

COURSE CATALOG

3DEXPERIENCE
July 2014



3DEXPERIENCE

3DS Learning Solutions | Course Catalog

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DELMIA Industrial Engineering

DELMIA Manufacturing Equipment Design Essentials (DBG)

Course Code	DEL-en-DBG-F-15-141
Available Release	3DEXPERIENCE R2014x
Duration	20 hours
Course Material	English
Level	Fundamental
Audience	Design Engineers, Device Builders
Description	This course will teach you to build engineering connections and kinematic mechanism for a product. These mainly comprise the Robot and the NC Machine. You will learn how to generate device specific resources. You will also learn to define various attributes such as travel limits, home positions, ports and mount points for a device. This aids in the intended functioning of a device in a manufacturing industry.
Objectives	Upon completion of this course you will be able to: <ul style="list-style-type: none"> - Define Kinematics for a device - Generate a device resource using the kinematic mechanisms - Define the Robot and NC Machine attributes
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE Platform course. They should also be familiar with kinematic mechanics.
Available Online	Yes

DELMIA Milling Machining Essentials (SMG)	
Course Code	DEL-en-SMG-F-15-141
Available Release	3DEXPERIENCE R2014x
Duration	16 hours
Course Material	English
Level	Fundamental
Audience	Numerical Control (NC) Programmers
Description	This course will teach you how to define and manage NC programs dedicated to machining parts that are designed with surface or solid geometry. You will learn how to define the 3-Axis Roughing, Semi-finishing and Finishing operations. You will also learn how to improve productivity in mould and die machining using the various functionalities of 3-Axis Surface Machining
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - Create Machining Features - Define 3-Axis Surface Machining operations - Define a Rework Area - Analyze and modify the Tool path
Prerequisites	Students attending this course should have completed the DELMIA Prismatic Machining Fundamentals courses.
Available Online	Yes

DELMIA Multi-Axis Machining Essentials (MMG)	
Course Code	DEL-en-MMG-F-15-141
Available Release	3DEXPERIENCE R2014x
Duration	16 hours
Course Material	English
Level	Fundamental
Audience	Numerical Control (NC) Programmers
Description	This course teaches you how to generate high quality NC programs for machining complex 3D parts and free-form shapes using advanced machining techniques. You will learn how to perform 2.5 to 5-Axis machining operations.
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - 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 Prismatic Machining Fundamentals and the DELMIA Milling Machining Essentials courses.
Available Online	Yes

DELMIA Prismatic Machining Advanced (PMG)

Course Code	DEL-en-PMG-A-15-141
Available Release	3DEXPERIENCE R2014x
Duration	20 hours
Course Material	English
Level	Advanced
Audience	NC Programmers
Description	This course will teach you how to manage the NC resources and associate a user representation to a tool. It will also teach you to copy and transform the machining operations to machine similar profiles in a part. You will learn about the automation processes and how to optimize a program using the Auto Sequencing functionality. You will also learn how to save a video simulation result into a 3D Part.
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - Create the tools catalog to manage tools and tool assemblies - Associate a user representation to a tool assembly - Create and instantiate a Machining Process catalog - Create a Machining Template for Resources and Programming - Optimize a program using the Auto Sequencing functionality - Copy and transform the machining operations to machine similar profiles in a part - Customize a PP Word Table - Save the video simulation result into a 3DPart
Prerequisites	Students attending this course should have completed the DELMIA Prismatic Machining Fundamentals course.

DELMIA Prismatic Machining Advanced (PMG)

Available Online

Yes

DELMIA Prismatic Machining Fundamentals (PMG)	
Course Code	DEL-en-PMG-F-15-141
Available Release	3DEXPERIENCE R2014x
Duration	32 hours
Course Material	English
Level	Fundamental
Audience	NC Programmers
Description	This course will teach you how to use the common functionalities available in the machining apps of DELMIA. It will also teach you the fundamentals of creating and simulating a tool path. You will learn how to create tool paths for 2- and 2.5-axis machining operations. You will also learn how to create probes in the simulation object and how to simulate the machines, detect clashes and analyze them.
Objectives	<p>Upon completion of this course 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 the simulation object - Generate the Numerical Control (NC) output
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE Platform course. Additionally, they should be familiar with the fundamentals of machining.
Available Online	Yes

DELMIA Manufacturing Engineering

DELMIA Manufactured Item Definition Essentials (PRD)	
Course Code	DEL-en-PRD-F-15-141
Available Release	3DEXPERIENCE R2014x
Duration	6 hours
Course Material	English
Level	Fundamental
Audience	Mechanical Designers, Process Planners
Description	This course will teach you how to define manufactured items and author assemblies. You will learn how to manage the product to manufactured item assignments. You will also learn how to link the product components to each step of the plan using the simple drag-and-drop technique. Further, you will learn how to create catalogs and reuse a manufacturing assembly structure.
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - Manage the Manufactured Item-Product scope - Author manufacturing assemblies - Assign products to manufactured items - Generate manufacturing assemblies from a product structure
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE Platform course.
Available Online	Yes

DELMIA Manufacturing Assembly Evaluation Essentials (FIT)

Course Code	DEL-en-FIT-F-15-141
Available Release	3DEXPERIENCE R2014x
Duration	6 hours
Course Material	English
Level	Fundamental
Audience	Simulation Engineers, Industrial Engineers and Mechanical Engineers
Description	This course will teach you how to create process simulations to perform assembly feasibility studies. You will learn how to identify potential assembly issues and communicate them directly to the product designers in early product development stages. You will also learn how to enhance the simulations to optimize the assembly processes.
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - Determine the assembly feasibility of manufactured parts - Define, simulate and review the entire process to identify potential design issues - Create product assembly simulation to analyze the impact on the shop floor - Perform the assembly sequence analysis - Analyze multiple assembly scenarios to determine the most optimal process
Prerequisites	Students attending this course should have completed the Gateway to 3DEXPERIENCE Platform course. Students attending this course should have completed the Gateway to 3DEXPERIENCE Platform course.

DELMIA Manufacturing Assembly Evaluation Essentials (FIT)

They should also be familiar with the Mechanical Engineering concepts.

Available Online

Yes

DELMIA Manufacturing Equipment Allocation Essentials (MLB)

Course Code	DEL-en-MLB-F-15-141
Available Release	3DEXPERIENCE R2014x
Duration	8 hours
Course Material	English
Level	Fundamental
Audience	Manufacturing Engineers, Resource Planners
Description	This course will teach you how to create and manage resource structure. You will learn how to assign operation to resource by using the different assignment techniques. You will also learn how to balance the operation between two or more working resources. Finally, you will learn how to simulate a plant to verify its feasibility.
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 and manage the walkway - Simulate the Resource Plant
Prerequisites	Students attending this course should have completed the Gateway to the 3DEXPERIENCE Platform, DELMIA Manufacturing Item Definition Essentials and DELMIA Manufacturing Process Planning Essentials courses.
Available Online	Yes

DELMIA Manufacturing Process Planning Essentials (MSD)

Course Code	DEL-en-MSD-F-15-141
Available Release	3DEXPERIENCE R2014x
Duration	8 hours
Course Material	English
Level	Fundamental
Audience	Manufacturing Engineers
Description	This course will teach you how to create and manage the manufacturing system. You will learn how to perform automatic line balancing. You will also learn how to manage the multi-model sessions.
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 System-Manufactured Item scope - Assign manufactured items to operations - Generate a system structure from the manufacturing item structure - Author operations and add constraints between operations - Assign manufactured items to operation using the System Assignment Assistant - Analyze the workload and line balancing
Prerequisites	Students attending this course should have completed the Gateway to 3DEXPERIENCE Platform course. They should have also completed the DELMIA Manufacturing Item Definition Essentials course.
Available Online	Yes

DELMIA Manufacturing Work Instructions (WKD)	
Course Code	DEL-en-WKD-F-15-141
Available Release	3DEXPERIENCE R2014x
Duration	6 hours
Course Material	English
Level	Fundamental
Audience	Simulation Engineers, Process Planners and Manufacturing Engineers
Description	This course will teach you how to create textual instructions and 3D annotations to describe a process and the steps involved in it. You will learn how to complement the textual instructions with electronic documents and images. You will also learn how to deliver the work instructions to the team members on the shop floor through a manufacturing execution system, HTML or printed material.
Objectives	<p>Upon completion of this course you will be able to:</p> <ul style="list-style-type: none"> - Create textual and 3D work instructions for an operation - Modify, reorder and delete the work instructions - Enrich the work instructions with documents - Add the work instructions to a catalog and reuse them for other operations - Preview the authored instructions in a 3D environment
Prerequisites	Students attending this course should have completed the Gateway to 3DEXPERIENCE Platform course.
Available Online	Yes