designers
Description	<p>This module will teach you how to use the Generative Shape Design app to create curves and surfaces. You will learn how to assemble, re-limit, and connect the geometries smoothly. You will also learn how to analyze the wireframe and the surface quality and rectify the detected defects.</p>
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - Knowledge: Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. - - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Mechanical and Shape Designer
Available Online	Yes

Practice CATIA Generative Shape Design - Added Exercises	
Course Code	CAT-en-GSD-X-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	960 hours
Course Material	
Level	Exercise
Audience	Mechanical Designers and Surface Designers
Description	This module provides you with an extensive database of exercises for additional practice on advanced topics of Surface Design. The exercises have been created based on the Industry practices.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create wireframe features using the existing curves and surfaces - Create advanced and parameterized swept surfaces - Perform advanced surface analysis and gap correction - Create advanced blend features - Improve the quality and stability of created geometries
Prerequisites	Students attending this module should know the basic and advanced features of Surface Design.
Available Online	Yes

Practice CATIA Generative Wireframe and Surface	
Course Code	CAT-en-GS1-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	1200 hours
Course Material	
Level	Fundamental
Audience	Surface Designers
Description	This module will teach you how to use the Generative Wireframe and Surface app to create curves and surfaces. You will learn how to assemble, re-limit and connect the geometries smoothly. You will also learn how to analyze the wireframe and the surface quality and rectify the detected defects.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create curves and improve the quality of the imported wireframes - Create surfaces based on the wireframe geometries - Assemble, re-limit and connect the surfaces smoothly to achieve the topology - Analyze the surface quality and heal the defects
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Imagine and Shape (IMA)	
Course Code	CAT-en-IMA-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2021x
Duration	16 hours
Course Material	
Level	Fundamental
Audience	Shape Designers, Product Stylists and Industrial Designers
Description	This module will teach you how to use the CATIA Imagine & Shape app to create, modify and improve product shapes and styles. You will learn how to use the Sketch Tracer app to import stylist's images in the 3DEXPERIENCE platform. You will also learn how to create an environment for a designed model and render it.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create subdivision surfaces using tools specific to the Imagine and Shape app - Modify the style surfaces using Generative Shape Design tools - Create the required environment around a model - Apply materials to the created models
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. Additionally, they should be familiar with the fundamentals of CATIA Mechanical and Shape Design.
Available Online	Yes

Practice CATIA Live Rendering	
Course Code	CAT-en-LRE-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2021x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	Visual Experience Designers
Description	<p>This module will introduce you to the CATIA Live Rendering app and its working environment. You will learn how to create highly realistic renderings and visualizations by application of customized materials, ambiances, cameras and lights. You will also learn about various other tools and options that you can use for creating rendered images and videos.</p>
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Create and apply materials and stickers to 3D models. - Enhance a 3D Scene by adding dome ambiances and HDRi lights. - Create Cameras and animations for realistic visualizations and renderings - Render batches of images and animations - Export rendered images and generate videos - Add 3D environment and visualize the model
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Mechanical Systems Design	
Course Code	CAT-en-KIM-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	This module will teach you how to create the architecture of a mechanism using simple wireframe elements and then complete the mechanism by adding 3D representations. You will also learn how to create a more complex mechanism using existing mechanisms, and finally how to animate the result.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create a new mechanism - Manage the mechanism behavior - Include alternative representations to complete the mechanism - Create a new macro mechanism from existing sub-mechanisms - Animate the mechanism
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with the Assembly Design app.
Available Online	Yes

Practice CATIA Natural Assembly	
Course Code	CAT-en-LCP-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2021x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	Mechanical Engineers and Designers, and Design Architects
Description	<p>This module will teach you how to create and manage product structures. You will explore a product and modify its structure by adding new products and exploding existing products. You will then scan the structure to activate a working product level, search for and add existing parts and use constraints to position the parts. Finally, you will create a new sub-product from a components list and use it to complete the product.</p>
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Explore a product and modify its structure using Natural Assembly - Select the product levels using the Ladder functionality - Search for a product and insert it in an existing assembly - Position the parts using constraints - Create a new sub-product from a component's list and use it to complete the product
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.

Practice CATIA Natural Assembly

Available Online

Yes

Practice CATIA Natural Shape	
Course Code	CAT-en-LSP-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	7 hours
Course Material	
Level	Fundamental
Audience	Conceptual Designers, Stylists, Simulation and Manufacturing Engineers
Description	This module will introduce you to the CATIA Natural Shape app and its unique working environment. You will learn how to use the app to conceptualize, create and modify mechanical parts and shapes. The course features short-duration demos followed by exercises which will allow you to practice. You will also learn the related theory, tips and recommendations while performing the exercises.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create a conceptual design directly in 3D - Use the hybrid design environment to conceptualize your designs - Work on the structure to create the 3D parts - Navigate through the structure and position the parts - Reuse the existing designs in the 3D models
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Natural Sketch	
Course Code	CAT-en-NTS-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2021x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	Creative Designers
Description	<p>This module contains both videos and exercises. After a short introduction to the app and the user interface, videos will be used to demonstrate the sketching techniques and the use of the sketch tools. You will use the exercises that follow the videos to practice what you have learned and familiarize yourself with the available tools.</p>
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Sketch curves or primitives in 2D and 3D - Trace and refine vector or primitive curves - Sketch on a surface - Import and edit images - Transform curves and images
Prerequisites	<p>Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. They should also be familiar with basic sketching techniques.</p>
Available Online	Yes

Practice CATIA Part Design	
Course Code	CAT-en-PDG-F-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	960 hours
Course Material	
Level	Fundamental
Audience	Mechanical and Sheet Metal Designers
Description	This module will teach you how to create a 3D model using the CATIA Part Design app. You will learn how to use different feature-based tools to build a 3D model. You will also learn how to add parameters, then review, measure and modify a model.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create new parts - Create and constrain 2D sketches - Complete a 3D model using basic features - Parameterize a model - Review and measure a model - Reuse existing features
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Part Design - Added Exercises	
Course Code	CAT-en-PDG-X-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	780 hours
Course Material	
Level	Exercise
Audience	Mechanical Designers
Description	<p>This module provides you with an exercise database for additional practice on the 3DEXPERIENCE Part Design app. The exercises have been arranged in increasing order of difficulty. The fundamental exercises will check and refresh your basic Part Design skills before you move on to more complex topics. The advanced exercises will make you practice the recommended design methodologies using realistic parts.</p>
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Apply your Mechanical skills in selected scenarios. - Employ the recommended methodology in various situations and efficiently use the Mechanical workbenches.
Prerequisites	Students attending this learning module should be familiar with CATIA Part Design.
Available Online	Yes

Practice CATIA Piping and Tubing 3D Design	
Course Code	CAT-en-PIP-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2021x
Duration	960 hours
Course Material	
Level	Fundamental
Audience	Piping or Tubing Designers
Description	This module will teach you how to route a pipe or a tube, and place the piping components. You will learn how to detail the design and modify the network. You will also learn how to validate the design and prepare it for manufacturing. The module also features exercises that enable you to practice creating a piping system design.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Route straight pipes or tubes - Position piping or tubing parts - Adjust the design of a piping or a tubing network - Validate the piping and tubing design - Prepare the piping and tubing design for manufacturing
Prerequisites	Students attending this module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Piping and Tubing Setup	
Course Code	CAT-en-PTS-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2021x
Duration	1440 hours
Course Material	
Level	Fundamental
Audience	Fluid Systems Solution Administrators
Description	This module will teach you how to set up fluid systems resources and create piping components. You will learn how to manage component catalogs, design validation rules, and global naming conventions. You will also learn how to customize the generative view style file for drawings and standards for P&ID.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create and manage resources for fluid systems design - Build equipment, supports, and components - Reuse the piping standard data for design setup - Create and manage component catalogs - Define the global naming conventions - Create the checks and rules for design validation - Create templates for generating reports - Customize the drafting standards and settings - Define symbols and annotations for piping and instrumentation diagrams
Prerequisites	Students attending this module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Quality Rules Capture	
Course Code	CAT-en-KWE-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2021x
Duration	240 hours
Course Material	
Level	Fundamental
Audience	Design Engineers
Description	<p>This module will teach you how to create PLM knowledge objects in the 3DEXPERIENCE platform. You will work with PLM rules and check. You will learn how to create reusable functions using EKL. You will also learn how to store and manage the libraries of reusable functions.</p>
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create Rule Sets - Create PLM Rules and Checks - Create Reusable Functions - Create and Manage Libraries of Reusable Functions
Prerequisites	<p>Students attending this module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with the fundamentals of Enterprise Knowledge Language (EKL).</p>
Available Online	Yes

Practice CATIA Quality Rules Reuse	
Course Code	CAT-en-KE1-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	5 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	This module will show you how to share corporate knowledge stored in the rule bases and leverage it across the company to ensure design compliance with the established standards. You will also learn to create reports and manage their template.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Automate the design modifications - Analyze and create reports
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Sheet Metal Design	
Course Code	CAT-en-SMD-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2021x
Duration	16 hours
Course Material	
Level	Fundamental
Audience	Sheet Metal Designer
Description	This module will teach you how to create a sheet metal part using standard wall, bend and stamping features. You will see how user features can be incorporated into the design and how to use both standard and user-defined materials. Finally you will learn how to create a flat pattern and produce a detailed, annotated drawing.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create a sheet metal part using wall and bend features - Manage folded and unfolded views - Use pre-defined sheet metal parameters - Create stamped features - Create duplicating features and use the multi-body methodology - Creating drawings of sheet metal parts - Export a finished flat pattern
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and be familiar with the CATIA Part Design app.
Available Online	Yes

Practice CATIA Surface Design - Added Exercises

Course Code	CAT-en-GS1-X-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	8 hours
Course Material	
Level	Exercise
Audience	Mechanical Surface Designers
Description	This module provides you with an exercise database for additional practice on 3DEXPERIENCE Surface Design. The exercises have been created based on Industry practices. You will get to practice skills such as creating wireframes and surfaces, creating surfacic shells and solid parts, and working with multiple parts that are referencing a common part.
Objectives	<p>These exercises will allow you to put your Shape skills into practice on selected scenarios.</p> <ul style="list-style-type: none"> - You will apply the recommended methodology in various situations. - You will enhance your understanding and usage of the Shape apps.
Prerequisites	Students attending this course should be familiar with Surface Design.
Available Online	Yes

Practice CATIA Weld Design	
Course Code	CAT-en-WDG-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2021x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers and Structural Designers
Description	This module will teach you how to create a welded assembly. You will learn how to join parts using appropriate weld features and how to generate associative weld drawings and weld reports. This course will teach you how to define the welding resource in the Data Setup app and use it to create welds.
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Define the welding resource - Create and manage welded assemblies - Generate weld reports - Create welding drawings
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with Assembly Design.
Available Online	Yes

Practice ENOVIA Collaborative Lifecycle Management

Course Code	ENOV-en-LIIN-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2021x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	CAD designers, engineers in charge of product development
Description	In this module, you will learn how to use the ENOVIA Collaborative Lifecycle Management app to manage the complete lifecycle of an object in order to achieve concurrent engineering. You will also learn to manage the access and ownership of objects for collaboration of members on the same platform.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create a new product structure - Use different sections of the Action bar effectively - Manage the changes in a product structure - Save the product structure in the database
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice ENOVIA Design Review	
Course Code	ENOV-en-REEV-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	6.5 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	This module will teach you how to create different slides for various positions of an assembly to create exploded views. You will also learn how to create sections and measures, and export them as parts or drawings. You will also learn how to compare 3D objects and how to create multi-context reviews.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create a design review and add markups to it - Create slides and add markers - Create and export sections and measures - Compare 3D Objects and 2D Drawings - Create multi-context reviews
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice ENOVIA Exchanges Management	
Course Code	ENOV-en-EXCH-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2021x
Duration	2 hours
Course Material	
Level	Fundamental
Audience	CAD Designers and Platform Contributors
Description	This module will teach you how to use the import / export tools in 3DEXPERIENCE. You will also manage the mastership between V5 files and 3DEXPERIENCE files.
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Import and export 3DXML files - Import and export CATIA V5 files - Manage the Mastership of imported objects
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice ENOVIA On-The-Go	
Course Code	ENOV-en-ONGO-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2021x
Duration	60 hours
Course Material	
Level	Fundamental
Audience	Users of the 3DEXPERIENCE platform
Description	This module will teach you how you can work in the offline mode in the 3DEXPERIENCE platform.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Work in the offline mode - Return to the online mode - Restore the last session - Create the offline content in the online mode
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice ENOVIA Project Execution	
Course Code	ENOV-en-PREX-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	150 hours
Course Material	
Level	Fundamental
Audience	
Description	This module will teach you how to use the Project Execution app to manage your assigned tasks. You will be able to manage the project schedule, modify the tasks, record the risks and create timesheets.
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Manage the project schedule - Record risks for tasks - Create and submit timesheets
Prerequisites	<p>Knowledge: Students attending this course should have completed the Explore the Business Innovator and Explore the Industry Innovator module. Additionally, they should be familiar with the Practice the Project Management module. 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Project Team Member.</p>
Available Online	Yes

SIMULIA Plastic Part Filling Essentials	
Course Code	SIM-en-PPF-F-15-201
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	Plastic Mechanical Designer Interior Designer Mold & Tooling Designer
Description	This course is an introduction to performing basic injection molding simulation to spur product and design innovation in the 3DEXPERIENCE platform. The 3DEXPERIENCE platform enables realistic plastic injection molding simulation of the filling manufacturing process early in the design cycle, when the cost of design change is low and opportunity is high.
Objectives	Upon completion of this course you will be able to: <ul style="list-style-type: none"> - Perform Mold Filling simulations - View and evaluate simulation results
Prerequisites	None
Available Online	Yes

SIMULIA Static Study Essentials	
Course Code	SIM-en-STDY-F-15-201
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	This course is intended for the following role: Mechanism Simulation Designer
Description	This course is an introduction to performing linear static simulations in the 3DEXPERIENCE Platform. The Static Study app enables designers to perform strength and deflection calculations under static conditions to validate product performance to guide design modifications. Designers can experience product performance virtually so that they can make better-informed design decisions early in the design cycle, when the cost of design change is low and opportunity is high.
Objectives	Upon completion of this course you will be able to: <ul style="list-style-type: none"> - Search for simulation data in the database - Open the simulation for modification - Perform a simulation using the Static Study app - Review simulations stored in a database and generate reports
Prerequisites	None
Available Online	Yes

Transition to the 3DEXPERIENCE platform for Mechanical Designers

Course Code	CAT-en-3DMTVS-F-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2021x
Duration	12 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	<p>This module addresses the needs of Mechanical Designers working on cloud. 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.</p>
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - 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
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business

Transition to the 3DEXPERIENCE platform for Mechanical Designers	
	Innovator Role module. They should also be familiar with CATIA V5 Mechanical Design.
Available Online	Yes

Transition to the 3DEXPERIENCE platform for Mechanical Designers

Course Code	CAT-en-3DMT-F-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	12.1 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	<p>This module 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.</p>
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - 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 learning module should have completed the Explore the Collaborative Business Innovator Role module. 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-3DSTVS-F-15-191
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	Designers who need to work with styled parts.
Description	This course addresses the needs of Surface Designers working on cloud. 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	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - Create new products and parts - Create a new part version - Replace a part and update a product - Replay master exercise based on shape functionalities
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

Transition to the 3DEXPERIENCE platform for Surface Designers	
Course Code	CAT-en-3DST-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	420 hours
Course Material	
Level	Fundamental
Audience	Designers who need to work with styled parts.
Description	This module 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	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create new products and parts - Create a new part version - Replace a part and update a product
Prerequisites	<ul style="list-style-type: none"> - Knowledge: Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. They should also be familiar with CATIA V5 Mechanical Design and Surface Design. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Mechanical and Shape Designer
Available Online	Yes

Understand Systems Thinking and Model-Based Systems Engineering Approach

Available Release	3DEXPERIENCE R2021x
Duration	160 hours
Course Material	
Level	Fundamental
Audience	Systems Engineer, Systems Architect, Mechatronic Systems Designer, Project Manager, Quality Assurance, Requirements Manager, Software Developer and Student
Description	In this module, you will learn the concepts of Systems Engineering and Model-Based Systems Engineering including how to articulate the Cyber MagicGrid methodology in a Process-Methods-Tools approach.
Objectives	<p>Upon the completion of this learning module, you will be able to:</p> <ul style="list-style-type: none"> - Discover what is Systems Engineering and learn about its key concepts and the benefits - Realize the importance of Model-Based Systems Engineering (MBSE) in successful implementation of projects - Discover critical industrial challenges and the value proposition of the 3DEXPERIENCE platform to overcome them - Learn about the Cyber MagicGrid methodology and explore the Cyber Systems Portfolio on 3DEXPERIENCE platform - Articulate the value of a tooled-up Systems Engineering approach within the framework of Cyber MagicGrid methodology
Prerequisites	

Understand Systems Thinking and Model-Based Systems Engineering Approach

Available Online

Yes

What's New for Function Driven Generative Designers

Course Code	CAT-en-WGDE-U-15-191
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x
Duration	16 hours
Course Material	
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	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - 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 Industry Innovation	
Course Code	ENOV-en-WCSV-U-15-191
Available Release	3DEXPERIENCE R2019x
Duration	1.5 hours
Course Material	
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	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - 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

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	
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	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - 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	
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	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - 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	
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	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - 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 Product Enclosure Designers	
Course Code	CAT-en-WPED-U-15-191
Available Release	3DEXPERIENCE R2019x
Duration	12.5 hours
Course Material	
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	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - 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

What's New for Shape Designers	
Course Code	CAT-en-WSUA-U-15-191
Available Release	3DEXPERIENCE R2019x
Duration	4.5 hours
Course Material	
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	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - 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	
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	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - 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

Learning Experiences for Governance and Lifecycle - GVLX-OC

3DEXPERIENCE 3D Component Designer for PLM Services Essentials	
Course Code	ENOV-EN-XCD-F-15-191
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x
Duration	3 hours
Course Material	
Level	Fundamental
Audience	Component Designers, Mechanical Designers, CAD users
Description	<p>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.</p>
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - 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

3DEXPERIENCE 3D Component Designer for PLM Services Essentials	
Prerequisites	Students attending this course must be familiar with the fundamentals of CATIA V5, SOLIDWORKS and should 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 Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x
Duration	1.4 hours
Course Material	
Level	Fundamental
Audience	Design Reviewers
Description	<p>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</p>
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - Create a review for design validation - Create slides and markups - Measure various geometrical items - Browse and filter annotations
Prerequisites	<p>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.</p>
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	
Level	Fundamental
Audience	3DEXPERIENCE platform users, CAD users
Description	<p>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.</p>
Objectives	<p>In this course, you will learn how to:</p> <ul style="list-style-type: none"> - 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

3DEXPERIENCE Business Innovation Essentials	
Course Code	CRB-en-IFW-F-15-191
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x
Duration	2.5 hours
Course Material	
Level	Fundamental
Audience	3DEXPERIENCE platform users
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.
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - Understand the 3DEXPERIENCE interface - Connect to the 3DEXPERIENCE platform - Access your Dashboard - Use the 6WTags for searching content - Share various documents with other users through - Collaborate using capabilities of the 3DEXPERIENCE platform
Prerequisites	There is no pre-requisite for this course.
Available Online	Yes

3DEXPERIENCE Business Innovation Essentials for CAD Users

Course Code	CRB-en-IFWC-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	5.5 hours
Course Material	
Level	Fundamental
Audience	3DEXPERIENCE platform users
Description	<p>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 design a model using CATIA V5 or SOLIDWORKS launched from the 3DEXPERIENCE platform. In addition, you will learn about configuring the 3DEXPERIENCE Platform Management dashboard.</p>
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - - Access the 3DEXPERIENCE Platform Management dashboard - - Configure the 3DEXPERIENCE Platform Management dashboard - - Understand the 3DEXPERIENCE interface - - Connect to the 3DEXPERIENCE platform - - Access your Dashboard - - Access your social communities on 3DSwym - - Share various documents with other users - - Collaborate using capabilities of 3DEXPERIENCE platform - - Design using CATIA V5 Connector or SOLIDWORKS Connector

3DEXPERIENCE Business Innovation Essentials for CAD Users	
Prerequisites	There is no pre-requisite for this course.
Available Online	Yes

ENOVIA Classify and Reuse Essentials	
Course Code	ENOV-en-CLRE-F-15-191
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x
Duration	2 hours
Course Material	
Level	Fundamental
Audience	3DEXPERIENCE Platform Users
Description	<p>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.</p>
Objectives	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - Search and view different types of Libraries and their related hierarchy. - Search and view General Classes and Folders.
Prerequisites	<p>Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform and should be familiar with Collaboration and Approvals in ENOVIA.</p>
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	
Level	Fundamental
Audience	3DEXPERIENCE platform users
Description	<p>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.</p>
Objectives	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - 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	
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	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - 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

ENOVIA Engineering BOM Management Essentials	
Course Code	ENOV-en-ENBO-F-15-191
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	Design Engineers and Manufacturing Engineers
Description	<p>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.</p>
Objectives	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - 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	<p>Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform and should be familiar with Collaboration and Approvals in ENOVIA.</p>
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	
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	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - 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 Project Execution Essentials	
Course Code	ENOV-en-PREX-F-15-191
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2021x
Duration	0 hours
Course Material	
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	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - Manage the project schedule - Record risks for tasks - Create and submit timesheets
Prerequisites	
Available Online	Yes

ENOVIA Project Management Fundamentals	
Course Code	ENOV-en-PRPR-F-15-191
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2021x
Duration	12 hours
Course Material	
Level	Fundamental
Audience	Project Managers, Project Members and Reviewers.
Description	<p>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.</p>
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - 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	<p>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.</p>

ENOVIA Project Management Fundamentals

Available Online

Yes

ENOVIA Variant Management Essentials : Product Architect	
Course Code	ENOV-en-VAMAPDA-F-15-191
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x
Duration	6.5 hours
Course Material	
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	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - 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 Variant Management Essentials: Product Manager	
Course Code	ENOV-en-VAMAPDM-F-15-191
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x
Duration	4 hours
Course Material	
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	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - 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

ENOVIA X-CAD Design Management Essentials	
Course Code	ENOV-en-XCAD-F-15-191
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x
Duration	13.5 hours
Course Material	
Level	Fundamental
Audience	Product Engineers and Design Engineers - Business Administrators and System Administrators
Description	<p>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.</p>
Objectives	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - 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 Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x
Duration	7 hours
Course Material	
Level	Fundamental
Audience	Product Engineers and Design Engineers - Business Administrators and System Administrators
Description	<p>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.</p>
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - 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

ENOVIA X-CAD Design Management for SolidWorks Essentials	
	course and should be familiar with Collaboration and Approvals in ENOVIA and SOLIDWORKS fundamentals.
Available Online	Yes

Explore the 3D Product Architect Role	
Course Code	ENOV-en-PAU-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	90 hours
Course Material	
Level	Fundamental
Audience	3DEXPERIENCE platform users, 3D Product Architects, CAD users
Description	<p>This learning module provides you a guided and systematic approach to learn about the functionalities available in the 3D Product Architect role of the 3DEXPERIENCE platform. You will also learn how to create and modify a product structure and validate the designs. This module offers an insight into the functionalities that helps build an organized structure using various web-based applications available with the 3D Product Architect role.</p>
Objectives	<p>In this module, you will learn how to:</p> <ul style="list-style-type: none"> - Explore and visualize products within a web-browser - Create and modify product structure of various components - Create revisions and manage the lifecycle of the products - Modify the design - Review 3D models
Prerequisites	<ul style="list-style-type: none"> - Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator, 3D Product Architect and Mechanical Designer

Explore the 3D Product Architect Role

Available Online

Yes

Explore the Change Manager Role	
Course Code	ENOV-en-CHG-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	120 hours
Course Material	
Level	Fundamental
Audience	Change Managers and Product Managers
Description	As a Change Manager, your goal is to clearly communicate change decisions and assignments to all impacted organizations. In this module you will learn to establish a governance-monitored change implementation process across the global teams.
Objectives	<p>Upon the completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Create a Change Management dashboard - Create a Change Order & Add Proposed changes - Create a standalone Change Action - Add Change Dependencies - Perform Change Assessment and Impact Analysis - Add assignee's for Change Actions - Review and Approve change
Prerequisites	<ul style="list-style-type: none"> - Knowledge: Students attending this course should have completed the Explore the Business Innovator Role and Explore the Industry Innovator Role modules. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator, Change Management and Mechanical Designer.
Available Online	Yes

Explore the Classification Manager Role	
Course Code	ENOV-en-CCM-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	90 hours
Course Material	
Level	Fundamental
Audience	Classification Managers
Description	In an industrial scenario, it is important for the classification manager to organize and manage libraries efficiently. This learning module will take you through the use of IP Classification app to create libraries and classes. You will learn how to store, manage and access documents and other files within the application in a collaborative work environment.
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Manage general libraries and their related hierarchies - Create and manage attribute groups - Classify the library objects in IP Classify and Reuse widget
Prerequisites	<p>Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator module and Explore the Collaborative Industry Innovator module.</p> <p>3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator, Classification Manager.</p>
Available Online	Yes

Explore the Collaborative Designer for CATIA V5 Role

Course Code	ENOV-en-UE5-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	72 hours
Course Material	
Level	Fundamental
Audience	Designers working on CATIA V5
Description	This learning module provides you with a guided and systematic approach to learn about the Collaborative Designer for CATIA V5 role. You will learn how to securely connect CATIA V5 to the 3DEXPERIENCE platform. You will modify and save CATIA V5 objects on the 3DEXPERIENCE platform. You will also learn how to replace revisions and review properties of objects saved on the platform.
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Modify and save CATIA V5 objects on the 3DEXPERIENCE platform - Replace revisions of a part in CATIA V5 - Modify and review properties of a part - Verify the modifications
Prerequisites	<ul style="list-style-type: none"> - Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. They must be familiar with the basic mechanical engineering concepts and the basics of CATIA V5. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Collaborative Designer for CATIA V5. - Additional: CATIA V5-6R2019 SP5 (Native)

Explore the Collaborative Designer for CATIA V5 Role

Available Online

Yes

Explore the Collaborative Designer for SOLIDWORKS Role	
Course Code	ENOV-en-UES-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	70 hours
Course Material	
Level	Fundamental
Audience	Designers working on SOLIDWORKS
Description	<p>This learning module provides you with a guided and systematic approach to learn about the Collaborative Designer for SOLIDWORKS role. You will learn how to securely connect SOLIDWORKS to the 3DEXPERIENCE platform. You will modify and save SOLIDWORKS objects on the 3DEXPERIENCE platform. You will also learn how to replace revisions and review properties of objects saved on the platform.</p>
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Modify and save SOLIDWORKS objects on the 3DEXPERIENCE platform - Replace revisions of a part in SOLIDWORKS - Modify and review properties of a part
Prerequisites	<ul style="list-style-type: none"> - Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role and the Explore the Collaborative Industry Innovator Role modules. They must be familiar with the basic mechanical engineering concepts and the basics of SOLIDWORKS. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Collaborative Designer for SOLIDWORKS.

Explore the Collaborative Designer for SOLIDWORKS Role	
	- Additional: SOLIDWORKS (Native)
Available Online	Yes

Explore the Collaborative Industry Innovator Role	
Course Code	CRB-en-CSV-F-15-211
Available Releases	3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	108 hours
Course Material	
Level	Fundamental
Audience	Users of the 3DEXPERIENCE platform
Description	In this module, you will learn how to collaborate across disciplines with full flexibility and traceability to define and develop innovative products.
Objectives	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - Create and manage a collaborative space - Create a bookmark workspace - Create and manage bookmark folders - Manage MS Office documents into 3DEXPERIENCE Platform using Collaboration for Microsoft - Manage data collaboratively using Collaborative Lifecycle. - Report and manage an issue - Manage and track a change action - Create, edit and start a task - Create and manage a route
Prerequisites	Students attending this course should be familiar with Collaborative Business Innovator role.
Available Online	Yes

Explore the Lean Team Player Role	
Course Code	DEL-en-PTW-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	50 hours
Course Material	
Level	Fundamental
Audience	
Description	In this module, you will learn how the digitization of your team routines will improve the overall performance and skills of your team.
Objectives	<p>Upon completion of this learning module, you will be able to:</p> <ul style="list-style-type: none"> - Create and manage 3DLean Board - Prepare and organize Leangets - Create and manage actions - Create and manage problems - Prepare and launch a Flash 5' Meeting
Prerequisites	
Available Online	Yes

Explore the Product Manager Role	
Course Code	ENOV-en-PDM-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	120 hours
Course Material	
Level	Fundamental
Audience	Product Managers
Description	As a Product Manager, you will drive the corporate strategy with collaboration between cross-functional teams to achieve the product's strategic intent. In this module, you will learn to manage the entire definition, planning and development of the product portfolio based on customer needs and market opportunities.
Objectives	<p>Upon the completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Create Model Versions - Add Requirements to Model Versions - Create Variants and Options - Frame Model Version Rules - Build Product Configurations
Prerequisites	<ul style="list-style-type: none"> - Knowledge: Students attending this course should have completed the Explore the Collaborative Business Innovator and Explore the Collaborative Industry Innovator Role modules. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Product Manager.
Available Online	Yes

Explore the Product Release Engineer Role	
Course Code	ENOV-en-XEN-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	90 hours
Course Material	
Level	Fundamental
Audience	
Description	This learning module provides you with a guided and systematic approach to learn about the Product Release Engineer role. In this module, you will create a new engineering definition by duplicating the existing product assembly and release it with the help of the ENOVIA Engineering Release widget.
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - View and Open Engineering Items - Evaluate the geometry in 3DPlay - Create a new Engineering definition - Set the re-use and duplicate components - Assign the design responsibilities - Release the Engineering definition
Prerequisites	Knowledge: Students attending this course should have completed the Explore the Business Innovator module. 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator, Product Release Engineer and Mechanical Designer.
Available Online	Yes

Explore the Project Manager Role	
Course Code	ENOV-en-DPM-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	2.5 hours
Course Material	
Level	Fundamental
Audience	Project Managers, Project Team Members and Reviewers
Description	In today's fast-paced, customer-driven environment, products need to be designed and delivered in a timely yet highly efficient manner. You need great project management skills to deliver successful results. This self-paced module will help you to learn and explore the capabilities of the Project Manager.
Objectives	By the end of this module, you will be able to: <ul style="list-style-type: none"> - Create Project Templates - Define Project Schedule - Submit Weekly Time Sheets - Monitor Project Status
Prerequisites	Students attending this module should have completed the Explore the Collaborative Business Innovator module and Explore the Collaborative Industry Innovator module. 3DEXPERIENCE Roles: Collaborative Business Innovator and Collaborative Industry Innovator, Project Manager and Project Team Member.
Available Online	Yes

Explore the Requirements Engineer Role

Course Code	ENOV-en-TRM-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	300 hours
Course Material	
Level	Fundamental
Audience	Requirement Engineers, 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 module will help you learn and explore ENOVIA Requirements Management capabilities.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Capture requirements from MS Word and MS Excel documents - Create requirements and requirement specifications - Allocate requirements to products and models - Create test cases and use cases - Create revisions and multiple versions of requirements - Generate traceability reports
Prerequisites	<p>Knowledge: Students attending this course should have completed the Explore the Business Innovator Role and Explore the Industry Innovator Role modules. 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator, Requirements Engineer and Systems Architecture Designer</p>

Explore the Requirements Engineer Role

Available Online

Yes

Master ENOVIA Project Management	
Course Code	ENOV-en-PRPR-A-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2021x
Duration	480 hours
Course Material	
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	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - 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

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

Master ENOVIA Project Management	
Course Code	ENOV-en-PRPR-A-15-211
Available Release	3DEXPERIENCE R2021x
Duration	480 hours
Course Material	
Level	Advanced
Audience	Project Managers and Project Members
Description	This module focuses on the advanced functionalities of the Project Management app. You will learn how to manage risks associated with a project, assign people to meet the project's resource requirements and track quality metrics. You will also learn how to create budgets and benefits for a project, work with time sheets and generate labor reports.
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Document the various risk areas of a project and track them - Create and manage the resource requirements for a project - Create budgets and benefits to monitor the financials of a project - Track the time spent on a project using time sheets - Create calendars for the projects - Identify the quality factors of a project and monitor them - Create an assessment to measure the project's health - Use dashboards to monitor the status of your projects
Prerequisites	Knowledge: Students attending this module should have completed the Explore the Business Innovator, Explore the Industry Innovator module and Practice

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

Perform as Classification Manager	
Course Code	ENOV-en-CCM-F-15-201
Available Release	3DEXPERIENCE R2020x
Duration	2.2 hours
Course Material	
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	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - 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	<p>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.</p>

Perform as Classification Manager

Available Online

Yes

Perform as Project Manager	
Course Code	ENOV-en-DPM-F-15-201
Available Release	3DEXPERIENCE R2020x
Duration	4.5 hours
Course Material	
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	<p>By the end of this learning module, you will be able to:</p> <ul style="list-style-type: none"> - Create Project Template - Define Project Schedule - Allocate Resource - Submit Weekly Time Sheets - Monitor Project Status - Track Project Financials
Prerequisites	<ul style="list-style-type: none"> - 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 Project Planner (XPP)	
Course Code	CRB-en-XPP-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	1.5 hours
Course Material	
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	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - 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

Perform as Requirements Manager	
Course Code	ENOV-en-TRM-F-15-201
Available Release	3DEXPERIENCE R2020x
Duration	5.3 hours
Course Material	
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	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - 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

Practice CATIA 3D Annotation Insight

Course Code	CAT-en-LFT-F-15-211
Available Releases	3DEXPERIENCE R2014x , 3DEXPERIENCE R2015x , 3DEXPERIENCE R2016x , 3DEXPERIENCE R2017x , 3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2021x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	Design, Quality and other such departments where interrogating and annotating the 3D model is a frequent or occasional requirement.
Description	This module teaches how to use the 3D Annotation Insight app to review and filter 3D annotations information contained within part and assembly documents. Students will learn how to hide / show annotations and captures, use the dimensioning and tolerancing annotations to enhance understanding and improve the decision making.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Access and visualize the view, capture and annotation review features - Query and filter 3D annotations - Show/Hide individual as well as all annotations of a given type - Display FTA captures - Remove the FTA clipping plane of a capture - Filter 3D annotations
Prerequisites	Students attending this learning module should have taken the Explore the Collaborative Business Innovator Role module and should be familiar with the Windows Operating System.

Practice CATIA 3D Annotation Insight	
Available Online	Yes

Practice ENOVIA Artwork Connector	
Course Code	ENOV-en-ARCO-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	155 hours
Course Material	
Level	Fundamental
Audience	Graphic Designers and Project Managers
Description	Learn how the Adobe Illustrator plug-in provides capabilities to collaborate, access, and store final artwork to the 3DEXPERIENCE platform. Also, learn how to synchronize in one click the artwork text boxes with the copy content stored in the 3DEXPERIENCE platform with pre-tagged fields in the artwork file.
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Install and set-up the connector - List the operating systems supported by the connector - Search for a POA, access the artwork assembly, map, sync , check-in and other critical functions using the Artwork Assembly panel - Create, access and manage templates in the platform using the Artwork Template panel - Assign a GS1 artwork element type to the text areas using the Type Assignment panel
Prerequisites	<ul style="list-style-type: none"> - Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. Additionally they should possess knowledge of Adobe Illustrator. - - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator, Artwork Coordinator and Copy Author & Graphic Designer.

Practice ENOVIA Artwork Connector	
Available Online	Yes

Practice ENOVIA Change Action Management	
Course Code	ENOV-en-NCHA-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2021x
Duration	5.5 hours
Course Material	
Level	Fundamental
Audience	Change Initiators, Design Engineers and Product Managers
Description	This module will teach you how to use the ENOVIA Change Action Management app to manage the engineering change process. You will learn how to create change actions and add Proposed changes to it. You will also learn to work with change actions and view the Realized changes to complete the change process.
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Initiate a Change Action - Add Proposed Changes to a Change Action - Work Under Change Action to execute a Design Modification - View the Realized Changes - Review and Approve the Design changes
Prerequisites	Students attending this module should have completed the Explore the Collaborative Business Innovator and Explore the Collaborative Industry Innovator modules.
Available Online	Yes

Practice ENOVIA Design Review	
Course Code	ENOV-en-REEV-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	6.5 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	This module will teach you how to create different slides for various positions of an assembly to create exploded views. You will also learn how to create sections and measures, and export them as parts or drawings. You will also learn how to compare 3D objects and how to create multi-context reviews.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create a design review and add markups to it - Create slides and add markers - Create and export sections and measures - Compare 3D Objects and 2D Drawings - Create multi-context reviews
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice ENOVIA Engineering Release	
Course Code	ENOV-en-ENXENG-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	Release Engineers
Description	This module will teach you to analyze the engineering items and create a new engineering definition using the ENOVIA Engineering Release widget. You will play the role of a Product Release Engineer in building a new engineering definition from early definition to final validation in collaboration with engineering ecosystem.
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - View and Open Engineering Items - Evaluate the geometry in 3DPlay - Explore revision history - Create a new Engineering definition - Set the re-use and duplicate components - Set the Part Number and update its quantity - Add and review the design specification document - Assign the design responsibilities - Release the Engineering definition
Prerequisites	Knowledge: Students attending this course should have completed the Explore the Business Innovator module. 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator, Product Release Engineer and Mechanical Designer.
Available Online	Yes

Practice ENOVIA IP Classification	
Course Code	ENOV-en-PACL-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	270 hours
Course Material	
Level	Fundamental
Audience	Classification Managers
Description	This module will teach you how to use the IP Classification app to improve reuse and reduce costs through secure content classification during the development process.
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Manage general libraries and their related hierarchies - Create and manage attribute groups - Classify the library objects using IP Classify and Reuse widget
Prerequisites	<p>Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role, Explore the Collaborative Industry Innovator Role and Explore the Classification Manager Role modules. 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Classification Manager.</p>
Available Online	Yes

Practice ENOVIA IP Classification	
Course Code	ENOV-en-PACL-F-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2021x
Duration	270 hours
Course Material	
Level	Fundamental
Audience	Classification Managers
Description	This module will teach you how to use the IP Classification app to improve reuse and reduce costs through secure content classification during the development process.
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Manage general libraries and their related hierarchies - Create and manage attribute groups - Classify the library objects using IP Classify and Reuse widget
Prerequisites	<p>Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role, Explore the Collaborative Industry Innovator Role and Explore the Classification Manager Role modules. 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Classification Manager.</p>
Available Online	Yes

Practice ENOVIA Project Execution	
Course Code	ENOV-en-PREX-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	150 hours
Course Material	
Level	Fundamental
Audience	
Description	This module will teach you how to use the Project Execution app to manage your assigned tasks. You will be able to manage the project schedule, modify the tasks, record the risks and create timesheets.
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Manage the project schedule - Record risks for tasks - Create and submit timesheets
Prerequisites	<p>Knowledge: Students attending this course should have completed the Explore the Business Innovator and Explore the Industry Innovator module. Additionally, they should be familiar with the Practice the Project Management module. 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Project Team Member.</p>
Available Online	Yes

Practice ENOVIA Project Management	
Course Code	ENOV-en-PRPR-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	660 hours
Course Material	
Level	Fundamental
Audience	Project Managers and Project Team Members.
Description	<p>This module will teach you how to create and manage projects, assign project members, create tasks, create bookmark structures and define access rights for managing the documents related to the projects. You will also learn how to create the process flows for the review and approval of tasks, and how to monitor the status of different projects. Additionally, you will learn how to use the Microsoft Project Integration functionality to exchange and view a project's data.</p>
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Create programs and projects - Assign members to a project - Add tasks and assign project members to the tasks - Create bookmarks for managing project documents - Create process flow for tasks - Review the status of programs and projects - Exchange and view projects' data using Microsoft Project Integration
Prerequisites	<p>Knowledge: Students attending this course should have completed the Explore the Business Innovator and Explore the Industry Innovator module.</p> <p>3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Project Manager.</p>

Practice ENOVIA Project Management	
Available Online	Yes

Practice ENOVIA Traceable Requirements Management	
Course Code	ENOV-en-RERE-F-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2021x
Duration	300 hours
Course Material	
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	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - 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

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

Practice ENOVIA Traceable Requirements Management – Added Exercise

Course Code	ENOV-en-RERE-X-15-211
Available Release	3DEXPERIENCE R2021x
Duration	270 hours
Course Material	
Level	Exercise
Audience	Requirements Engineer
Description	This module provides you with exercises for additional practice on the ENOVIA Traceable Requirements Management app. The exercises have been created based on Industry practices. You will practice creating requirements and specification structures. You will also learn how to allocate requirements to products and models and generate traceability reports for them.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Capture requirements from MS Word and MS Excel documents - Create requirements and requirement specifications - Allocate requirements to products and models - Create test cases and use cases - Create revision and multiple versions of requirements - Generate traceability reports
Prerequisites	Students attending this learning module should be familiar with ENOVIA Traceable Requirements Management.
Available Online	Yes

Practice ENOVIA Variant Management: Product Manager	
Course Code	ENOV-en-VAMAPDM-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	210 hours
Course Material	
Level	Fundamental
Audience	Product Managers
Description	This module will teach you how to use the Variant Management app for creating and managing product configurations.
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Create product structures - Define product portfolios - Create features and rules - Create product configurations
Prerequisites	<p>Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role, Explore the Collaborative Industry Innovator Role and Explore the Product Manager Role modules. 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Product Manager.</p>
Available Online	Yes

Understand Lean Fundamentals	
Available Release	3DEXPERIENCE R2021x
Duration	210 hours
Course Material	
Level	Fundamental
Audience	
Description	In this module, you will learn about the fundamentals of lean to achieve operational practices transformation, target excellence and development.
Objectives	Learn Lean fundamentals and how to successfully articulate Lean tools.
Prerequisites	
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	
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	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - 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 Industry Innovation	
Course Code	ENOV-en-WCSV-U-15-191
Available Release	3DEXPERIENCE R2019x
Duration	1.5 hours
Course Material	
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	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - 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

What's New for Product Architects	
Course Code	ENOV-en-WPDA-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	4 hours
Course Material	
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	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - 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 Engineers	
Course Code	ENOV-en-WPDE-U-15-191
Available Release	3DEXPERIENCE R2019x
Duration	2 hours
Course Material	
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	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - 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

What's New for Product Managers	
Course Code	ENOV-en-WPDM-U-15-191
Available Release	3DEXPERIENCE R2019x
Duration	2 hours
Course Material	
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	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - 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

What's New for Project Managers	
Course Code	ENOV-en-WDPM-U-15-191
Available Release	3DEXPERIENCE R2019x
Duration	1.5 hours
Course Material	
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	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - 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	
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	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - 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

What's New for Requirements Managers	
Course Code	ENOV-en-WTRM-U-15-191
Available Release	3DEXPERIENCE R2019x
Duration	1 hours
Course Material	
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	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - 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

Learning Experiences for Manufacturing and Production - MPLX-OC

3DEXPERIENCE Business Innovation Essentials	
Course Code	CRB-en-IFW-F-15-191
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x
Duration	2.5 hours
Course Material	
Level	Fundamental
Audience	3DEXPERIENCE platform users
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.
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - Understand the 3DEXPERIENCE interface - Connect to the 3DEXPERIENCE platform - Access your Dashboard - Use the 6WTags for searching content - Share various documents with other users through - Collaborate using capabilities of the 3DEXPERIENCE platform
Prerequisites	There is no pre-requisite for this course.
Available Online	Yes

3DEXPERIENCE Business Innovation Essentials for CAD Users

Course Code	CRB-en-IFWC-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	5.5 hours
Course Material	
Level	Fundamental
Audience	3DEXPERIENCE platform users
Description	<p>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 design a model using CATIA V5 or SOLIDWORKS launched from the 3DEXPERIENCE platform. In addition, you will learn about configuring the 3DEXPERIENCE Platform Management dashboard.</p>
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - - Access the 3DEXPERIENCE Platform Management dashboard - - Configure the 3DEXPERIENCE Platform Management dashboard - - Understand the 3DEXPERIENCE interface - - Connect to the 3DEXPERIENCE platform - - Access your Dashboard - - Access your social communities on 3DSwym - - Share various documents with other users - - Collaborate using capabilities of 3DEXPERIENCE platform - - Design using CATIA V5 Connector or SOLIDWORKS Connector

3DEXPERIENCE Business Innovation Essentials for CAD Users

Prerequisites

There is no pre-requisite for this course.

Available Online

Yes

CATIA Mechanical Design Expert	
Course Code	CAT-en-3DE-A-15-201
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	32 hours
Course Material	
Level	Advanced
Audience	Mechanical Designers
Description	<p>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.</p>
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - 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 R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	32 hours
Course Material	
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	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - 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

Collaborate from Design to Manufacturing in Additive Manufacturing	
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	2.8 hours
Course Material	
Level	Fundamental
Audience	Additive Manufacturing Designer, Additive Manufacturing Programmer, Mechanical Designers
Description	In this module, you will learn how to apply the end-to-end process from the design optimization through to the virtual print of the part.
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Design a part for additive manufacturing - Setup the manufacturing built for additive manufacturing process - Simulate the manufacturing setup for virtual printing
Prerequisites	<ul style="list-style-type: none"> - Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. They must be familiar with the CATIA Part Design, and the CATIA Imagine and Shape apps. - - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator, Functional Driven Generative Designer, Powder Bed Programmer, Additive Manufacturing Researcher and Reverse Shape Optimizer.
Available Online	Yes

DELMIA Equipment Allocation Essentials	
Course Code	DEL-en-MLB-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	Process Planners, Resource Planners
Description	<p>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.</p>
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - 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	<p>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.</p>
Available Online	Yes

DELMIA Milling Machining Essentials	
Course Code	DEL-en-SMG-F-15-191
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x
Duration	10.7 hours
Course Material	
Level	Fundamental
Audience	Numerical Control (NC) Programmers
Description	This course will teach you how to define and manage NC programs dedicated to machining parts that are designed with surface or solid geometry. You will learn how to define the 3-Axis Roughing, Semi-finishing and Finishing operations. You will also learn how to improve productivity in mould and die machining using the various functionalities of 3-Axis Surface Machining.
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - 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 Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x
Duration	8.7 hours
Course Material	
Level	Fundamental
Audience	Numerical Control (NC) Programmers
Description	<p>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.</p>
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - 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 V5 to 3DEXPERIENCE Machining Transition

Course Code	DEL-en-PMGT-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2021x
Duration	12.2 hours
Course Material	
Level	Fundamental
Audience	NC Programmers
Description	<p>This module will teach you what are the differences between the Machining PPR Structure of CATIA V5 and DELMIA 3DEXPERIENCE and how to migrate the CATIA V5 Machining data to DELMIA 3DEXPERIENCE. You will also learn how to create a PPRContext, assign an NC Machine, insert and mount an NC Machine accessory, and then mount the workpiece. This module will also teach you how to define a tool assembly and its advanced parameters. You will learn how to define a Prismatic Machining Operation, replay the toolpath, and generate the NC Output.</p>
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Use the DELMIA 3DEXPERIENCE Machining product to define a Machining Process - Create Tools, Holders and Tool Assemblies - Define a Machining Operation - Generate a Numerical Control (NC) Output - Store and retrieve a Machining Process from the 3DEXPERIENCE database - Migrate CATIA V5 Machining objects to DELMIA 3DEXPERIENCE
Prerequisites	Students attending this course should have completed the Explore the Business Innovator module.

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

Discover the Digital Factory	
Available Release	3DEXPERIENCE R2021x
Duration	40 hours
Course Material	
Level	Fundamental
Audience	Manufacturing Engineers
Description	In this module, you will discover why the digital factory is key to coping with the global scale of planning and production that we see in the modern experience economy.
Objectives	<p>Upon completion of this learning module, you will learn:</p> <ul style="list-style-type: none"> - What digital factory is - How the digital factory works - How digital factory can help keep all stakeholders involved on the same page - How digital factory enables digital continuity to overcome companies challenges
Prerequisites	
Available Online	Yes

ENOVIA Classify and Reuse Essentials	
Course Code	ENOV-en-CLRE-F-15-191
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x
Duration	2 hours
Course Material	
Level	Fundamental
Audience	3DEXPERIENCE Platform Users
Description	<p>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.</p>
Objectives	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - Search and view different types of Libraries and their related hierarchy. - Search and view General Classes and Folders.
Prerequisites	<p>Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform and should be familiar with Collaboration and Approvals in ENOVIA.</p>
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	
Level	Fundamental
Audience	3DEXPERIENCE platform users
Description	<p>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.</p>
Objectives	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - 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	
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	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - 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

Explore the Collaborative Industry Innovator Role	
Course Code	CRB-en-CSV-F-15-211
Available Releases	3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	108 hours
Course Material	
Level	Fundamental
Audience	Users of the 3DEXPERIENCE platform
Description	In this module, you will learn how to collaborate across disciplines with full flexibility and traceability to define and develop innovative products.
Objectives	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - Create and manage a collaborative space - Create a bookmark workspace - Create and manage bookmark folders - Manage MS Office documents into 3DEXPERIENCE Platform using Collaboration for Microsoft - Manage data collaboratively using Collaborative Lifecycle. - Report and manage an issue - Manage and track a change action - Create, edit and start a task - Create and manage a route
Prerequisites	Students attending this course should be familiar with Collaborative Business Innovator role.
Available Online	Yes

Explore the Lean Team Player Role	
Course Code	DEL-en-PTW-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	50 hours
Course Material	
Level	Fundamental
Audience	
Description	In this module, you will learn how the digitization of your team routines will improve the overall performance and skills of your team.
Objectives	<p>Upon completion of this learning module, you will be able to:</p> <ul style="list-style-type: none"> - Create and manage 3DLean Board - Prepare and organize Leangets - Create and manage actions - Create and manage problems - Prepare and launch a Flash 5' Meeting
Prerequisites	
Available Online	Yes

Explore the Manufacturing Engineer Role	
Course Code	DEL-en-PST-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	90 hours
Course Material	
Level	Fundamental
Audience	Process Engineer, Manufacturing Engineer
Description	This module will teach you how to define and manage the manufacturing item structure, routings and capable resource structure using DELMIA Manufacturing Engineer Role.
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Manage the manufacturing item structure - Define the operations in process plan - Associate MBOM items to operations - Manage the capable resource structure
Prerequisites	Students attending this module needs to be familiar with
Available Online	Yes

Explore the Manufacturing Items Engineer Role

Course Code	DEL-en-MFN-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	45 hours
Course Material	
Level	Fundamental
Audience	Manufacturing Engineers
Description	This learning module provides you a guided and systematic approach to learn about the functionalities available in the Manufacturing Items Engineer role of the 3DEXPERIENCE platform. You will also learn how to create, modify and update a manufacturing items structure using the web-based application.
Objectives	<p>In this learning module, you will learn how to:</p> <ul style="list-style-type: none"> - Explore and visualize products within a web-browser - Create and modify manufacturing items structures - Create revisions - Create change actions - Track changes and update manufacturing bill of materials
Prerequisites	
Available Online	Yes

Explore the NC Prismatic and Mill-Turn Programmer Role

Course Code	DEL-en-NPT-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	120 hours
Course Material	
Level	Fundamental
Audience	NC Programmers
Description	<p>This module gives you an overview of the 3DEXPERIENCE NC Prismatic & Mill-Turn Machine Programmer role that enables you to create a mill-turn machining operation and simulate the tool path. You will learn how to simulate the machines, detect clashes and analyze them. It will also teach you to generate the NC output for an NC program.</p>
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Define the infrastructure required for machining - Create tools and tool assemblies - Define turning operations - Replay and simulate tool paths - Simulate a machine using a simulation object - Generate the Numerical Control (NC) output
Prerequisites	<ul style="list-style-type: none"> - Knowledge: Students attending this course should have completed the Explore the Collaborative Business Innovator Role module. Additionally, they should be familiar with the fundamentals of machining. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and NC Prismatic & Mill-Turn Programmer.

Explore the NC Prismatic and
Mill-Turn Programmer Role

Available Online

Yes

Explore the NC Prismatic Machine Programmer Role	
Course Code	DEL-en-NPM-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	3 hours
Course Material	
Level	Fundamental
Audience	NC Programmers
Description	In this module gives you an overview of the 3DEXPERIENCE NC Prismatic Machine Programmer Role that enables you to create a machining operation and simulate the tool path. You will learn how to simulate the machines, detect clashes and analyze them. It will also teach you to generate the NC output for an NC program.
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Define the infrastructure required for machining - Create tools and tool assemblies - Define prismatic machining operations - Replay and simulate tool paths - Simulate a machine using a simulation object - Generate the Numerical Control (NC) output
Prerequisites	<ul style="list-style-type: none"> - Knowledge: Students attending this course should have completed the Explore the Business Innovator module. Additionally, they should be familiar with the fundamentals of machining. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and NC Prismatic Machine Programmer.
Available Online	Yes

Explore the Powder Bed Programmer Role (PBF)

Course Code	DEL-en-PBF-F-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	2 hours
Course Material	
Level	Fundamental
Audience	3D Printer Programmers. Product Designers
Description	In this module, you will learn to optimize powder bed fusion manufacturing techniques (infrastructure , scan path , output)
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - Knowledge: Students attending this module should have completed the Explore the Collaborative Business Innovator Role module. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Powder Bed Programmer.
Available Online	Yes

Explore the Process Engineer Role for Complex Assembly	
Course Code	DEL-en-PPL-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	75 hours
Course Material	
Level	Fundamental
Audience	Process planners, Manufacturing Engineers
Description	In this module, you will learn how to create and manage with 3DEXPERIENCE platform the complete process planning from EBOM to resource allocation of a product in 3D context.
Objectives	<p>Upon completion of this learning module, you will be able to:</p> <ul style="list-style-type: none"> - Create and manage a MBOM structure - Create and manage a process planning - Assign manufacturing items to operations - Create product flows - Create and manage resources - Assign resources to operations - Position operations on a 3D model - Preview an assembly
Prerequisites	
Available Online	Yes

Master CATIA Assembly Design	
Course Code	CAT-en-ASD-A-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	12 hours
Course Material	
Level	Advanced
Audience	Mechanical Designers
Description	This module will introduce you to complex assembly modeling techniques. You will learn how to design a product architecture and manage complex assembly structures. You will also learn how to use advanced features to design parts within an assembly environment and how to analyze interferences.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Analyze interferences - Analyze component links and relations - Design complex products - Design new parts within a product - Manage complex product structures
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and be familiar with the CATIA Part Design and Assembly Design fundamentals.
Available Online	Yes

Master CATIA Drafting	
Course Code	CAT-en-GDR-A-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	12 hours
Course Material	
Level	Advanced
Audience	Draftsmen
Description	This module will teach you how to manage drawing sheets and views in the Drafting app. You will also learn how to use advanced tools to dress-up, annotate views and customize the Drafting app.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Finalize the drawing sheet - Work with large assemblies - Customize the drafting app - Perform administrative tasks - Add Bill of Material
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. Additionally, they should be familiar with Part Design and Assembly Design in CATIA.
Available Online	Yes

Master CATIA Part Design	
Course Code	CAT-en-PDG-A-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	7 hours
Course Material	
Level	Advanced
Audience	Mechanical and Sheet Metal Designers
Description	This module will introduce you to complex 3D modeling techniques, using advanced sketch-based and surface-based features. You will learn how to manage complex part structures and how to improve productivity by reusing existing features. Finally, you will learn how to use parameters and tables to drive the design of a model.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Design parts with complex geometries - Create and manage robust part structures - Create fully parameterized models - Create re-usable features
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and be familiar with CATIA Part Design fundamentals.
Available Online	Yes

Orchestrate Process Planning in the Digital Factory	
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	50 hours
Course Material	
Level	Fundamental
Audience	Process Planners, Manufacturing Planners
Description	In this case study, you will learn how to update an existing process plan, when the design is modified with addition or deletion of a part from the assembly structure. You will also learn, how to modify the work instructions based on the modification of the process plan.
Objectives	In this case study, we will learn how to incorporate the design changes of a product on an existing process plan. We will learn how to update a process when a design part is removed from the product structure.
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

Orchestrate the Digital Factory	
Available Release	3DEXPERIENCE R2021x
Duration	45 hours
Course Material	
Level	Fundamental
Audience	Process Planners, Manufacturing Engineers
Description	In this module, you will comprehend cross-discipline, end-to-end continuity in the digital factory with 3DEXPERIENCE platform by connecting the dots to manufacture a new version of an existing product.
Objectives	<p>Upon completion of this learning module, you will see how to:</p> <ul style="list-style-type: none"> - Modify a MBOM structure - Modify a process plan - Modify a plant layout - Create work instructions - Review resource allocation - Perform ergonomics analysis - Simulate factory flows
Prerequisites	<ul style="list-style-type: none"> - Knowledge: Learners attending this module should have completed the Explore the Collaborative Business Innovator role and the Explore the Collaborative Industry Innovator role modules. Additionally, they should be familiar with defining process planning in DELMIA, the concepts of EBOM, MBOM structure and resources. - 3DEXPERIENCE Roles: Collaborative Business Innovator and Collaborative Industry Innovator.
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	
Level	Fundamental
Audience	Simulation Engineers, Process Planners and Manufacturing Engineers
Description	<p>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.</p>
Objectives	<p>After completing this module, you will be able to:</p> <ul style="list-style-type: none"> - validate the product build up - build the work instructions - create the 3D work instructions - review and enhance the work instructions
Prerequisites	<ul style="list-style-type: none"> - 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)	
	<p>modules. Additionally, they should be familiar with defining process planning in DELMIA.</p> <ul style="list-style-type: none">- 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Work Instructions Designer
Available Online	Yes

Practice CATIA 2D Layout for 3D Design	
Course Code	CAT-en-LO1-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	In this module you will learn how to create 2D layout views in a 3D model and use them to design the part in the 3D environment.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create 2D layout views in a 3D environment - Export 2D geometry into a 3D environment - Create drawings using the 2D layout views
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with CATIA Part and Assembly Design.
Available Online	Yes

Practice CATIA Assembly Design (ASD)	
Course Code	CAT-en-ASD-F-15-211
Available Releases	3DEXPERIENCE R2015x , 3DEXPERIENCE R2016x , 3DEXPERIENCE R2017x , 3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	480 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	This module 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	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - Create a new product and add components - Position components within a product - Modify a product structure - Analyze weight distribution - Replace components
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and be familiar with the CATIA Part Design fundamentals
Available Online	Yes

Practice CATIA Assembly Design - Added Exercises

Course Code	CAT-en-ASD-X-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	360 hours
Course Material	
Level	Exercise
Audience	Mechanical Designers
Description	This module provides you with exercises for additional practice on the 3DEXPERIENCE Assembly Design app. The exercises have been created based on Industry practices. You will practice creating assembly structure, positioning components, constraining components using engineering connections and modifying parts in assembly context.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Practice your Assembly Design skills using selected scenarios - Apply the recommended methodology in various scenarios
Prerequisites	Students attending this learning module should be familiar with Part Design and Assembly Design.
Available Online	Yes

Practice CATIA Drafting	
Course Code	CAT-en-GDR-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	360 hours
Course Material	
Level	Fundamental
Audience	Draftsmen
Description	This module will teach you how to create drawings using the Drafting app. You will learn how to create projection views and section views of a 3D model or an assembly and add the required dimensions.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create simple projection views and section views of 3D parts and assemblies - Position the views on a drawing sheet - Add dimensions and annotations to the views
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module. Additionally, they should be familiar with Part Design and Assembly Design in CATIA.
Available Online	Yes

Practice CATIA Engineering Templates Reuse	
Course Code	CAT-en-KT1-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	30 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	In this course, you will learn how to create customized features by reusing the power copy and user feature.
Objectives	Upon completion of this course you will be able to: <ul style="list-style-type: none"> - Create customized features using templates.
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Generative Wireframe and Surface	
Course Code	CAT-en-GS1-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	1200 hours
Course Material	
Level	Fundamental
Audience	Surface Designers
Description	This module will teach you how to use the Generative Wireframe and Surface app to create curves and surfaces. You will learn how to assemble, re-limit and connect the geometries smoothly. You will also learn how to analyze the wireframe and the surface quality and rectify the detected defects.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create curves and improve the quality of the imported wireframes - Create surfaces based on the wireframe geometries - Assemble, re-limit and connect the surfaces smoothly to achieve the topology - Analyze the surface quality and heal the defects
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Mechanical Systems Design	
Course Code	CAT-en-KIM-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	This module will teach you how to create the architecture of a mechanism using simple wireframe elements and then complete the mechanism by adding 3D representations. You will also learn how to create a more complex mechanism using existing mechanisms, and finally how to animate the result.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create a new mechanism - Manage the mechanism behavior - Include alternative representations to complete the mechanism - Create a new macro mechanism from existing sub-mechanisms - Animate the mechanism
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with the Assembly Design app.
Available Online	Yes

Practice CATIA Natural Shape	
Course Code	CAT-en-LSP-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	7 hours
Course Material	
Level	Fundamental
Audience	Conceptual Designers, Stylists, Simulation and Manufacturing Engineers
Description	This module will introduce you to the CATIA Natural Shape app and its unique working environment. You will learn how to use the app to conceptualize, create and modify mechanical parts and shapes. The course features short-duration demos followed by exercises which will allow you to practice. You will also learn the related theory, tips and recommendations while performing the exercises.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create a conceptual design directly in 3D - Use the hybrid design environment to conceptualize your designs - Work on the structure to create the 3D parts - Navigate through the structure and position the parts - Reuse the existing designs in the 3D models
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Part Design	
Course Code	CAT-en-PDG-F-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	960 hours
Course Material	
Level	Fundamental
Audience	Mechanical and Sheet Metal Designers
Description	This module will teach you how to create a 3D model using the CATIA Part Design app. You will learn how to use different feature-based tools to build a 3D model. You will also learn how to add parameters, then review, measure and modify a model.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create new parts - Create and constrain 2D sketches - Complete a 3D model using basic features - Parameterize a model - Review and measure a model - Reuse existing features
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Part Design - Added Exercises	
Course Code	CAT-en-PDG-X-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	780 hours
Course Material	
Level	Exercise
Audience	Mechanical Designers
Description	<p>This module provides you with an exercise database for additional practice on the 3DEXPERIENCE Part Design app. The exercises have been arranged in increasing order of difficulty. The fundamental exercises will check and refresh your basic Part Design skills before you move on to more complex topics. The advanced exercises will make you practice the recommended design methodologies using realistic parts.</p>
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Apply your Mechanical skills in selected scenarios. - Employ the recommended methodology in various situations and efficiently use the Mechanical workbenches.
Prerequisites	Students attending this learning module should be familiar with CATIA Part Design.
Available Online	Yes

Practice CATIA Quality Rules Reuse	
Course Code	CAT-en-KE1-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	5 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	This module will show you how to share corporate knowledge stored in the rule bases and leverage it across the company to ensure design compliance with the established standards. You will also learn to create reports and manage their template.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Automate the design modifications - Analyze and create reports
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Surface Design - Added Exercises	
Course Code	CAT-en-GS1-X-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	8 hours
Course Material	
Level	Exercise
Audience	Mechanical Surface Designers
Description	This module provides you with an exercise database for additional practice on 3DEXPERIENCE Surface Design. The exercises have been created based on Industry practices. You will get to practice skills such as creating wireframes and surfaces, creating surfacic shells and solid parts, and working with multiple parts that are referencing a common part.
Objectives	<p>These exercises will allow you to put your Shape skills into practice on selected scenarios.</p> <ul style="list-style-type: none"> - You will apply the recommended methodology in various situations. - You will enhance your understanding and usage of the Shape apps.
Prerequisites	Students attending this course should be familiar with Surface Design.
Available Online	Yes

Practice DELMIA Machining Validation	
Course Code	DEL-en-MSG-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2021x
Duration	360 hours
Course Material	
Level	Fundamental
Audience	NC Programmers
Description	<p>This module will teach you how to simulate an NC machine using tool path and NC code. You will learn how to create probes in the simulation object environment and use them to detect the clashes that occur during a machine simulation. You will also learn how to perform a fault analysis to detect, analyze and eliminate the clashes.</p>
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create a simulation object - Simulate the machine using tool path and NC code - Create Probes to detect clashes during the machine simulation - Analyze and eliminate the clashes
Prerequisites	<p>Students attending this course should have completed the Explore the Business Innovator module. Additionally, they should be familiar with the fundamentals of machining and the DELMIA Prismatic Machining. ap3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator, NC Prismatic Machine Programmer and NC MachineCode Validation Specialist.p.</p>
Available Online	Yes

Practice DELMIA Manufacturing Context Builder

Course Code	DEL-en-MSB-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2021x
Duration	348 hours
Course Material	
Level	Fundamental
Audience	Process Planners
Description	In this module, you will learn to explore the PPR context. You will also learn to manage the documents in the spreadsheet view. You will learn to use the Compare command to compare structures of different versions of a PPR object like products, manufactured items, resources, systems or operations.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - Knowledge: Students attending this module should have completed the Explore the Business Innovator module. Additionally, they should be familiar with the fundamentals of Process Planning. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Process Engineer.
Available Online	Yes

Practice DELMIA Planning Structure	
Course Code	DEL-en-PRR-F-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2021x
Duration	490 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers and Process Planners
Description	This module will teach you how to define and manage the manufactured product structure, routings and resource allocation in one single and simple interface. You will learn how to perform line balancing across stations and lines. You will also learn how to detect issues early in the process plan using 3D validation.
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - Define a manufacturing bill of materials - Reuse the manufacturing bill of materials template - Associate the manufacturing bill of materials to a product structure - Create assemblies and sub-assemblies - Assign parts to sub-assemblies - Define the operation - Assign resources to operations
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice DELMIA Prismatic and Turning Machining

Course Code	DEL-en-LMG1-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2021x
Duration	1390 hours
Course Material	
Level	Fundamental
Audience	NC Programmers
Description	<p>This module will teach you how to define various turning operations to machine cylindrical parts. You will learn how to define multi-spindle and multi-turret machines, and use multiple turrets simultaneously to machine a part. You will also learn how to perform the part transfer activity using the multi-spindle machine to complete the machining on both sides of a part without any manual intervention. This module will also teach you how to create milling operations using the mill-turn machine.</p>
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Define the machining infrastructure - Define the turning operations - Define the milling operations using the multi-slide machine - Define multi-setups and multi-part machining - Replay and simulate the tool paths - Generate the Numerical Control (NC) output
Prerequisites	<p>Students attending this module should have completed the Explore the Collaborative Business Innovator role and the Explore the Collaborative Industry Innovator role modules. Additionally, they should be familiar with the fundamentals of machining.</p>

Practice DELMIA Prismatic and Turning Machining

Available Online

Yes

Practice DELMIA Prismatic Machining	
Course Code	DEL-en-PMG-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2021x
Duration	12.8 hours
Course Material	
Level	Fundamental
Audience	NC Programmers
Description	<p>This module will teach you how to use the common functionalities available in the machining apps of DELMIA. It will also teach you the fundamentals of creating and simulating a tool path. You will learn how to create tool paths for 2 and 2.5-axis machining operations. You will also learn how to create probes in the simulation object and how to simulate the machines, detect clashes and analyze them.</p>
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - Knowledge: Students attending this course should have completed the Explore the Business Innovator module. Additionally, they should be familiar with the fundamentals of machining. - 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and NC Prismatic Machine Programmer and Mechanical Designer.

Practice DELMIA Prismatic Machining

Available Online

Yes

Practice ENOVIA Design Review	
Course Code	ENOV-en-REEV-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	6.5 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	This module will teach you how to create different slides for various positions of an assembly to create exploded views. You will also learn how to create sections and measures, and export them as parts or drawings. You will also learn how to compare 3D objects and how to create multi-context reviews.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create a design review and add markups to it - Create slides and add markers - Create and export sections and measures - Compare 3D Objects and 2D Drawings - Create multi-context reviews
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice ENOVIA Project Execution	
Course Code	ENOV-en-PREX-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	150 hours
Course Material	
Level	Fundamental
Audience	
Description	This module will teach you how to use the Project Execution app to manage your assigned tasks. You will be able to manage the project schedule, modify the tasks, record the risks and create timesheets.
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Manage the project schedule - Record risks for tasks - Create and submit timesheets
Prerequisites	<p>Knowledge: Students attending this course should have completed the Explore the Business Innovator and Explore the Industry Innovator module. Additionally, they should be familiar with the Practice the Project Management module. 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Project Team Member.</p>
Available Online	Yes

Transition to the 3DEXPERIENCE platform for Mechanical Designers

Course Code	CAT-en-3DMTVS-F-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2021x
Duration	12 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	<p>This module addresses the needs of Mechanical Designers working on cloud. 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.</p>
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - 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
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business

Transition to the 3DEXPERIENCE platform for Mechanical Designers

Innovator Role module. They should also be familiar with CATIA V5 Mechanical Design.

Available Online

Yes

Transition to the 3DEXPERIENCE platform for Mechanical Designers

Course Code	CAT-en-3DMT-F-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	12.1 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	<p>This module 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.</p>
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - 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 learning module should have completed the Explore the Collaborative Business Innovator Role module. They should also be familiar with CATIA V5 Mechanical Design.

Available Online

Yes

Understand Lean Fundamentals	
Available Release	3DEXPERIENCE R2021x
Duration	210 hours
Course Material	
Level	Fundamental
Audience	
Description	In this module, you will learn about the fundamentals of lean to achieve operational practices transformation, target excellence and development.
Objectives	Learn Lean fundamentals and how to successfully articulate Lean tools.
Prerequisites	
Available Online	Yes

Understand Process Planning in the Digital Factory

Available Release	3DEXPERIENCE R2021x
Duration	30 hours
Course Material	
Level	Fundamental
Audience	Manufacturing Engineers
Description	In this module, you will learn about the basics of process planning in the digital factory and how it optimize and bring economic benefits.
Objectives	<p>Upon completion of this module, you will learn:</p> <ul style="list-style-type: none"> - What is process planning - How process planning happens in the digital factory - What are the tools and methods to perform process planning in the digital factory - How process planning can create a basis for optimizations and bring economic benefits - What are the main applications of the digital factory for process planning
Prerequisites	
Available Online	Yes

Use DELMIA Equipment Allocation (MLB)	
Course Code	DEL-en-MLB-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	3 hours
Course Material	
Level	Fundamental
Audience	Process Planners, Resource Planners, Manufacturing Planners
Description	In this module, you will learn how to create a resource structure and insert resources using the catalog. You will also learn how to balance the workload between various resources defined in a process planning.
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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 defining process planning in DELMIA, the concepts of EBOM, MBOM structure and resources. - 3DEXPERIENCE Roles: Collaborative Business Innovator and Collaborative Industry Innovator.
Available Online	Yes

Use DELMIA Manufactured Item Definition (PRD)

Course Code	DEL-en-PRD-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	2.7 hours
Course Material	
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: <ul style="list-style-type: none"> - 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	
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	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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

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	
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	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - 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

What's New for Industry Innovation	
Course Code	ENOV-en-WCSV-U-15-191
Available Release	3DEXPERIENCE R2019x
Duration	1.5 hours
Course Material	
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	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - 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

What's New for Manufacturing Engineers	
Course Code	DEL-en-WPST-U-15-191
Available Release	3DEXPERIENCE R2019x
Duration	1.5 hours
Course Material	
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	<p>Upon completion of this module, you will be able to</p> <ul style="list-style-type: none"> - 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	
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	<p>Upon completion of this module, you will be able to</p> <ul style="list-style-type: none"> - 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

Learning Experiences for Simulation - SMLX-OC

3DEXPERIENCE Business Innovation Essentials	
Course Code	CRB-en-IFW-F-15-191
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x
Duration	2.5 hours
Course Material	
Level	Fundamental
Audience	3DEXPERIENCE platform users
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.
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - Understand the 3DEXPERIENCE interface - Connect to the 3DEXPERIENCE platform - Access your Dashboard - Use the 6WTags for searching content - Share various documents with other users through - Collaborate using capabilities of the 3DEXPERIENCE platform
Prerequisites	There is no pre-requisite for this course.
Available Online	Yes

3DEXPERIENCE Business Innovation Essentials for CAD Users

Course Code	CRB-en-IFWC-F-15-191
Available Release	3DEXPERIENCE R2019x
Duration	5.5 hours
Course Material	
Level	Fundamental
Audience	3DEXPERIENCE platform users
Description	<p>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 design a model using CATIA V5 or SOLIDWORKS launched from the 3DEXPERIENCE platform. In addition, you will learn about configuring the 3DEXPERIENCE Platform Management dashboard.</p>
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - - Access the 3DEXPERIENCE Platform Management dashboard - - Configure the 3DEXPERIENCE Platform Management dashboard - - Understand the 3DEXPERIENCE interface - - Connect to the 3DEXPERIENCE platform - - Access your Dashboard - - Access your social communities on 3DSwym - - Share various documents with other users - - Collaborate using capabilities of 3DEXPERIENCE platform - - Design using CATIA V5 Connector or SOLIDWORKS Connector

3DEXPERIENCE Business Innovation Essentials for CAD Users

Prerequisites

There is no pre-requisite for this course.

Available Online

Yes

ENOVIA Classify and Reuse Essentials	
Course Code	ENOV-en-CLRE-F-15-191
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x
Duration	2 hours
Course Material	
Level	Fundamental
Audience	3DEXPERIENCE Platform Users
Description	<p>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.</p>
Objectives	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - Search and view different types of Libraries and their related hierarchy. - Search and view General Classes and Folders.
Prerequisites	<p>Students attending this course should have completed the Gateway to the 3DEXPERIENCE platform and should be familiar with Collaboration and Approvals in ENOVIA.</p>
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	
Level	Fundamental
Audience	3DEXPERIENCE platform users
Description	<p>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.</p>
Objectives	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - 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	
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	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - 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

Explore the Collaborative Industry Innovator Role	
Course Code	CRB-en-CSV-F-15-211
Available Releases	3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	108 hours
Course Material	
Level	Fundamental
Audience	Users of the 3DEXPERIENCE platform
Description	In this module, you will learn how to collaborate across disciplines with full flexibility and traceability to define and develop innovative products.
Objectives	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - Create and manage a collaborative space - Create a bookmark workspace - Create and manage bookmark folders - Manage MS Office documents into 3DEXPERIENCE Platform using Collaboration for Microsoft - Manage data collaboratively using Collaborative Lifecycle. - Report and manage an issue - Manage and track a change action - Create, edit and start a task - Create and manage a route
Prerequisites	Students attending this course should be familiar with Collaborative Business Innovator role.
Available Online	Yes

Explore the Fluid Dynamics Engineer Role

Course Code	SIM-en-FMK-F-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	16 hours
Course Material	
Level	Fundamental
Audience	<ul style="list-style-type: none"> - This course is intended for the following roles: - Fluid Dynamics Engineer
Description	This course is a comprehensive introduction to fluid mechanics simulation in the 3DEXPERIENCE Platform. In this course, you will learn how to solve computational fluid dynamics (CFD) problems.
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - 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

Master CATIA Assembly Design	
Course Code	CAT-en-ASD-A-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	12 hours
Course Material	
Level	Advanced
Audience	Mechanical Designers
Description	This module will introduce you to complex assembly modeling techniques. You will learn how to design a product architecture and manage complex assembly structures. You will also learn how to use advanced features to design parts within an assembly environment and how to analyze interferences.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Analyze interferences - Analyze component links and relations - Design complex products - Design new parts within a product - Manage complex product structures
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and be familiar with the CATIA Part Design and Assembly Design fundamentals.
Available Online	Yes

Master CATIA Part Design	
Course Code	CAT-en-PDG-A-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	7 hours
Course Material	
Level	Advanced
Audience	Mechanical and Sheet Metal Designers
Description	This module will introduce you to complex 3D modeling techniques, using advanced sketch-based and surface-based features. You will learn how to manage complex part structures and how to improve productivity by reusing existing features. Finally, you will learn how to use parameters and tables to drive the design of a model.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Design parts with complex geometries - Create and manage robust part structures - Create fully parameterized models - Create re-usable features
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and be familiar with CATIA Part Design fundamentals.
Available Online	Yes

Practice CATIA Assembly Design (ASD)	
Course Code	CAT-en-ASD-F-15-211
Available Releases	3DEXPERIENCE R2015x , 3DEXPERIENCE R2016x , 3DEXPERIENCE R2017x , 3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	480 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	This module 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	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - Create a new product and add components - Position components within a product - Modify a product structure - Analyze weight distribution - Replace components
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and be familiar with the CATIA Part Design fundamentals
Available Online	Yes

Practice CATIA Assembly Design - Added Exercises

Course Code	CAT-en-ASD-X-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	360 hours
Course Material	
Level	Exercise
Audience	Mechanical Designers
Description	This module provides you with exercises for additional practice on the 3DEXPERIENCE Assembly Design app. The exercises have been created based on Industry practices. You will practice creating assembly structure, positioning components, constraining components using engineering connections and modifying parts in assembly context.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Practice your Assembly Design skills using selected scenarios - Apply the recommended methodology in various scenarios
Prerequisites	Students attending this learning module should be familiar with Part Design and Assembly Design.
Available Online	Yes

Practice CATIA Dymola Behavior Modeling	
Course Code	CAT-en-DBD-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2021x
Duration	660 hours
Course Material	
Level	Fundamental
Audience	Dynamic Systems Designers
Description	<p>This module will teach you how to model and simulate the dynamic behavior of a multi-engineering system. You will learn how to search, open and manage the Dymola Behavior libraries. You will also learn how to manage the link between a logical component and a Dymola model.</p>
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Search and open the Dymola behavior library - Edit and simulate an existing dynamic behavior model - Create a new dynamic model - Insert the model into a functional or logical component - Generate the Dymola model from the mechanism - Simulate the logical component with a behavior in the Functional & Logical Design app
Prerequisites	<ul style="list-style-type: none"> - Knowledge: Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module and should be familiar with Functional & Logical Design fundamentals. -

Practice CATIA Dymola Behavior Modeling	
	- 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Dynamic Systems Designer
Available Online	Yes

Practice CATIA Engineering Templates Reuse	
Course Code	CAT-en-KT1-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	30 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	In this course, you will learn how to create customized features by reusing the power copy and user feature.
Objectives	Upon completion of this course you will be able to: <ul style="list-style-type: none"> - Create customized features using templates.
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Generative Wireframe and Surface	
Course Code	CAT-en-GS1-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	1200 hours
Course Material	
Level	Fundamental
Audience	Surface Designers
Description	This module will teach you how to use the Generative Wireframe and Surface app to create curves and surfaces. You will learn how to assemble, re-limit and connect the geometries smoothly. You will also learn how to analyze the wireframe and the surface quality and rectify the detected defects.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create curves and improve the quality of the imported wireframes - Create surfaces based on the wireframe geometries - Assemble, re-limit and connect the surfaces smoothly to achieve the topology - Analyze the surface quality and heal the defects
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Natural Shape	
Course Code	CAT-en-LSP-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	7 hours
Course Material	
Level	Fundamental
Audience	Conceptual Designers, Stylists, Simulation and Manufacturing Engineers
Description	This module will introduce you to the CATIA Natural Shape app and its unique working environment. You will learn how to use the app to conceptualize, create and modify mechanical parts and shapes. The course features short-duration demos followed by exercises which will allow you to practice. You will also learn the related theory, tips and recommendations while performing the exercises.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create a conceptual design directly in 3D - Use the hybrid design environment to conceptualize your designs - Work on the structure to create the 3D parts - Navigate through the structure and position the parts - Reuse the existing designs in the 3D models
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Part Design	
Course Code	CAT-en-PDG-F-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	960 hours
Course Material	
Level	Fundamental
Audience	Mechanical and Sheet Metal Designers
Description	This module will teach you how to create a 3D model using the CATIA Part Design app. You will learn how to use different feature-based tools to build a 3D model. You will also learn how to add parameters, then review, measure and modify a model.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create new parts - Create and constrain 2D sketches - Complete a 3D model using basic features - Parameterize a model - Review and measure a model - Reuse existing features
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Part Design - Added Exercises	
Course Code	CAT-en-PDG-X-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	780 hours
Course Material	
Level	Exercise
Audience	Mechanical Designers
Description	<p>This module provides you with an exercise database for additional practice on the 3DEXPERIENCE Part Design app. The exercises have been arranged in increasing order of difficulty. The fundamental exercises will check and refresh your basic Part Design skills before you move on to more complex topics. The advanced exercises will make you practice the recommended design methodologies using realistic parts.</p>
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Apply your Mechanical skills in selected scenarios. - Employ the recommended methodology in various situations and efficiently use the Mechanical workbenches.
Prerequisites	Students attending this learning module should be familiar with CATIA Part Design.
Available Online	Yes

Practice CATIA Quality Rules Reuse	
Course Code	CAT-en-KE1-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	5 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	This module will show you how to share corporate knowledge stored in the rule bases and leverage it across the company to ensure design compliance with the established standards. You will also learn to create reports and manage their template.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Automate the design modifications - Analyze and create reports
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice CATIA Surface Design - Added Exercises	
Course Code	CAT-en-GS1-X-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	8 hours
Course Material	
Level	Exercise
Audience	Mechanical Surface Designers
Description	This module provides you with an exercise database for additional practice on 3DEXPERIENCE Surface Design. The exercises have been created based on Industry practices. You will get to practice skills such as creating wireframes and surfaces, creating surfacic shells and solid parts, and working with multiple parts that are referencing a common part.
Objectives	<p>These exercises will allow you to put your Shape skills into practice on selected scenarios.</p> <ul style="list-style-type: none"> - You will apply the recommended methodology in various situations. - You will enhance your understanding and usage of the Shape apps.
Prerequisites	Students attending this course should be familiar with Surface Design.
Available Online	Yes

Practice ENOVIA Collaborative Lifecycle Management

Course Code	ENOV-en-LIIN-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2021x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	CAD designers, engineers in charge of product development
Description	In this module, you will learn how to use the ENOVIA Collaborative Lifecycle Management app to manage the complete lifecycle of an object in order to achieve concurrent engineering. You will also learn to manage the access and ownership of objects for collaboration of members on the same platform.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Create a new product structure - Use different sections of the Action bar effectively - Manage the changes in a product structure - Save the product structure in the database
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice ENOVIA Exchanges Management	
Course Code	ENOV-en-EXCH-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2021x
Duration	2 hours
Course Material	
Level	Fundamental
Audience	CAD Designers and Platform Contributors
Description	This module will teach you how to use the import / export tools in 3DEXPERIENCE. You will also manage the mastership between V5 files and 3DEXPERIENCE files.
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Import and export 3DXML files - Import and export CATIA V5 files - Manage the Mastership of imported objects
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice ENOVIA On-The-Go	
Course Code	ENOV-en-ONGO-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2021x
Duration	60 hours
Course Material	
Level	Fundamental
Audience	Users of the 3DEXPERIENCE platform
Description	This module will teach you how you can work in the offline mode in the 3DEXPERIENCE platform.
Objectives	<p>Upon completion of this module you will be able to:</p> <ul style="list-style-type: none"> - Work in the offline mode - Return to the online mode - Restore the last session - Create the offline content in the online mode
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business Innovator Role module.
Available Online	Yes

Practice ENOVIA Project Execution	
Course Code	ENOV-en-PREX-F-15-211
Available Release	3DEXPERIENCE R2021x
Duration	150 hours
Course Material	
Level	Fundamental
Audience	
Description	This module will teach you how to use the Project Execution app to manage your assigned tasks. You will be able to manage the project schedule, modify the tasks, record the risks and create timesheets.
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - Manage the project schedule - Record risks for tasks - Create and submit timesheets
Prerequisites	<p>Knowledge: Students attending this course should have completed the Explore the Business Innovator and Explore the Industry Innovator module. Additionally, they should be familiar with the Practice the Project Management module. 3DEXPERIENCE Roles: Collaborative Business Innovator, Collaborative Industry Innovator and Project Team Member.</p>
Available Online	Yes

Practice SIMULIA Additive Manufacturing Scenario	
Course Code	SIM-en-MDA-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	This course is intended for the following roles: Additive Manufacturing Researcher, Additive Manufacturing Programmer
Description	This course is a comprehensive introduction to defining and performing additive manufacturing process simulations. It teaches you how to add material to the part, define laser paths, and model cooling effects during the build process in the context of thermal and thermal-stress simulations.
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - Generate machine build environment, support structures and scan path using the Powder Bed Fabrication application - Perform sequential thermal-structural simulations using the Additive Manufacturing Scenario application - View and evaluate simulation results
Prerequisites	Mechanical Scenario Creation Essentials
Available Online	Yes

Practice SIMULIA Linear Structural Scenario Creation	
Course Code	SIM-en-LNCS-F-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	<ul style="list-style-type: none"> - 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	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - Perform linear and frequency simulations - Perform thermal simulations - View and evaluate simulation results
Prerequisites	<ul style="list-style-type: none"> - The following course is required prior to taking this one: - Structural Model Creation Essentials
Available Online	Yes

Practice SIMULIA Linear Structural Validation	
Course Code	SIM-en-LSDY-F-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	480 hours
Course Material	
Level	Fundamental
Audience	<ul style="list-style-type: none"> - The course is intended for the following audience: - Structural Designer
Description	<p>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.</p>
Objectives	<p>The course covers the following topics:</p> <ul style="list-style-type: none"> - Searching and managing simulation data. - Performing a structural simulation using the Linear Structural Validation app, including: Linear statics, Natural frequency extraction, Thermal (steady-state). - Review the results of the simulation using contour plots, animations and other visualization features.
Prerequisites	None
Available Online	Yes

Practice SIMULIA Material Calibration

Course Code	SIM-en-MCAL-F-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	480 hours
Course Material	
Level	Fundamental
Audience	<ul style="list-style-type: none"> - This course is intended for the following roles: - Material Calibration Specialist - Structural Mechanics Engineer
Description	<p>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.</p>
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - Import and plot material test data - Configure and calibrate material models - Use optimization settings - Generate additional outputs - Create a core material in the 3DEXPERIENCE platform - Export materials for use in an Abaqus input file
Prerequisites	The following course is required prior to taking this one: Structural Model Creation Essentials

Practice SIMULIA Material Calibration

Available Online

Yes

Practice SIMULIA Mechanical Scenario Creation	
Course Code	SIM-en-MECS-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	16 hours
Course Material	
Level	Fundamental
Audience	<ul style="list-style-type: none"> - This course is intended for the following roles: - Structural Mechanics Engineer
Description	This course is an introduction to mechanical and thermal simulation in the 3DEXPERIENCE Platform. It teaches you how to solve both linear and nonlinear static and dynamics problems and view simulation results.
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - Perform structural simulations (linear and nonlinear; statics and dynamics) - Perform thermal simulations - View and evaluate simulation results
Prerequisites	The following course is required prior to taking this one: Structural Model Creation Essentials
Available Online	Yes

Practice SIMULIA Mechanical Scenario Creation: Linear Dynamics	
Course Code	SIM-en-MECS2-F-15-211
Available Releases	3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	<ul style="list-style-type: none"> - This course is intended for the following roles: - Structural Mechanics Engineer
Description	<p>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. .</p>
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - Perform linear dynamics simulations - Perform coupled structural-acoustic simulations - Perform complex eigenvalue simulations - View and evaluate simulation results
Prerequisites	<ul style="list-style-type: none"> - The following course is required prior to taking this one: - Mechanical Scenario Creation Essentials
Available Online	Yes

Practice SIMULIA Model Assembly Design	
Course Code	SIM-en-MSAM-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	<ul style="list-style-type: none"> - This course is intended for the following roles: - Structural Performance Engineer - Structural Mechanics Engineer
Description	<p>This course is 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.</p>
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - Create external simulation representations. - Perform automated modeling
Prerequisites	Structural Model Creation: Geometry and Meshing
Available Online	Yes

Practice SIMULIA Performance Trade-off	
Course Code	SIM-en-PTO-F-15-211
Available Releases	3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	<ul style="list-style-type: none"> - 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	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - - Visualize and compare simulation data - Conduct trade-off analyses - Select the best alternative
Prerequisites	none
Available Online	Yes

Practice SIMULIA Physics Results Explorer	
Course Code	SIM-en-PHYR-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	<ul style="list-style-type: none"> - This course is intended for the following roles: - Fluid Dynamics Engineer - Structural Engineer - Structural Mechanics Engineer - Structural Performance Engineer
Description	The 3DEXPERIENCE Platform offers a rich variety of simulation tools and provides a new paradigm in results visualization. This course is an introduction to the high-performance visualization tool in the 3DEXPERIENCE Platform that allows simulation analysts and engineers to view and evaluate simulation results.
Objectives	Upon completion of this course you will be able to: <ul style="list-style-type: none"> - View and evaluate simulation results
Prerequisites	None
Available Online	Yes

Practice SIMULIA Physics Simulation Review	
Course Code	SIM-en-PSR-F-15-211
Available Releases	3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	130 hours
Course Material	
Level	Fundamental
Audience	This course is intended for all simulation roles.
Description	This course teaches you how to view simulation experience content in the Physics Simulation Review app, providing lightweight results visualization.
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - - • Replay simulation experiences in Physics Simulation Review for both native simulations and externally generated simulation results. - - • Perform lightweight visualization through web browsers
Prerequisites	None
Available Online	Yes

Practice SIMULIA Plastic Injection	
Course Code	SIM-en-PPM-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	Simulation Analysts
Description	This course is an introduction to performing injection molding simulation to spur product and design innovation in the 3DEXPERIENCE Platform. The 3DEXPERIENCE Platform enables realistic plastic injection molding simulation of the mold cooling, filling and packing manufacturing processes early in the design cycle, when the cost of design change is low and opportunity is high.
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - Perform a plastic injection molding simulation of the mold cooling, filling and packing processes using the Plastic Mold Injection app - Understand simulation results from the molding process through to part warpage to produce highly efficient designs and/or optimize their performance
Prerequisites	None
Available Online	Yes

Practice SIMULIA Structural Model Creation	
Course Code	SIM-en-MECM-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	<ul style="list-style-type: none"> - This course is intended for the following roles: - Structural Engineer - Structural Mechanics Engineer - Structural Performance Engineer
Description	This course is an introduction to finite element modeling in the 3DEXPERIENCE platform. It teaches you how to prepare finite element models for simulation.
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - Create complete Finite Element models for structural and thermal simulations
Prerequisites	None
Available Online	Yes

Practice SIMULIA Structural Model Creation : Geometry and Meshing	
Course Code	SIM-en-MECM2-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	16 hours
Course Material	
Level	Fundamental
Audience	<ul style="list-style-type: none"> - This course is intended for the following roles: - - Structural Mechanics Engineer - Structural Performance Engineer
Description	This course provides an in-depth look at cleaning/repairing geometry for the purpose of generating high quality meshes. It also offers a comprehensive discussion on meshing techniques. The focus is on techniques relevant to simulation.
Objectives	Upon completion of this course you will be able to: <ul style="list-style-type: none"> - Clean and repair native and imported geometry. - Use advanced meshing techniques.
Prerequisites	The following course is required prior to taking this one: Structural Model Creation Essentials
Available Online	Yes

Practice SIMULIA Structural Scenario Creation	
Course Code	SIM-en-EMCS-F-15-211
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	<ul style="list-style-type: none"> - This course is intended for the following roles: - Structural Performance Engineer
Description	This course is an introduction to structural and thermal simulation in the 3DEXPERIENCE Platform. It teaches you how to solve both linear and nonlinear static problems and basic linear dynamics problems.
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - 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 3DPlay Simulation Experience Essentials

Course Code	SIM-en-3DP-F-15-191
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x
Duration	2 hours
Course Material	
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: <ul style="list-style-type: none"> - Replay simulation experiences in 3DPlay - Perform lightweight visualization through web browsers
Prerequisites	None
Available Online	Yes

SIMULIA Abaqus Study Essentials	
Course Code	SIM-en-ABQX-F-15-201
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	2 hours
Course Material	
Level	Fundamental
Audience	Experienced Abaqus users who need to be able to run and manage their simulations in the 3DEXPERIENCE Platform will benefit from attending this class.
Description	The course covers the following topics: • Creating and configuring jobs • Managing files and data • Common Abaqus simulation use cases, including submodeling, making use of user subroutines, restart and import simulations. The course is divided into lectures and workshops. The course's workshops are integral to the training. They are designed to reinforce concepts presented during the lectures. They are intended to provide users with the experience of running and trouble-shooting actual simulation processes.
Objectives	This course is an introduction to running existing Abaqus simulations in the 3DEXPERIENCE Platform. The Abaqus Study app 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 Composites Simulation Engineer Essentials	
Course Code	SIM-en-SCI-F-15-201
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	Composites Simulation Engineer
Description	Composite materials are used in many design applications because of their high stiffness-to-weight ratios. The 3DEXPERIENCE Platform offers a variety of tools for their design and analysis in the context of a single integrated work environment. This enables greater productivity and efficiency.
Objectives	Upon completion of this course you will be able to: <ul style="list-style-type: none"> - 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	
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	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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 Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	Stress Engineer
Description	<p>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.</p>
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - 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 Linear Dynamics Scenario Creation Essentials	
Course Code	SIM-en-DYNS-F-15-191
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x
Duration	8 hours
Course Material	
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: <ul style="list-style-type: none"> - 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 Multiscale Experiment Creation Essentials

Course Code	SIM-en-MSEC-F-15-201
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	This course is intended for the following roles: Multiscale Systems Specialist Multiphysics Experiment Creator Multiscale System Analyst
Description	<p>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).</p>
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - 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 Performance Study Essentials	
Course Code	SIM-en-DISB-F-15-201
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	4 hours
Course Material	
Level	Fundamental
Audience	Mechanical Analyst Structural Vibration Analyst Noise & Vibration Analyst Fluid Mechanics Analyst Finite Element Modeling & Assembly Specialist Structural Analysis Engineer Steel Ship Structural Analysis Engineer Stress Engineer Fluid Dynamics Engineer Simulation Process Method Developer Results Data Analyst
Description	This course is an introduction to the lightweight web-based tool in the 3DEXPERIENCE Platform that allows simulation analysts and engineers to run predefined Simulation Processes. The tool enables one to quickly search, run, and monitor existing Simulation Processes.
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - Instantiate Simulation Processes from Simulation Experiences - Run and monitor Simulation Processes - Manage Simulation Processes
Prerequisites	None
Available Online	Yes

SIMULIA Plastic Part Injection Essentials	
Course Code	SIM-en-PPI-F-15-191
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x
Duration	8 hours
Course Material	
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: <ul style="list-style-type: none"> - Perform Injection Molding simulations - View and evaluate simulation results
Prerequisites	None
Available Online	Yes

SIMULIA Process Composer Essentials	
Course Code	SIM-en-PRCW-F-15-201
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	<ul style="list-style-type: none"> - 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	<p>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.</p>
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - Compose Simulation Processes - Produce Simulation Experiences
Prerequisites	None
Available Online	Yes

SIMULIA Process Experience Studio Essentials	
Course Code	SIM-en-EXPS-F-15-201
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	2 hours
Course Material	
Level	Fundamental
Audience	This course is intended for the Simulation Process Method Developer role.
Description	This course is an introduction to the web-based tool in the 3DEXPERIENCE Platform that allows methods developers to create customized interfaces for the Simulation Experiences. This app is similar to a form builder which lets the methods developer quickly develop the customized interface.
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - 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 R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	This course is intended for the following roles: Simulation Process Method Developer Results Data Analyst
Description	This course is an introduction to the integrated web-based tool in the 3DEXPERIENCE platform that allows decision makers to collaboratively choose the best design from a large pool of data. This tool allows one to view and conduct trade-off analyses.
Objectives	Upon completion of this course you will be able to: <ul style="list-style-type: none"> - Initialize an analytics case - Conduct trade-off analyses - Select the best alternative
Prerequisites	None
Available Online	Yes

SIMULIA Simulation Companion Essentials	
Course Code	SIM-en-COMP-F-15-201
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	2 hours
Course Material	
Level	Fundamental
Audience	This course is intended for the Simulation Asset Management role.
Description	This course is an introduction to the light weight web-based tool in the 3DEXPERIENCE Platform that allows methods developers and engineers to quickly test and create ad-hoc simulation processes. This app provides tools and infrastructure to run a program and manage both the input and output data.
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - Complete basic ad-hoc simulation workflows using Simulation Companion - Set up a 3DDashboard experience for conducting ad-hoc simulation workflows - Initialize and manage a new ad-hoc simulation workflow - Configure and run simulation tools - Manage Simulation Companion processes
Prerequisites	None
Available Online	Yes

SIMULIA Simulation Model Design Essentials	
Course Code	SIM-en-SML-F-15-201
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	8 hours
Course Material	
Level	Fundamental
Audience	Mechanical Analyst Structural Vibration Analyst Noise & Vibration Analyst Fluid Mechanics Analyst Multiphysics Simulation Researcher Finite Element Modeling & Assembly Specialist
Description	This course is an introduction to creating and assembling geometry in the 3DEXPERIENCE Platform. The focus is on techniques relevant to simulation.
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - Create basic native solid geometry. - Create basic native shell geometry. - Create assemblies of parts.
Prerequisites	None
Available Online	Yes

SIMULIA Structural Validation Essentials	
Course Code	SIM-en-STRV-F-15-191
Available Releases	3DEXPERIENCE R2018x , 3DEXPERIENCE R2019x
Duration	4 hours
Course Material	
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	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - 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 Professional Engineer for SOLIDWORKS Users	
Course Code	SIM-en-DRDW-F-15-201
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x
Duration	24 hours
Course Material	
Level	Fundamental
Audience	Structural Simulation Engineer
Description	This course is an introduction to the Structural Simulation Engineer role, which is an offering to expand the simulation capabilities for SOLIDWORKS users.
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - 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

Transition to the 3DEXPERIENCE platform for Mechanical Designers

Course Code	CAT-en-3DMT-F-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2020x , 3DEXPERIENCE R2021x
Duration	12.1 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	<p>This module 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.</p>
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - 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 learning module should have completed the Explore the Collaborative Business Innovator Role module. They should also be familiar with CATIA V5 Mechanical Design.

Available Online

Yes

Transition to the 3DEXPERIENCE platform for Mechanical Designers	
Course Code	CAT-en-3DMTVS-F-15-211
Available Releases	3DEXPERIENCE R2019x , 3DEXPERIENCE R2021x
Duration	12 hours
Course Material	
Level	Fundamental
Audience	Mechanical Designers
Description	<p>This module addresses the needs of Mechanical Designers working on cloud. 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.</p>
Objectives	<p>Upon completion of this module, you will be able to:</p> <ul style="list-style-type: none"> - 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
Prerequisites	Students attending this learning module should have completed the Explore the Collaborative Business

Transition to the 3DEXPERIENCE platform for Mechanical Designers

Innovator Role module. They should also be familiar with CATIA V5 Mechanical Design.

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	
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	<p>Upon completion of this course, you will be able to:</p> <ul style="list-style-type: none"> - 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

