![3DEXPERIENCE Edu]

Upskill your students now!

TEACHING VIRTUAL MANUFACTURING WITH DELMIA

Empower your students to build the factory of the future

DS DASSAULT SYSTEMES

IT'S TIME TO UPSKILL YOUR STUDENTS ON MANUFACTURING PROCESSES WITH THE POWER OF THE VIRTUAL FACTORY!

Virtual factories are transforming manufacturing with digital models that simulate the entire manufacturing processes, from plant design to factory operations and human ergonomics. Manufacturing companies are looking for employees with new skills required to lead this transformation. The **3D**EXPERIENCE® platform for Education empowers your students to master these skills with a connected, integrated view of the manufacturing process. Extend the virtual world of product design and innovation to production, and in turn teach your students to create the efficient, sustainable factory of the future.

DID YOU KNOW?

The Global Digital Twin Market size is expected to reach $63.5 billion by 2027, rising at a market growth rate of 41.7%

Source: Researchandmarket.com

TRANSFORM YOUR CLASSROOM INTO THE FACTORY OF THE FUTURE!

Process Planning
Design, validate and document manufacturing processes

Fabrication
Program and simulate machining and additive manufacturing

Robotics
Program and simulate industrial robotics

Ergonomics
Design human-centered production and workplace environments

Sustainable Manufacturing
Reduce scrap waste with digital innovation testing

Collaborative Manufacturing
Connect everyone for a common understanding

3

APPS, LEARNING CONTENT AND COMMUNITY

To prepare your students with relevant future-ready skills, you will need to teach them how to plan, simulate and operate an accurate virtual production system.
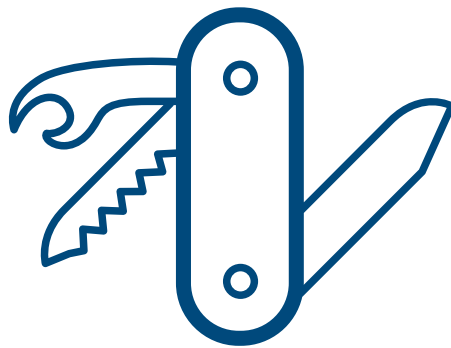
The **3D**EXPERIENCE platform, by including apps, learning content and community, delivers a unique, open and extensible platform that fully integrates the cross-discipline processes needed for developing virtual factories. Give your students the ability to understand what digital continuity means for manufacturing and how the **3D**EXPERIENCE platform supports collaboration among engineers in all disciplines on a single platform.

APPS
APPS FOR MASTERING VIRTUAL TWIN FOR MANUFACTURING

LEARNING CONTENT
FOR PREPARING STUDENTS WITH THE RIGHT SKILLS

COMMUNITY
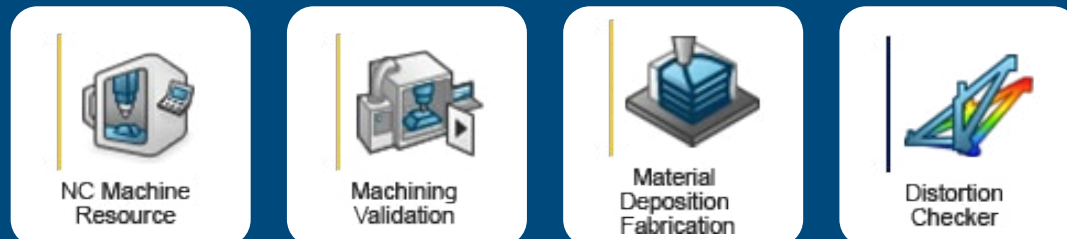TO SHARE BEST PRACTICES WITH PEERS AND EXPERTS

APPS

You need apps, we've got them! The **3DEXPERIENCE** platform for Education helps you prepare your students for the future of industry and increase their employability. It helps educators from all over the world to connect the dots between product, process plan, resources and manufacturing by bringing the full virtual factory to the classroom while supporting real-world problems and complexity. Let's plan, simulate and operate an accurate virtual production system!

PRODUCT

- Functional Gen. Design
- Design Review

PROCESS

- NC Machine Resource
- Machining Validation
- Material Deposition Fabrication
- Distortion Checker

VIRTUAL FACTORY

- Plant Layout Definition
- Process Planning
- Factory Flow Simulation
- Robot Simulation
- Ergonomics Evaluation
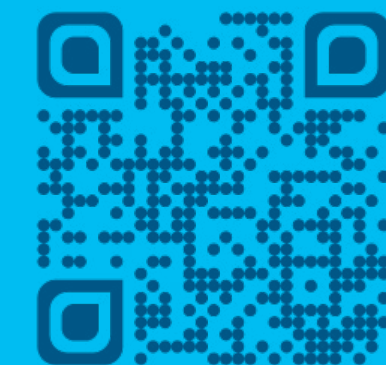
All these apps are available on the cloud!

KEY BENEFITS OF THE SOLUTION

- These apps provide students with an ideal environment for experiencing the methods practiced and required by various industries.

- Enable the design, simulation, automation and control of part production as well as tooling, machines.

- Program, simulate, and validate Robotic assembly systems in a 3D Virtual Factory context.

- Reduce cost and waste created through test innovation with simulated interactions and optimization.

- Rapidly evaluate workplace and product designs considering human factors and ergonomic requirements.

Deep dive further into the Roles and Apps:

go.3ds.com/v_manufacturing

LEARNING CONTENT

To enable you to go even further, we have developed learning experiences tailored for you. Either from our Edu-Space learning platform or from our communities, we offer learning materials and videos to support all your teaching activities on manufacturing disciplines.

Mechanical Design and Styling based learning content using CATIA, or Manufacturing Process Planning and Simulation using DELMIA — all these learning materials are there for you!

This learning content will open up an entirely new set of use cases. Specifically by merging the virtual product information as to how the product is to be manufactured and the information about how the product is actually being manufactured, students can have an instantaneous and simultaneous perspective on how the manufactured product is meeting its design specification goals.
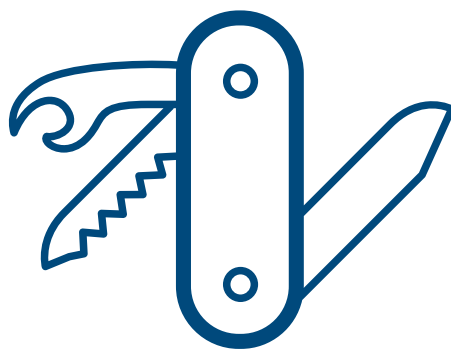
UPSKILL YOUR STUDENTS
LEARNING MATERIALS DESIGNED BY MANUFACTURING ENGINEERING CHAMPIONS

PROJECT-BASED LEARNING
GET YOUR STUDENTS INSPIRED

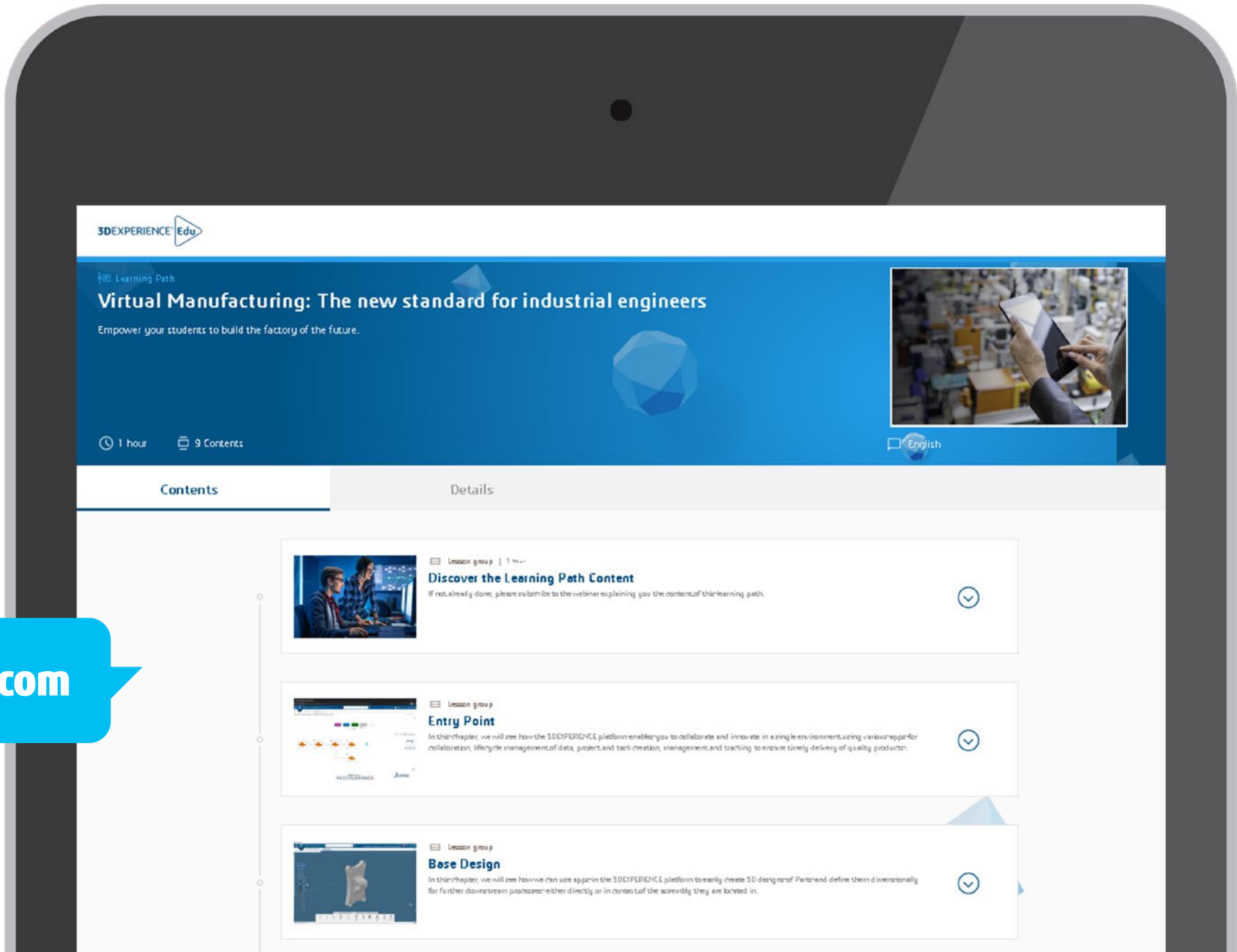**Dataset of a virtual factory included!**

Bring a real factory to your classroom. This limitless Virtual playground allows you to reuse, transform and create new teaching experiences based on Industry use cases.

eduspace.3ds.com

3DEXPERIENCE | Edu

Learning Path

Virtual Manufacturing: The new standard for industrial engineers
Empower your students to build the factory of the future.

1 hour   9 Contents   English

Contents   Details

Lesson group | 1 hour
Discover the Learning Path Content
If not already done, please watch the video to explaining you the content of this learning path.

Lesson group
Entry Point

Lesson group
Base Design

A GLOBAL COMMUNITY

Want to accelerate collaboration and international exposure for your students?

• You understand that you've got all the right content for your transitioning, now you just need connections with teachers that are also **3D**EXPERIENCE users and manufacturing experts.

• **3D**EXPERIENCE Edu | Academics Community is for you! Teachers from around the world and our Edu technical experts are there for your empowerment. Whether the solution comes from a peer, Dassault Systèmes or an Edu Champion, you're not alone anymore! What's more, you'll be invited regularly to private webinars to expand your know-how in specific topics. So stay tuned!

go.3ds.com/Academiccommunity

Join our Expert Educator Committee dedicated to virtual factory

• Our **3D**EXPERIENCE Edu Expert Educator Committee for manufacturing has been set up to encourage you to adopt and use state-of-the-art Industry solutions to support the evolution of sustainable manufacturing.

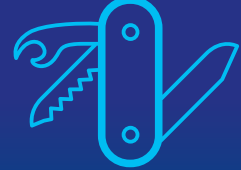**Break the silos by working transversally with other expert committees!**

COURSES

3DEXPERIENCE platform in a manufacturing context

VIDEOS

Watch quick on-boarding tutorials to learn great tips and tricks

FEATURED TOOLS

Discover some dedicated libraries and tools

To discover more about our Academic offer, reach
go.3ds.com/v_manufacturing

Our 3DEXPERIENCE® platform powers our brand applications, serving 11 industries, and provides a rich portfolio of industry solution experiences.

Dassault Systèmes, the **3D**EXPERIENCE Company, is a catalyst for human progress. We provide business and people with collaborative virtual environments to imagine sustainable innovations. By creating 'virtual experience twins' of the real world with our **3D**EXPERIENCE platform and applications, our customers push the boundaries of innovation, learning and production.

Dassault Systèmes' 20,000 employees are bringing value to more than 270,000 customers of all sizes, in all industries, in more than 140 countries. For more information, visit **www.3ds.com**.

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