

3M and Ansys Train Engineers to Improve Adhesive Joint Design and Drive Sustainability

Ansys Learning Hub courses taught by 3M research scientists help engineers develop innovative designs using tapes and adhesives while eliminating material waste

/ Key Highlights

- Ansys and 3M created an advanced simulation training program, enabling engineers to enhance the design and sustainability of their products when using tapes and adhesives as part of the design
- Three industry-level learning courses for adhesive modeling and simulation are now available with planned expansion into a complete, accredited program

PITTSBURGH, PA, January 3, 2022 – <u>3M</u> (NASDAQ: MMM) and <u>Ansys</u> (NASDAQ: ANSS) launched a material modeling training program that is helping engineers refine product development processes, accelerate the design stage and eliminate material waste. Engineers are leveraging the program to better generate and analyze simulations, enhance designs and speed to market next-generation products using tape and adhesive as part of their design.

3M is the market leader in developing and supplying adhesives that are widely applied across verticals, including industrial equipment, health care, worker safety and consumer goods. Throughout the adhesive development cycle, 3M scientists and engineers use Ansys solutions to ensure adhesives maintain structural integrity.

Advanced polymeric materials require simulation to validate engineering decisions and improve sustainability across organizations. Engineers often struggle to obtain accurate engineering data on tapes and adhesives to effectively run simulations — this results in excess material waste and additional prototyping cycles, which hinders sustainability efforts. To answer this challenge, 3M and Ansys collaborated to create an industry material modeling training program that teaches engineers how to model with tape and structural adhesives, optimize adhesive and joint design, decrease waste, and improve production efficiency. In addition, 3M offers verified FE material models for their tape and adhesive products to Ansys users.

"Together with Ansys, 3M is creating a leading-edge learning environment that will educate current and future engineering workforces on how to harness powerful material science and digital engineering solutions to increase productivity, win the race to market and substantially improve environmental sustainability," said Rebecca Miller, Vice President, Structural Adhesives at 3M Industrial Adhesives and Tapes Division. "Through this program, engineers will learn core principles and processes to overcome highly complex engineering challenges."

The first phase of this program includes three industry-level learning courses for adhesive modeling and simulation that are now available in Ansys Learning Hub (ALH). ALH is an Ansys-powered learning & development program that hosts digital engineering solution training and adoption resources across various verticals. These

courses combine on-demand and instructor-led training delivered by 3M research scientists and engineers. The program will be available to all ALH customers. Over time the series will expand to form a guided learning program, spanning several major material modeling engineer competencies and will become an accredited program, embedded into the material industry's qualification process.

Ansys Learning Hub is an on-demand portal that provides continuous learning curriculum for Ansys customers including 450 Ansys training courses, over 1,200 self-paced workshops for hands-on practice, 400 hours of topical lecture videos and more than 200 virtual and live training events annually led by Ansys experts. The program also provides tools for managing educational goals and instructor-moderated breakout rooms.

"Engineers can radically reduce costly material waste and power team-wide environmental sustainability by mastering a rapid and robust solution that determines the optimum adhesive and joint design for bonding applications," said Shane Emswiler, senior vice president at Ansys. "Through this training program with 3M, we are empowering engineers to enhance their skill set, increase production efficiency, slash material waste and speed products to market."

To enroll in the upcoming Instructor-Led ALH Courses, please visit the following pages:

<u>Designing with 3M™ Tapes and Adhesives</u> <u>Introduction to modeling 3M™ Structural Adhesives using Ansys</u> <u>Introduction to modeling 3M™ Pressure-Sensitive Adhesives using Ansys</u>

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/ About Ansys

If you've ever seen a rocket launch, flown on an airplane, driven a car, used a computer, touched a mobile device, crossed a bridge or put on wearable technology, chances are you've used a product where Ansys software played a critical role in its creation. Ansys is the global leader in engineering simulation. Through our strategy of Pervasive Engineering Simulation, we help the world's most innovative companies deliver radically better products to their customers. By offering the best and broadest portfolio of engineering simulation software, we help them solve the most complex design challenges and create products limited only by imagination. Founded in 1970, Ansys is headquartered south of Pittsburgh, Pennsylvania, U.S.A. Visit www.ansys.com for more information.

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