



# SIMULATION: THE NEW STANDARD FOR DESIGNERS

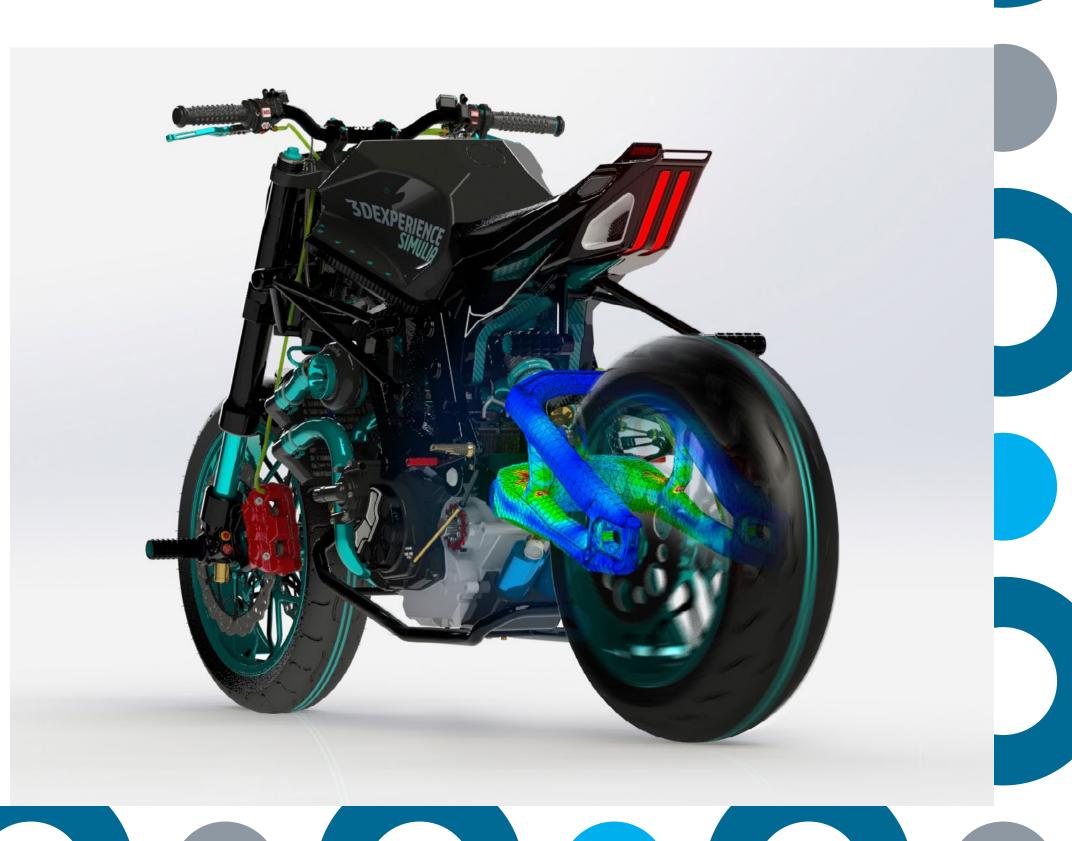
Empowering students with simulation-driven design experiences



### SIMULATION: A KEY DISCIPLINE TODAY FOR TOMORROW'S FUTURE

Every industry is being challenged to improve sustainability while introducing increasingly complex products in shorter periods of time. Traditional methods of design, physical prototype testing, and manufacturing are no longer sufficient for a company to remain competitive. Fortunately, the **3DEXPERIENCE**® platform enables companies to execute all their processes using a virtual twin. With a virtual twin, companies can rapidly explore a design space, leverage generative design techniques, or evaluate and optimize manufacturing methods. Accurate physics simulation of real world observations is essential for the virtual twin.

It is equally essential for companies to employ engineers and scientists with a solid grasp of the fundamental scientific theories and experience using a virtual twin to solve challenging problems. The Physics Simulation apps and learning content provided in the **3DEXPERIENCE** Edu offer enables educators to nurture and train the next generation of engineers and scientists needed to solve the most challenging problems.



### **EDU OFFER: APPS + LEARNING CONTENT + COMMUNITY**

We know you're probably already an expert on leading Dassault Systèmes products like Abaqus, and that you've invested a lot of time developing your knowledge and skills and creating motivating lectures and handson simulation exercises. You likely mentor your students as they hone their skills executing inspiring capstone projects for the world of industry or perhaps you're a newcomer! If you are, then welcome!

If you're reading this, you're almost certainly interested in jumping to the new, cutting-edge Dassault Systèmes solution, **3DEXPERIENCE**.

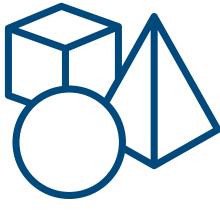
### **APPLICATIONS**

APPLICATION FOR INDUSTRIES



### **LEARNING CONTENT**

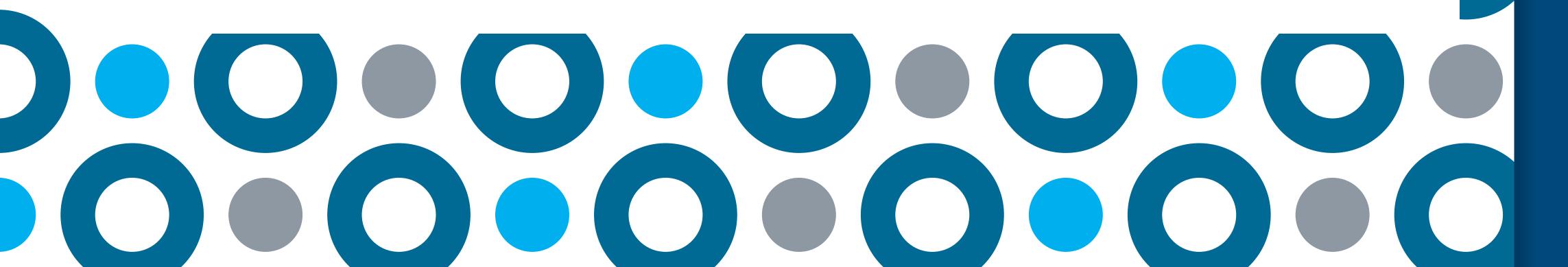
CONTENT FOR EDUCATORS AND STUDENTS



### COMMUNITY

DEDICATED GROUP FOR EDUCATORS





### IT'S TIME FOR AN UPGRADE!

We've brought together everything you need to smoothly transition to **3DEXPERIENCE**. Let's push the boundaries of simulation! The **3DEXPERIENCE** platform for Education helps you prepare your students for their future employability by giving them access to industry simulation solutions.

By combining our powerful physics solvers with guided assistants that leverage the integration of CAD and simulation, we've enhanced the entire simulation learning experience. Instead of analyzing a single component, students use technologies like general contact and pre-tuned solution procedures to evaluate complex assemblies. Those with an understanding of fluid mechanics easily perform flow simulations. While new users rely on **3DEXPERIENCE** to learn simulation for the first time, experts are able to include complex physical responses, from explicit dynamics and material failure to complex turbulence modeling.



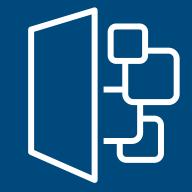


### **APPS**

Yes, there are more apps than ever! You're 100% sure to find what you need (to meet your short and long-term needs).



EVERYTHING YOU NEED TO TRANSFER YOUR PEDAGOGY AND A LOT MORE BESIDES















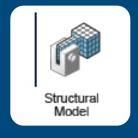


CAE/MACHINE DESIGN
COMPOSITES DESIGN
ADDITIVE MANUFACTURING
AND MORE

### **ANYTIME ANYWHERE**

YOU AND YOUR STUDENTS CAN NOW WORK FROM LABS AND FROM HOME!











1/m

### **COLLABORATIVE**

NO LIMITS! FROM TEAM
PROJECTS WITH YOUR
STUDENTS TO THE ENTIRE
WORLD!



# Deep dive further into the Roles and Apps:

edu.3ds.com/en/software/3dx-aca/simulia-3dx



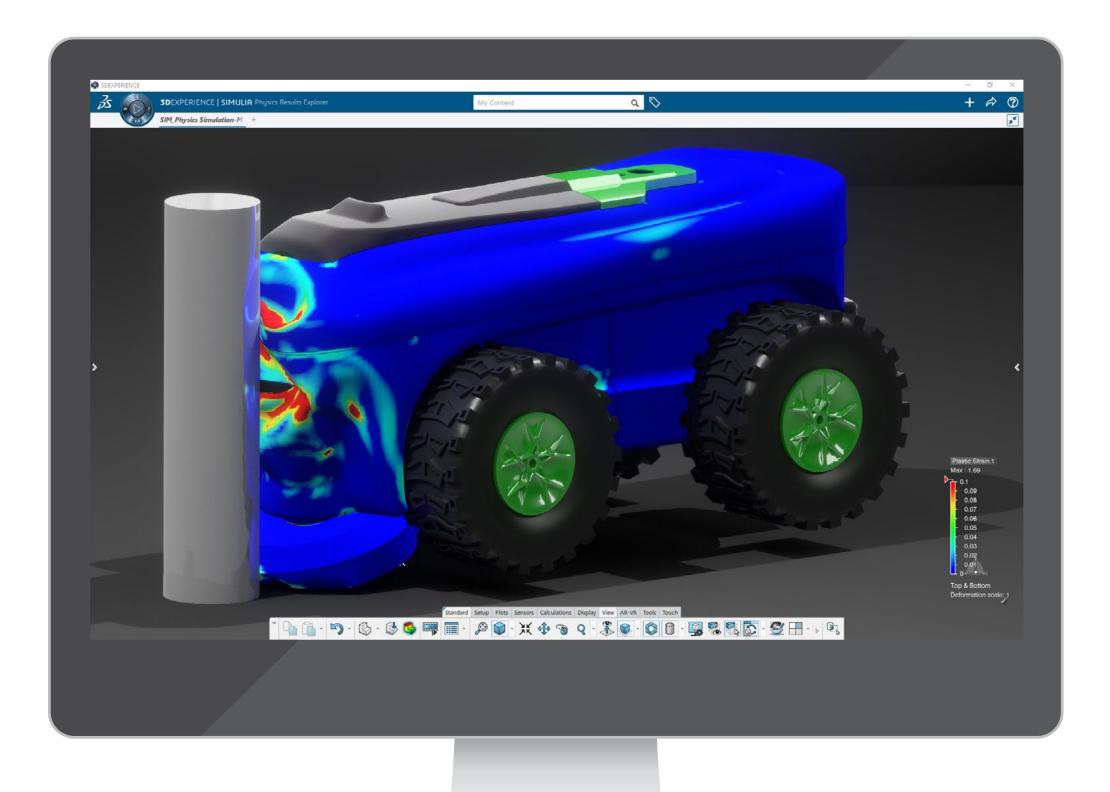
### **CLOUD BASED**

SECURE AND ALWAYS UPDATED



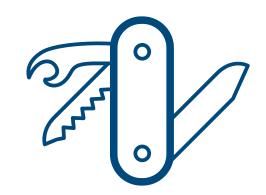
### **APPS**

When you deploy the **3DEXPERIENCE** platform for Education, it's only a third of everything you get! So, let's take a look at the amazing content and communities waiting for you.



### SHARPEN YOUR SKILLS

LEARNING MATERIALS
DESIGNED AND BUILT BY REAL
EDUCATORS JUST FOR YOU



### **CHALLENGE YOURSELF**

FLEXIBLE LEARNING MATERIALS
THAT CAN BE RE-USED HOW
AND WHENEVER YOU LIKE



### LEARN BEST PRACTICES

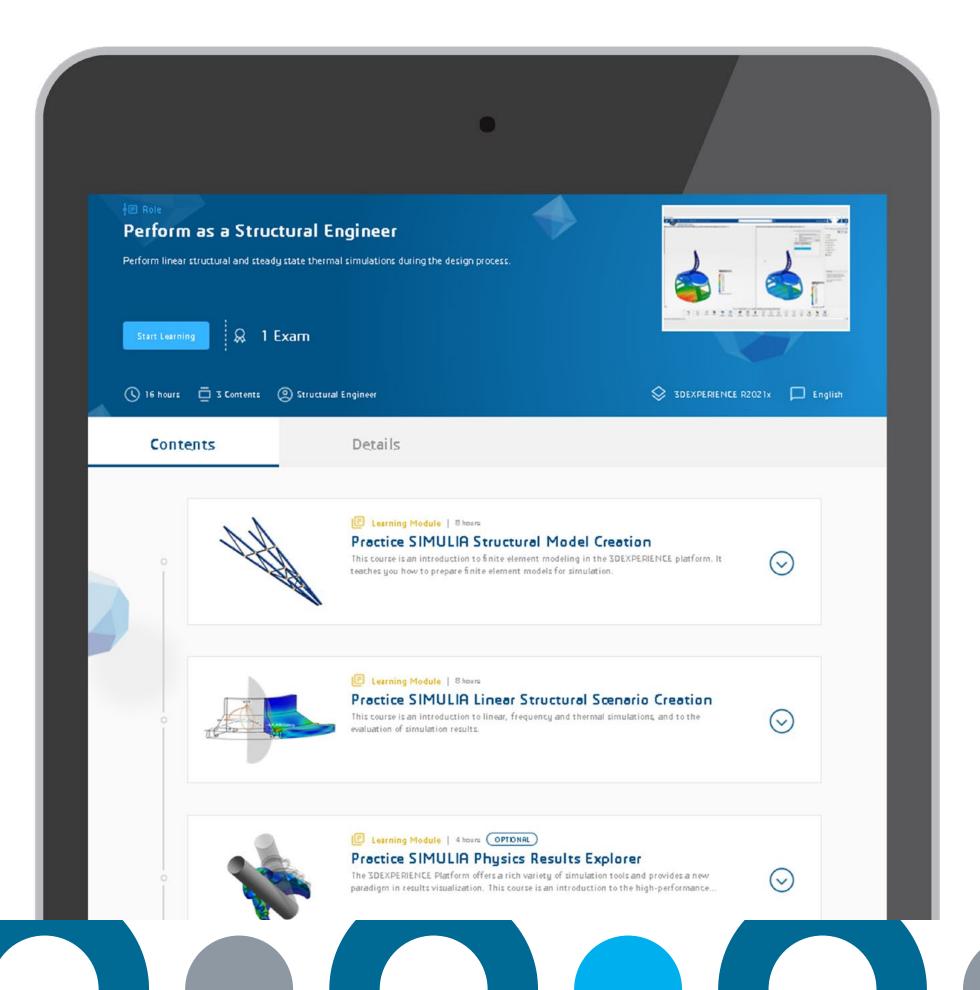
YOU'RE NO LONGER ALONE! WELCOME TO A COMMUNITY OF THOUSANDS OF EDUCATORS AND DASSAULT SYSTÈMES EXPERTS



### **LEARNING CONTENT**

Go beyond the apps! Discover the teaching and learning experiences tailored just for you. We understand you need content like videos, webinars, courses, learning paths to inspire your teaching — and we've worked hard to deliver the best yet! You can access all this through your customized dashboard, directly on the platform. On top of that, you'll be invited on a regular basis to private webinars to expand your know-how in specific topics.

• **Need some inspiration?** Explore our webinars or request a **3DEXPERIENCE** Edu HUB e-visit! You'll find motivating projects to stir your creativity and innovative pedogogical experiences.



### **LEARNING CONTENT**

- Need to adapt a current teaching activity? (i.e. Simulations on ABAQUS and CAE with CATIA V5)? We've got a range of options for you:
  - Re-use fully developed courses by teachers and professors from our committees (hundreds of hours of learning)
  - Re-use content from learning paths developed by Dassault Systèmes experts for our industry customers (plus they help students prepare for professional certifications!)
- Need to implement a new pedagogical approach like a flipclassroom, blended teaching, PBL, etc.?
  - Check out our unique repository of Edu Space learning modules and paths
  - Assemble them as you want and publish your own learning path

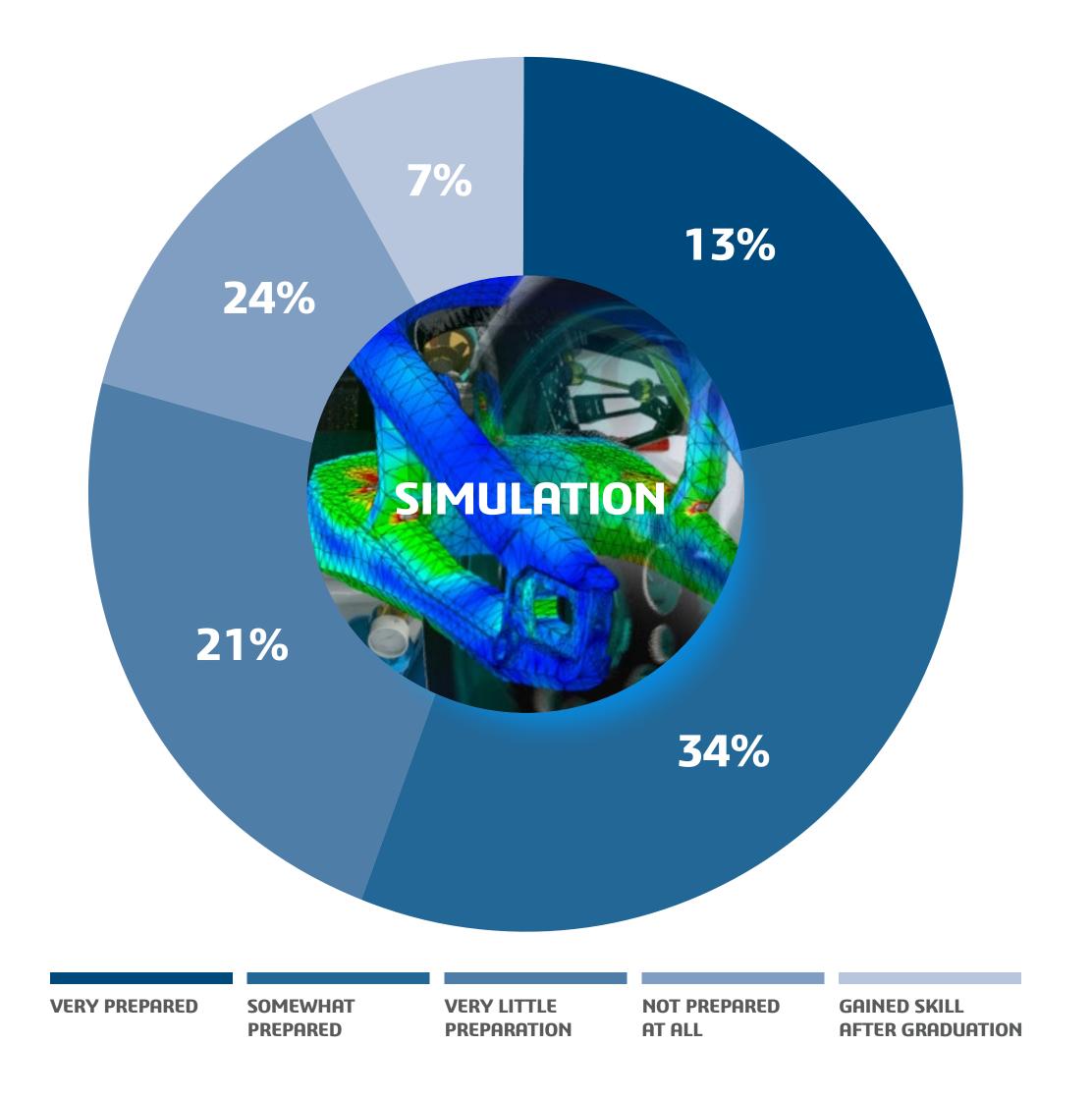


### **HEAR IT FROM THE EXPERTS!**

According to Dr. Byron PIPES, the Executive Director Indiana Manufacturing Institute at Purdue University "MODSIM represents the future of engineering because it will become pervasive across industry. This is transformational."

However, The American Society for Engineering Education states that 45% of students felt they are unprepared or have very limited knowledge about simulation. With one student even stating "We need to learn how to solve real-world engineering problems. My program put immense emphasis on memorization and math instead of use of modern tools such as simulation to solve problems".

Give your students a competitive edge for the future engineering workforce with SIMULIA on the **3DEXPERIENCE** platform!



Source: Report by ASEE, The American Society For Engineering Education

### A GLOBAL COMMUNITY

# Want to accelerate collaboration and international exposure for your students?

- You understand that you've got all the right content, now you just need connections with teachers that are also
   3DEXPERIENCE users.
- Promote turnkey capstone projects with existing student competitions and put together teams with students from around the world to allow your students to take part in a real Problem Based Learning (PBL) experience.



# Need some coaching to develop your latest hands-on exercise? Need platform best-practices?

• Then the **3DEXPERIENCE** 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!

### Need anything else?

• The **3DEXPERIENCE** Edu | Academics Community is there for that. Explain your need and we'll work on it with our community members. And if you like, they can start working directly with you.

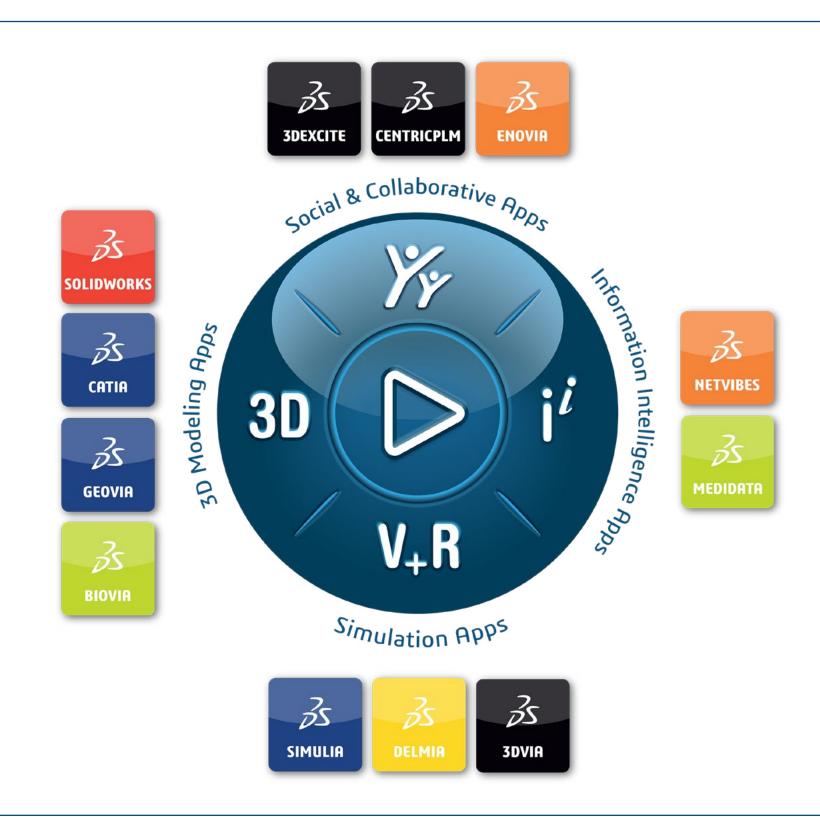
#### edu.3ds.com/en/software/3dx-aca/simulia-3dx



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

Dassault Systèmes, the **3DEXPERIENCE** 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 **3DEXPERIENCE** 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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