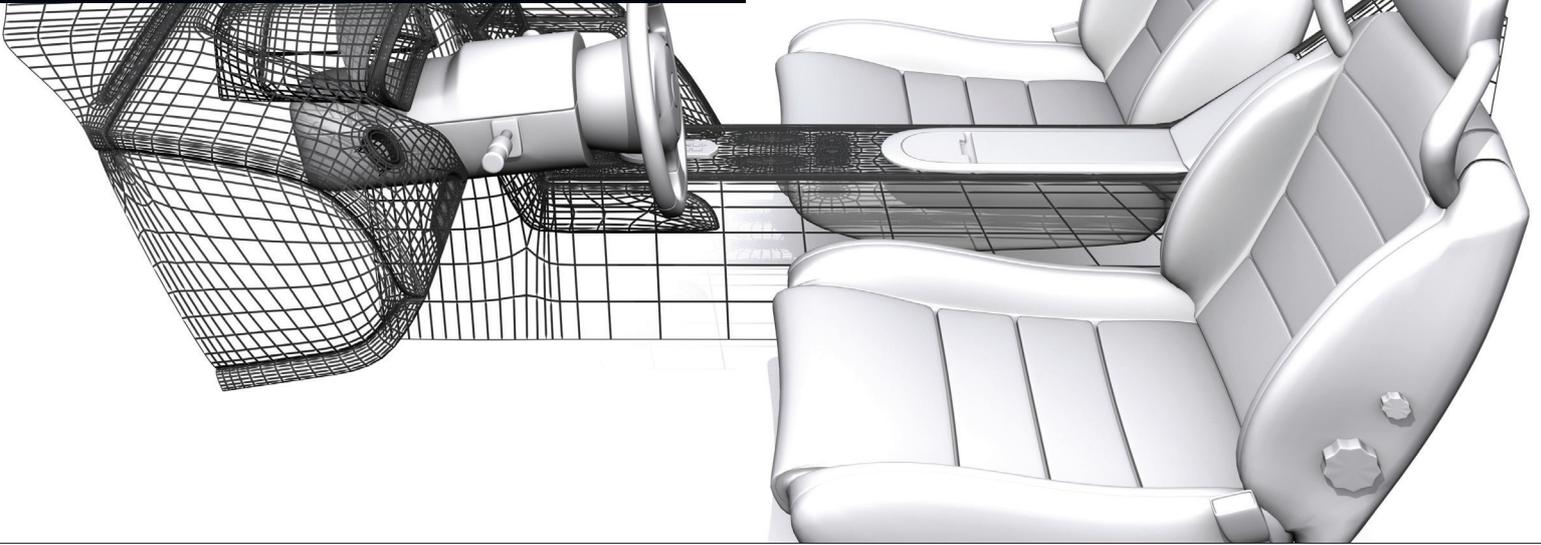


TECHNISCHE UNIVERSITÄT DRESDEN

TRAINING STUDENTS TO INNOVATE



PROFILE

Founded in 1828, Technische Universität Dresden (TU Dresden) is among the top universities in Germany and Europe. It was identified as one of the eleven Universities of Excellence in Germany, confirming its reputation as one of the country's premier institutions for research and study. TU Dresden's Institute of Textile Machinery and High Performance Material Technology (ITM) was created in 1925. One of the department's priorities is providing students with a high-quality, research-oriented curriculum and teaching them how to transfer research results into practical solutions.

HIGHLIGHT

ITM offers students a solid, scientific foundation and up-to-date technical experience based on the newest in-house and external research on textile materials and development, as well as textile and ready-made technology methods and machines. The school has been a Lectra partner since 2004, and a privilege partner since 2010. "It is a great pleasure for us to have such a long-standing relationship with Lectra. Their support includes regular software updates which ensure that our students have access to the latest industry technology," says Lina Girdauskaite, a R&D Engineer at TU Dresden.

LOCATION

Dresden, Germany

LECTRA SOLUTIONS

DesignConcept

In order to understand the full scope of the application of ready-made technology, students complete a range of projects using Lectra's DesignConcept 2D/3D software solution. The school chose to use Lectra's DesignConcept software suite because "we have several interdisciplinary projects with the airplane and automotive industry, where we benefit greatly from using DesignConcept 3D. With the help of Lectra's software package, students are able to manage their projects at a very high level with professional results," says Professor Sybille Krzywinski.

When students begin using the software, they are fascinated with its versatility and user-friendliness. "From car interiors to robot covers and other technical textiles products, the numerous applications of Lectra's software suite are incredible," says Nazanin Ansari, a student in the Master's program.

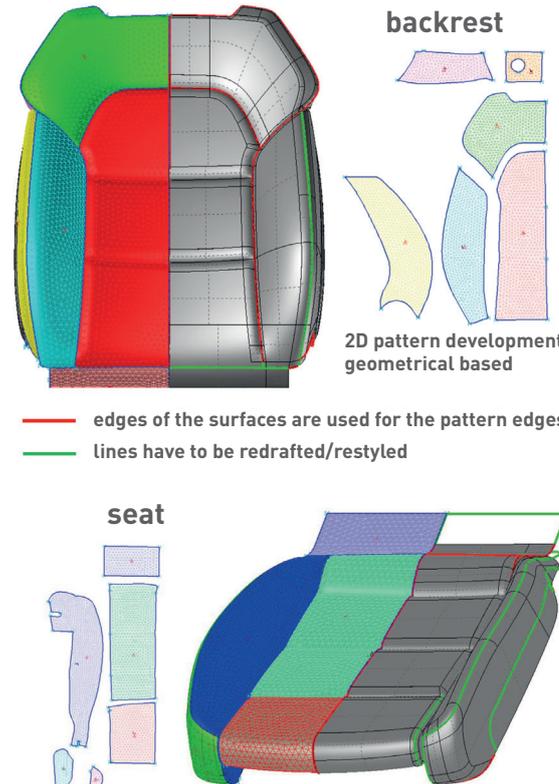
Lectra's DesignConcept solution presents a particular advantage for students when working on automotive and airplane-related assignments. "The great use of DesignConcept 3D is the ability to create real pattern cuts, even for very complex shapes, generate feasibility simulations, verify in 3D the geometrical features of the pattern cut and then flatten them into 2D," Professor Krzywinski explains. By entering fabric properties into the software database, students are certain that the design is adapted to the chosen material's geometrical and mechanical properties.

“ With DesignConcept, students can create different designs and change them very quickly. ”

Professor Krzywinski believes Lectra's 3D technology provides great added value for students by allowing them to see the end result of their creations before production starts. "Students can create different designs and change them very quickly," she adds. Students also gain an understanding of ways to accelerate the product development chain. With DesignConcept, they are able to minimize the trial and error phase during the product development stage, reduce material waste and quickly achieve precise results.

Professor Krzywinski is confident that working with Lectra's solution will enhance students' competitiveness in the professional market. The combination of theoretical and practical knowledge prepares students for the challenges of the technology industry.

STUDENT CORNER
Designing for the Future



backrest

2D pattern development, geometrical based

— edges of the surfaces are used for the pattern edges
— lines have to be redrafted/restyled

seat

© Technische Universität Dresden

Traditionally, pattern development of car seat covers is done manually. Upon completion of a car seat cover development project, students are able to virtually design the outer cover and inner components, calculate costs and optimize material use. Familiarity with Lectra's virtual prototyping software prepares ITM's students for the future of the automotive industry.

TU Dresden's large international student population means these skills will be spread around the world when these students return to their home countries. "Lectra's 3D software is so useful that working with it will help me find a job in many sectors of the industry," concludes Nazanin Ansari.



About Lectra

Lectra is the world leader in integrated technology solutions that automate, streamline and accelerate product design, development and manufacturing processes for industries using soft materials. Lectra develops the most advanced specialized software and cutting systems and provides associated services to a broad array of markets including fashion (apparel, accessories, footwear), automotive (car seats and interiors, airbags), furniture, as well as a wide variety of other market sectors, such as aeronautical and marine industries, wind power and personal protective equipment. Lectra serves 23,000 customers in more than 100 countries with 1,400 employees. The company is listed on Euronext.