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Course Catalog

V5

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CATIA

CATIA Analysis V5

CATIA V5 Analysis (V5A)

Course Code	CAT-en-V5A-F-V5R25
Available Releases	V5-6R2012 , V5-6R2013 , V5-6R2014 , V5-6R2015 , V5R19 , V5R20 , V5R21
Duration	8 hours
Course Material	English
Level	Fundamental
Audience	Mechanical Designers and Structural Analysts
Description	This course will introduce the concepts and benefits of Finite Element Analysis and the general analysis process. It will teach you how to prepare a model for analysis, create 1D, 2D and 3D FE models, and compute a simple static analysis for a single part or an assembly.
Objectives	Upon completion of this course you will be able to: - Create a Finite Element Analysis model - Prepare a solid or a surface model for analysis - Create 1D, 2D and 3D meshes for beam, surface, and solid models - Assign properties, loads and constraints, and define assembly connections - Compute an analysis for a part or an assembly - Generate and display analysis results
Prerequisites	Students attending this course should have followed the CATIA V5 Fundamentals course.
Available Online	Yes

Generative Assembly Structural Analysis (GAS)	
Course Code	CAT-en-GAS-F-V5R25
Available Releases	V5-6R2012 , V5-6R2013 , V5-6R2014 , V5-6R2015 , V5R19 , V5R20 , V5R21
Duration	8 hours
Course Material	English
Level	Fundamental
Audience	Mechanical Designers
Description	This course will teach you how to perform a Finite Element Analysis using an existing assembly. You will learn how to create connections between assembly components and how to assign appropriate connection properties. You will also learn how to create an analysis assembly from existing meshed parts.
Objectives	Upon completion of this course you will be able to: - Understand and differentiate between various types of hypotheses that are used for creating an assembly analysis - Define analysis connections between assembly components - Use existing assembly constraints to automatically create analysis connections - Assign a connection property to the appropriate analysis connection - Compute a static analysis for an assembly - Create and manage an analysis assembly model using existing meshed parts
Prerequisites	Students attending this course should have taken the CATIA V5 Fundamentals and Generative Part Structural Analysis Fundamentals courses
Available Online	Yes

Generative Part Structural Analysis Expert (GPE)

Course Code	CAT-en-GPE-F-V5R25
Available Releases	V5-6R2012 , V5-6R2013 , V5-6R2014 , V5-6R2015 , V5R19 , V5R20 , V5R21
Duration	8 hours
Course Material	English
Level	Fundamental
Audience	Mechanical Designers
Description	This course will teach you how to use advanced Finite Element Analysis pre-processing techniques and post-processing tools, including the concept of defining virtual parts to avoid excessive geometric modeling. You will learn how to perform frequency analysis on a single part, and how to use adaptive meshing to achieve pre-defined accuracy.
Objectives	Upon completion of this course you will be able to: - Define and customize the material properties of the parts to be analyzed - Apply pressure, acceleration, and force density loads - Define virtual parts to simplify the analysis - Apply pivot, ball-joint, and user-defined restraints - Compute the frequency analysis for a single part - Create planar sections to visualize the internal result values - Compute and refine a mesh using adaptive meshing in order to achieve the pre-defined accuracy
Prerequisites	Students attending this course should have taken the CATIA V5 Fundamentals and Generative Part Structural Analysis Fundamentals courses
Available Online	Yes

Generative Part Structural Analysis Fundamentals (GPF)

Course Code	CAT-en-GPF-F-V5R25
Available Releases	V5-6R2012 , V5-6R2013 , V5-6R2014 , V5-6R2015 , V5R19 , V5R20 , V5R21
Duration	8 hours
Course Material	English
Level	Fundamental
Audience	Mechanical Designers
Description	This course will teach you the basic concepts of Finite Element Analysis and the general analysis process. You will learn how to perform a simple static analysis on a single part using finite elements, and how to produce the final report of the analysis results.
Objectives	Upon completion of this course you will be able to: - Understand why, when, and how to use Finite Element Analysis - Use different element types and shapes to mesh a part - Apply clamp, slider, and iso-static restraints - Apply force, moment, and displacement loads - Compute the static analysis for a single part - Visualize the images of the analysis results and produce the analysis reports - Refine existing meshes to produce more accurate results
Prerequisites	Students attending this course should be familiar with the fundamentals of CATIA V5
Available Online	Yes

CATIA

CATIA Equipment and Systems Engineering V5

CATIA V5 for Electrical Designers (V5VE)

Course Code	CAT-en-V5VE-F-V5R25
Available Releases	V5-6R2013 , V5-6R2014 , V5-6R2015 , V5R19 , V5R20 , V5R21
Duration	48 hours
Course Material	English
Level	Fundamental
Audience	Automotive Electrical Harness Designers and new CATIA Electrical Designers.
Description	This course will introduce you to the fundamental concepts of CATIA V5. You will learn how to design parts and assemblies and create simple drawings. Once you are familiar with the fundamentals, you will be introduced to the Electrical Library products. You will learn how to create the Electrical Harness for an automotive assembly. You will also learn how to map the functional specifications of the Harness system to the digital mock-up created in CATIA V5 and create the harness documentation.
Objectives	Upon completion of this course you will be able to: - Understand the CATIA V5 interface - Design an automotive wire harness - Route the signals and create the wires - Flatten and synchronize an electrical or geometrical harness - Design and manage parts in the context of an assembly - Generate harness documentation - Produce simple drawings
Prerequisites	Students attending this course should be familiar with Mechanical Design and the Windows Operating System.
Available Online	Yes

Electrical Harness Flattening (EHF)

Course Code	CAT-en-EHF-F-V5R25
Available Releases	V5-6R2013 , V5-6R2014 , V5-6R2015 , V5R19 , V5R20 , V5R21
Duration	8 hours
Course Material	English
Level	Fundamental
Audience	Electrical Designers
Description	This course introduces you to the Electrical Harness Flattening workbench. You will learn how to flatten and synchronize an electrical / geometrical harness integrated within the Digital Mock-Up. You will also learn how to modify the bundle segments of a harness. Additionally, the course teaches you how to define and generate a report. It teaches you how to create a 2D drawing of a 3D harness. You will also learn how to create a Catalog Text Template for annotations and dimensions.
Objectives	Upon completion of this course you will be able to: - Flatten and synchronize the electrical or the geometrical harnesses - Modify the bundle segments of a harness to fit your drawing - Define and generate reports - Create 2D drawings of 3D harnesses - Create Text Templates Catalog
Prerequisites	Students attending this course should be familiar with the CATIA V5 Catalog Editor, Electrical Harness Installation and Assembly, and Wire Routing.
Available Online	Yes

Electrical Librarian and Harness Installation (ELI)

Course Code	CAT-en-ELI-F-V5R25
Available Releases	V5-6R2013 , V5-6R2014 , V5-6R2015 , V5R19 , V5R20 , V5R21
Duration	16 hours
Course Material	English
Level	Fundamental
Audience	Electrical Harness Designers
Description	This course will teach you how to create an Electrical Components Catalog. You will learn how to design harnesses, create bundle segments, and connect them to electrical components. You will also learn how to manage the branch points, protections, and links and perform knowledge checks.
Objectives	Upon completion of this course you will be able to: - Build and manage an Electrical Components Catalog - Design a harness that is integrated within the Digital Mock-Up - Connect bundle segments to electrical components
Prerequisites	Students attending this course should be familiar with the fundamentals of CATIA V5,and should know how to use the Part Design and the Catalog Editor workbenches.
Available Online	Yes

CATIA

CATIA Infrastructure V5

V5 Administration (ADM)

Course Code	CAT-en-ADM-F-V5R25
Available Releases	V5-6R2013 , V5-6R2014 , V5-6R2015 , V5R19 , V5R20 , V5R21
Duration	24 hours
Course Material	English
Level	Fundamental
Audience	Administrators of CATIA V5
Description	This course will teach you how to install CATIA V5 and its service packs. You will learn to use different tools to manage licenses, environments and standards. You will also learn to use tools available in batch mode and how to manage V4 and V5 data.
Objectives	Upon completion of this course you will be able to: - Install CATIA V5 and service packs - Manage CATIA licenses and environments - Manage CATIA settings and standards - Use CATIA V5 data management tools - Manage CATIA V4 data in V5, and CATIA V5 data in V4
Prerequisites	Students attending this course should be familiar with system administration.
Available Online	Yes

CATIA

CATIA Machining V5

Prismatic Machining (PMG)	
Course Code	CAT-en-PMG-F-V5R25
Available Releases	V5-6R2013 , V5-6R2014 , V5-6R2015 , V5R19 , V5R20 , V5R21
Duration	16 hours
Course Material	English
Level	Fundamental
Audience	NC Programmers
Description	This course will teach you how to define and manage NC programs to machine parts using Prismatic Machining techniques in the Prismatic Machining (PMG) workbench. You will learn to create 2.5 Axis Milling operations. You will also learn to use the PMG functionalities to create Prismatic Machining and Rework Areas.
Objectives	Upon completion of this course you will be able to: - Define Prismatic Machining operations - Create a Prismatic Machining Area and a Rework Area - Define and modify NC Macros
Prerequisites	Students attending this course should have completed the CATIA V5 Fundamentals course and the Numerical Control Infrastructure course.
Available Online	Yes

CATIA

CATIA Mechanical Design V5

CATIA Generative Drafting Fundamentals (ISO) (GDRI)

Course Code	CAT-en-GDRI-F-V5R25
Available Releases	V5-6R2012 , V5-6R2013 , V5-6R2014 , V5-6R2015 , V5R19 , V5R20 , V5R21
Duration	8 hours
Course Material	English
Level	Fundamental
Audience	Draftsmen
Description	This course will teach you how to use the Drafting workbench of CATIA V5 to create drawings. You will learn how to produce a drawing of a 3D model by creating projection and section views section views, and how to add basic dimensions to it.
Objectives	Upon completion of this course you will be able to: - Create simple projection and section views of 3D parts - Position the views on a drawing sheet - Add dimensions to the views - Finalize the drawing sheet by adding a title block
Prerequisites	Students attending this course should be familiar with the basics of CATIA V5.
Available Online	Yes

CATIA Generative Sheetmetal Design (SMD)

Course Code	CAT-en-SMD-F-V5R25
Available Releases	V5-6R2012 , V5-6R2013 , V5-6R2014 , V5-6R2015 , V5R19 , V5R20 , V5R21
Duration	8 hours
Course Material	English
Level	Fundamental
Audience	Sheetmetal Designers
Description	This course will teach you how to design a sheetmetal part using associative feature-based modeling. You will learn how to integrate both standard and user-defined stamped features into your designs and calculate the resulting flat patterns in accordance with either the standard bend allowances or your company's bend allowance tables.
Objectives	Upon completion of this course you will be able to: - Understand the terminology and the design process for creating a sheetmetal part - Define and manage the sheetmetal part parameters - Design walls, bends, and flanges - Add features such as cutouts, holes, corners, and chamfers - Create standard and user-defined stamped features - Manage folded and unfolded views and export a finished flat pattern
Prerequisites	Students attending this course should be familiar with CATIA V5 Fundamentals
Available Online	Yes

CATIA Part Design (PDG)

Course Code	CAT-en-PDG-F-V5R25
Available Releases	V5-6R2012 , V5-6R2013 , V5-6R2014 , V5-6R2015 , V5R19 , V5R20 , V5R21
Duration	8 hours
Course Material	English
Level	Fundamental
Audience	Mechanical Designers
Description	This course will teach you how to use the CATIA Part Design workbench to design 3D mechanical parts from 2D sketches. You will learn how to create and modify solid features in order to prepare 3D parts for manufacturing.
Objectives	Upon completion of this course you will be able to: - Design 3D mechanical parts using basic features - Create 3D solid features based on 2D sketches - Apply Dress-Up features to the 3D parts - Duplicate and move the 3D features - Modify a 3D part
Prerequisites	Students attending this course must have completed the CATIA V5 Fundamentals and CATIA Sketcher courses.
Available Online	Yes

CATIA Part Design Added Exercises (PDG)

Course Code	CAT-en-PDG-X-V5R25
Available Releases	V5-6R2012 , V5-6R2013 , V5-6R2014 , V5-6R2015 , V5R19 , V5R20 , V5R21
Duration	12 hours
Course Material	English
Level	Exercise
Audience	Mechanical Designers
Description	This course provides you with an exercise database for additional practice on CATIA Part Design. 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 recommended design methodologies using realistic parts.
Objectives	These exercises will allow you to put your Mechanical skills into practice on selected scenarios. You will apply the recommended methodology in various situations and thus enhance your understanding and usage of the Mechanical workbenches.
Prerequisites	Students attending this course must have completed the CATIA Part Design and CATIA Knowledge Fundamentals courses.
Available Online	Yes

CATIA Part Design Expert (PDG)

Course Code	CAT-en-PDG-A-V5R25
Available Releases	V5-6R2012 , V5-6R2013 , V5-6R2014 , V5-6R2015 , V5R19 , V5R20 , V5R21
Duration	12 hours
Course Material	English
Level	Advanced
Audience	Mechanical Designers
Description	This course will teach you how to design complex 3D mechanical parts using the Boolean approach. You will learn how to work in a Multi-Model Environment and maintain links between your 3D models. You will also learn how to analyze your designs in order to optimize them.
Objectives	Upon completion of this course you will be able to: - Create a part using 3D reference elements - Create advanced Sketch-Based Features - Apply advanced Dress-Up Features - Design 3D parts using Boolean operations - Work in a Multi-Model Environment and share your designs with others - Analyze parts and optimize them - Annotate the parts for review
Prerequisites	Students attending this course should have completed the CATIA V5 Fundamentals, Getting started with CATIA V5, CATIA Sketcher, and CATIA Part Design Fundamentals courses.
Available Online	Yes

CATIA Product Design (ASM)

Course Code	CAT-en-ASM-F-V5R25
Available Releases	V5-6R2012 , V5-6R2013 , V5-6R2014 , V5-6R2015 , V5R19 , V5R20 , V5R21
Duration	8 hours
Course Material	English
Level	Fundamental
Audience	Mechanical Designers
Description	This course will teach you how to create a simple product structure and how to add existing components and position them correctly. You will learn how to add new parts and design them in the context of a product. You will also learn how to analyze assemblies and ensure design coherence.
Objectives	Upon completion of this course you will be able to: - Create a new product and add components to it - Move the components within a product by positioning them using assembly constraints - Modify an existing product structure - Design new parts in the context of a product - Check the mechanical properties of a product and analyze its degrees of freedom - Analyze interferences between parts and perform measurements
Prerequisites	Students attending this course should be familiar with CATIA Part Design
Available Online	Yes

CATIA Product Design Added Exercises (ASM)

Course Code	CAT-en-ASM-X-V5R25
Available Releases	V5-6R2012 , V5-6R2013 , V5-6R2014 , V5-6R2015 , V5R19 , V5R20 , V5R21
Duration	8 hours
Course Material	English
Level	Exercise
Audience	Mechanical Designers
Description	This course provides you with additional exercises to practice the concepts that you have learnt in the CATIA Product Design course. These exercises represent typical industrial scenarios and demonstrate how CATIA Product Design helps you to achieve your design objectives.
Objectives	These exercises will allow you to put your Mechanical skills into practice on selected scenarios. You will apply the recommended methodology in various situations and thus enhance your understanding and usage of the Mechanical workbenches.
Prerequisites	Students attending this course should have attended the CATIA Product Design course and the CATIA Product Design Expert course
Available Online	Yes

CATIA Product Design Expert (ASM)

Course Code	CAT-en-ASM-A-V5R25
Available Releases	V5-6R2012 , V5-6R2013 , V5-6R2014 , V5-6R2015 , V5R19 , V5R20 , V5R21
Duration	16 hours
Course Material	English
Level	Advanced
Audience	Mechanical Designers
Description	This course will teach you how to design parts in the context of a complex product structure using collaborative engineering methods. You will learn how to optimize CATIA's performance when working with large and complex designs. You will also learn how to generate annotations and bills of material for your assembly drawings.
Objectives	Upon completion of this course you will be able to: - Optimize performance for large and complex designs - Manage contextual links between product documents using publications - Create and use parameters to drive a product design - Create sections to visualize the internal product structure - Create scenes and exploded views of a product - Generate annotations and bills of material for assembly drawings
Prerequisites	Students attending this course should be familiar with CATIA Product Design and CATIA Part Design
Available Online	Yes

CATIA Sketcher (SKE)	
Course Code	CAT-en-SKE-F-V5R25
Available Releases	V5-6R2012 , V5-6R2013 , V5-6R2014 , V5-6R2015 , V5R19 , V5R20 , V5R21
Duration	8 hours
Course Material	English
Level	Fundamental
Audience	Mechanical Designers
Description	This course will teach you how to use the CATIA Sketcher workbench. You will learn how to create two-dimensional sketches by drawing and constraining the various geometric elements. You will also learn how to analyze the sketches and edit them.
Objectives	Upon completion of this course you will be able to: - Work in the CATIA Sketcher environment - Create 2D sketch geometry - Analyze the sketched geometry - Edit existing 2D profiles - Dimension the sketch and modify it using constraints - Manage sketches within a 3D environment
Prerequisites	Students attending this course must have completed the CATIA V5 Fundamentals course
Available Online	Yes

CATIA Surface Design (GS1)

Course Code	CAT-en-GS1-F-V5R25
Available Releases	V5-6R2012 , V5-6R2013 , V5-6R2014 , V5-6R2015 , V5R19 , V5R20 , V5R21
Duration	8 hours
Course Material	English
Level	Fundamental
Audience	Mechanical Surface Designers
Description	This course will teach you how to use the Generative Shape Design tools. You will learn how to create wireframes and surfaces. You will also learn about the concept of hybrid design and how to use it while creating wireframes and surfaces. This course covers only those Generative Shape Design tools that are available with a MD2 license.
Objectives	Upon completion of this course you will be able to: - Identify and use the tools that are specific to the Generative Shape Design workbench - Create simple reference geometry and wireframe geometry - Use the reference wireframe elements to create simple surfaces - Create a clean topology from a set of surfaces and smooth sharp edges - Detect and correct the discontinuities on curves and surfaces - Create solids from surfaces
Prerequisites	Students attending this course should be familiar with CATIA V5 Fundamentals.
Available Online	Yes

CATIA Surface Design Added Exercises (GS1)

Course Code	CAT-en-GS1-X-V5R25
Available Releases	V5-6R2012 , V5-6R2013 , V5-6R2014 , V5-6R2015 , V5R19 , V5R20 , V5R21
Duration	8 hours
Course Material	English
Level	Exercise
Audience	Mechanical Surface Designers
Description	This course provides you with an exercise database for additional practice on CATIA Surface Design. The exercises have been created based on Industry practices. You will get to practice skills such as creating wireframes and surfaces, creating surfacic shells and solid parts, and working with multiple parts that are referencing a common part.
Objectives	These exercises will allow you to put your Shape skills into practice on selected scenarios. You will apply the recommended methodology in various situations and thus enhance your understanding and usage of the Shape workbenches.
Prerequisites	Students attending this course should be familiar with CATIA V5 Surface Design.
Available Online	Yes

CATIA V5 Fundamentals (V5F)	
Course Code	CAT-en-V5F-F-V5R25
Available Releases	V5-6R2012 , V5-6R2013 , V5-6R2014 , V5-6R2015 , V5R19 , V5R20 , V5R21
Duration	40 hours
Course Material	English
Level	Fundamental
Audience	Mechanical Designers with no CATIA V5 experience
Description	This course will teach you about CATIA V5. You will learn how to build simple parts and assemblies in CATIA, and how to make simple drawings of those parts and assemblies.
Objectives	Upon completion of this course you will be able to: - Understand and use the CATIA V5 interface - Plan the construction of a part in order to convey its visual and functional aspects - Create simple parts in CATIA V5 - Construct an assembly using the parts - Produce simple drawings and assembly layouts
Prerequisites	Students attending this course should be familiar with Mechanical Design and the Windows Operating System.
Available Online	Yes

CATIA V5 Mechanical Design Expert (V5E)	
Course Code	CAT-en-V5E-A-V5R25
Available Releases	V5-6R2012 , V5-6R2013 , V5-6R2014 , V5-6R2015 , V5R19 , V5R20 , V5R21
Duration	40 hours
Course Material	English
Level	Advanced
Audience	Mechanical Designers
Description	This course will teach you how to start a complex design project from its specifications (top down approach) and complete it by reusing existing data. It will focus on advanced skills and concepts that enable you to create and analyze complex parts and assemblies.
Objectives	Upon completion of this course you will be able to: - Create a complex model in CATIA V5 - Create and manage a structured model - Design parts in the context of an assembly - Re-use existing data to complete assemblies - Manage relationships between assembled parts - Analyze and annotate your design
Prerequisites	Students attending this course should be familiar with the basics of CATIA V5 Mechanical Design
Available Online	Yes

Composites Grid Approach (CPG)

Course Code	CAT-en-CPG-F-V5R25
Available Releases	V5-6R2013 , V5-6R2014 , V5-6R2015 , V5R20 , V5R21
Duration	24 hours
Course Material	English
Level	Fundamental
Audience	Composites Designers for Aerospace
Description	This course will introduce you to the Grid approach. You will generate plies, modify geometry, and create a solid or a top surface using the ply geometry. By the end of this course you will be able to create and modify a composite part using the Composites Grid Design approach.
Objectives	Upon completion of this course you will be able to: - Understand the concept of grid approach in Composites Design - Generate plies using the Grid approach - Modify the ply geometry - Create a solid or a top surface using the ply geometry - Create and modify a composite part using the Composites Grid Design approach
Prerequisites	Students attending this course should be familiar with Part Design, Assembly Design, Wireframe and Surface Design, Drafting and Composites Part Design.
Available Online	Yes

Composites Part Engineering (CPE)

Course Code	CAT-en-CPE-F-V5R25
Available Releases	V5-6R2013 , V5-6R2014 , V5-6R2015 , V5R19 , V5R20 , V5R21
Duration	24 hours
Course Material	English
Level	Fundamental
Audience	Composites Designers
Description	This course will teach you how to build composite parts in the context of the engineering design process, from Preliminary Design to Engineering Detail Design.
Objectives	Upon completion of this course you will be able to: - Define the composites parameters - Create a preliminary design using the Zone-based and the Solid-based approaches - Generate composites parts from a preliminary design to engineering detail design
Prerequisites	Students attending this course should be familiar with Part Design, Assembly Design, Wireframe and Surface Design, and Drafting.
Available Online	Yes

Composites Part Manufacturing (CPM)

Course Code	CAT-en-CPM-F-V5R25
Available Releases	V5-6R2013 , V5-6R2014 , V5-6R2015 , V5R19 , V5R20 , V5R21
Duration	16 hours
Course Material	English
Level	Fundamental
Audience	Composites Designers
Description	This course will teach you how to build composite parts for manufacturing detail design.
Objectives	Upon completion of this course you will be able to: - Understand the significance of the Manufacturing Data creation process in Composites design - Generate the Manufacturing data structure from the Engineering data structure - Modify the Manufacturing data structure - Synchronize the link between the Manufacturing and the Engineering part
Prerequisites	Students attending this course should be familiar with Part Design, Assembly Design, Wireframe, Surface Design and Drafting.
Available Online	Yes

Getting Started with CATIA V5 (COM)

Course Code	CAT-en-COM-F-V5R25
Available Releases	V5-6R2012 , V5-6R2013 , V5-6R2014 , V5-6R2015 , V5R19 , V5R20 , V5R21
Duration	4 hours
Course Material	English
Level	Fundamental
Audience	New CATIA V5 Users
Description	This course will teach you how to start working in CATIA V5. You will learn how to perform basic operations using the standard user interface elements and tools. You will also learn about graphic properties and how to use the basic visualization techniques to view objects in CATIA V5.
Objectives	Upon completion of this course you will be able to: - Open CATIA V5 documents and use basic tools to modify them - Use the specification tree to browse and understand the structure of an object - Use the compass to manipulate the viewpoint - View and modify the graphic properties of an object
Prerequisites	None
Available Online	Yes

CATIA

CATIA Product Synthesis V5

CATIA Knowledge Fundamentals (KWF)	
Course Code	CAT-en-KWF-F-V5R25
Available Releases	V5-6R2012 , V5-6R2013 , V5-6R2014 , V5-6R2015 , V5R19 , V5R20 , V5R21
Duration	8 hours
Course Material	English
Level	Fundamental
Audience	CATIA V5 Users
Description	This course will teach you how to embed knowledge within design and leverage it to automate modifications. You will learn how to create and use parametric parts and assemblies.
Objectives	Upon completion of this course you will be able to: - Use and manage the Knowledgeware working environment - Understand how collaborative work affects knowledge features - Use parameters, formulae, and design tables - Create parametric parts and assemblies - Share parameters and reuse relations
Prerequisites	Students attending this course should be familiar with CATIA V5 Part Design and Assembly Design
Available Online	Yes

Human Modeling (HMN)	
Course Code	CAT-en-HMN-F-V5R21
Available Releases	V5R19 , V5R20 , V5R21
Duration	16 hours
Course Material	English
Level	Fundamental
Audience	Designers, Engineers, Human Factor's Specialists, Health Specialists
Description	This course will teach you how to use the Human Model technology to leverage your ergonomics analysis. You will also learn how to position and manipulate the mannequin within a V5 Scene and evaluate the comfort, the reach, clearance, and the vision of your target population.
Objectives	Use Human Model technology to leverage your ergonomics analysis. - Position and manipulate the mannequin within a V5 Scene. - Evaluate the comfort, the reach, clearance, and the vision of your target population.
Prerequisites	Students attending this course should know how to work with V5 Digital Mock-Ups.
Available Online	Yes

Knowledge Advisor (KWA)	
Course Code	CAT-en-KWA-F-V5R25
Available Releases	V5-6R2013 , V5-6R2014 , V5-6R2015 , V5R19 , V5R20 , V5R21
Duration	8 hours
Course Material	English
Level	Fundamental
Audience	CAD Engineers
Description	This course will teach you how to embed knowledge in your designs using Knowledge Advisor tools. You will also learn how to leverage the knowledge to reduce errors and automate the design modifications.
Objectives	Upon completion of this course you will be able to: - Create and use User Parameters and Formulae - Create Rules, Checks and Reactions to control the design - Create and use Design Tables to automate the design modifications - Use miscellaneous Knowledge Advisor tools
Prerequisites	Students attending this course should be familiar with the basics of CATIA V5.
Available Online	Yes

Knowledge Expert (KWE)

Course Code	CAT-en-KWE-F-V5R25
Available Releases	V5-6R2013 , V5-6R2014 , V5-6R2015 , V5R19 , V5R20 , V5R21
Duration	4 hours
Course Material	English
Level	Fundamental
Audience	Mechanical and Electrical Design Engineers
Description	This course will show you how to build up and share corporate knowledge stored in rule bases, and leverage it across the company to ensure design compliance with established standards.
Objectives	Upon completion of this course you will be able to: - Embed the complex design knowledge in a parametric part using Knowledgeware Expert. - Automate design modifications using the specific Knoweldge Expert tools
Prerequisites	Students attending this course should be familiar with the basics of CATIA V5 and knowledgeware.
Available Online	Yes

CATIA

CATIA Shape Design and Styling V5

CATIA Surface Design Expert (GSD)	
Course Code	CAT-en-GSD-A-V5R25
Available Releases	V5-6R2012 , V5-6R2013 , V5-6R2014 , V5-6R2015 , V5R19 , V5R20 , V5R21
Duration	16 hours
Course Material	English
Level	Advanced
Audience	Mechanical Designers and Surface Designers
Description	This course will first recall and summarize the tools taught in the Surface Design course. It will then capitalize on this knowledge and teach you advanced surface creation tools, quality checking and correction techniques, and surface creation in a multi-model environment. This course covers only those Generative Shape Design tools that are specific to the HD2 license.
Objectives	Upon completion of this course you will be able to: - Create wireframe features using existing curves and surfaces - Create advanced and parameterized swept surfaces - Perform advanced surface analysis and gap correction - Create advanced blend features - Improve the quality and stability of created geometries
Prerequisites	Students attending this course should have attended the CATIA Surface Design course
Available Online	Yes

CATIA Surface Design Expert Added Exercises (GSD)	
Course Code	CAT-en-GSD-X-V5R25
Available Releases	V5-6R2012 , V5-6R2013 , V5-6R2014 , V5-6R2015 , V5R19 , V5R20 , V5R21
Duration	16 hours
Course Material	English
Level	Exercise
Audience	Mechanical Designers and Surface Designers
Description	This course provides you with an extensive database of exercises for additional practice on advanced topics of CATIA Surface Design. The exercises have been created based on Industry practices.
Objectives	Upon completion of this course you will be able to: - Create wireframe features using 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 create geometries
Prerequisites	Students attending this course should have attended the CATIA Surface Design Expert course
Available Online	Yes

CATIA V5 for Surfaces (V5S)	
Course Code	CAT-en-V5S-F-V5R25
Available Releases	V5-6R2012 , V5-6R2013 , V5-6R2014 , V5-6R2015 , V5R19 , V5R20 , V5R21
Duration	24 hours
Course Material	English
Level	Fundamental
Audience	Surface Designers
Description	This course will teach you how to create curves and surfaces using the Generative Shape Design workbench. You will learn how to analyze the wireframe and surface quality and rectify the defects. You will also learn how to work in a multi-model environment with published surfaces.
Objectives	Upon completion of this course you will be able to: - Use the tools of the Generative Shape Design workbench - Create good quality curves based on a sound and improved wireframe geometry - Assemble, relimit and connect the surfaces to get a topology - Analyze the quality of surfaces and rectify the defects - Manage the surfaces in a multi-model environment
Prerequisites	Students attending this course should be familiar with the fundamentals of CATIA V5.
Available Online	Yes

FreeStyle Shaper, Optimizer and Profiler (FSS)	
Course Code	CAT-en-FSS-F-V5R25
Available Releases	V5-6R2013 , V5-6R2014 , V5-6R2015 , V5R19 , V5R20 , V5R21
Duration	12 hours
Course Material	English
Level	Fundamental
Audience	Surface Designers
Description	This course will teach you how to create flawless, styled shapes from scratch using three-dimensional free-form curves and surfaces or using digitized data. You will also learn how to analyze and improve the quality of existing curves and surfaces.
Objectives	Upon completion of this course you will be able to: - Create styled shapes using digitized data - Create surfaces using a curve-based approach - Create surfaces using a surface-based approach - Analyze and correct the curve quality - Analyze and correct the surface quality
Prerequisites	Students attending this course should know Surface Design in CATIA V5.
Available Online	Yes

Freestyle Sketch Tracer (FSK)	
Course Code	CAT-en-FSK-F-V5R23
Available Releases	V5-6R2013 , V5R19 , V5R20 , V5R21
Duration	4 hours
Course Material	English
Level	Fundamental
Audience	Shape Designers
Description	This course will teach you how to import images in the CATIA V5 environment and use them as a background or a basis for your design.
Objectives	Upon completion of this course you will be able to: - Import an image into CATIA V5 - Position the image in the CATIA V5 environment - Use the image as a background or as a basis for the design
Prerequisites	Students attending this course should know the basics of CATIA V5.
Available Online	Yes

Generative Shape Design Optimizer (GSO)	
Course Code	CAT-en-GSO-F-V5R21
Available Releases	V5R19 , V5R20 , V5R21
Duration	8 hours
Course Material	English
Level	Fundamental
Audience	Surface Designers
Description	This course will teach you how to optimize surface built in Generative Shape Design workbench by morphing and deforming existing surfaces.You will learn about volumes and tools dedicated to BIW applications.
Objectives	Upon completion of the course you will learn to: - Develop Shapes - Morph Shapes - Create Junctions (BIW application) between surfaces - Work with Volumes
Prerequisites	Students attending this course should know Surface Design in CATIA V5.
Available Online	Yes

Photo Studio (PHS)	
Course Code	CAT-en-PHS-F-V5R21
Available Releases	V5R19 , V5R20 , V5R21
Duration	4 hours
Course Material	English
Level	Fundamental
Audience	Industrial Stylists and Designers
Description	This course will teach you how to create photo realistic images and simple animations of a product using Photo Studio workbench.
Objectives	Upon completion of this course you will be able to: - Create photo realistic images - Create and apply stickers to your models - Create animations using different techniques
Prerequisites	Students attending this course should know CATIA V5 Fundamentals
Available Online	Yes

ENOVIA

Digital Mock-Up V5

Digital Mock-Up Navigator (DMN)	
Course Code	ENOV-en-DMN-F-V5R25
Available Releases	V5-6R2012 , V5-6R2013 , V5-6R2014 , V5-6R2015 , V5R19 , V5R20 , V5R21
Duration	8 hours
Course Material	English
Level	Fundamental
Audience	Mechanical Designers, Managers
Description	This course will teach you how to manipulate a Digital Mock-Up in the context of an engineering review. You will also learn how to create simulations for review presentations.
Objectives	Upon completion of this course you will be able to: - Use the basic and advanced functionalities of the DMU Navigator workbench - Modify the properties of components and position them - Create movies using the simulations - Manage the mock-up configurations using scenes - Save specific mock-up configurations for analysis - Create annotated views of a mock-up for sharing
Prerequisites	Students attending this course should have attended the DMU Basics course
Available Online	Yes

Digital Mock-Up Space Analysis (SPA)

Course Code	ENOV-en-SPA-F-V5R25
Available Releases	V5-6R2012 , V5-6R2013 , V5-6R2014 , V5-6R2015 , V5R19 , V5R20 , V5R21
Duration	4 hours
Course Material	English
Level	Fundamental
Audience	Mechanical Designers, Engineering Managers
Description	This course will teach you how to review and validate designs throughout the product lifecycle, from design in context to maintenance review. You will also learn how to highlight interference problems and verify internal component clearances.
Objectives	Upon completion of this course you will be able to: - Perform measurements in the context of a digital mock-up - Create views to see the inner details of a digital mock-up - Analyze interferences to identify clashes, contacts, and component clearances - Compare different versions of a digital mock-up
Prerequisites	Students attending this course should have attended the DMU Basics course
Available Online	Yes

DMU Fitting Simulator (FIT)

Course Code	ENOV-en-FIT-F-V5R25
Available Releases	V5-6R2013 , V5-6R2014 , V5-6R2015 , V5R19 , V5R20 , V5R21
Duration	4 hours
Course Material	English
Level	Fundamental
Audience	Mechanical Designers
Description	This course will teach you how to define the process of mounting and dismounting parts of your assemblies. You will learn how to optimize the process for ease of assembly and maintenance.
Objectives	Upon completion of this course you will be able to: - Use the capabilities of the Fitting Simulator workbench - Create tracks to define the motion path of assembly components - Create sequences to define the order in which the tracks will take place - Play the motion sequences - Analyze clashes during sequence replays
Prerequisites	Students attending this course should be familiar with DMU Basics and DMU Space Analysis.
Available Online	Yes

DMU Kinematics Simulator (KIN)	
Course Code	ENOV-en-KIN-F-V5R25
Available Releases	V5-6R2012 , V5-6R2013 , V5-6R2014 , V5-6R2015 , V5R19 , V5R20 , V5R21
Duration	8 hours
Course Material	English
Level	Fundamental
Audience	Mechanical Design Engineers
Description	This course will teach you how to design mechanisms using an existing assembly. You will also learn how to simulate and analyze the mechanisms for clashes and perform kinematic analysis.
Objectives	Upon completion of this course you will be able to: - Apply the general processes in the DMU Kinematics workbench - Define a mechanism using an existing assembly - Simulate the mechanism - Analyze the mechanism for clashes - Perform kinematic analysis - Sequence multiple mechanisms
Prerequisites	Students attending this course should be familiar with DMU Basics and DMU Space Analysis.
Available Online	Yes


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