STEM Education Works®

When Jim Schacht walks into the new IN-MaC Design and Innovation Studio, he doesn't see just a lab full of gadgets. He sees future employees.

His enthusiasm for this project was evident from the very beginning. A ribbon-cutting ceremony was held to officially open the studio. "We are today launching our new Purdue University IN-MaC STEM Design and Innovation studio," said Schacht, who leads corporate responsibility efforts at Cummins. "We are so excited about the potential here."

For a company focused on advanced engineering and manufacturing, the studio is less about today's ribbon-cutting and more about who will be ready to work 10-15 years from now.

WHO THEY ARE

Cummins Inc., founded in 1919 and headquartered in Columbus, Indiana, is a global power leader that designs, manufactures, distributes, and services advanced powertrains and related technologies, including diesel, natural gas, electric, and hybrid systems.

The company serves customers in approximately 190 countries and territories through a broad network of distributors and dealers, supporting industries from transportation to power generation.

THEIR GOALS

Cummins Inc.'s primary goal was to invest in the "workforce of the future" by giving students early, sustained exposure to STEM fundamentals in a way that feels exciting and relevant.

"When we look at the needs of the future, specifically the workforce of the future, we know we have to start today developing the skills that will be needed for the jobs of tomorrow," says Jim Schacht.

STEM Education Works®

The Design and Innovation Studio is structured as a K–12 experience so students can start in elementary grades and build skills all the way through high school, strengthening both interest and competency over time.

“This is a K-12 design studio to teach kids fundamentals of STEM education combined with inspiration,” Schacht explains. “Because it’s hands-on experience in labs, in robotics, in 3D printing … they learn from the very beginning, and then they stay with it with a built-in curriculum that can take them all the way through high school.”

For Cummins Inc., success means more students excited about STEM, more young people who understand how modern manufacturing and engineering work, and a stronger regional talent pipeline.

THEIR SOLUTION

Cummins Inc. partnered with Purdue’s Indiana Manufacturing Competitiveness Center (IN-MaC) and STEM Education Works to launch a dedicated Design and Innovation Studio for K–12 students. IN-MaC and STEM Education Works provided the core technologies, curriculum, and training to make hands-on STEM learning more accessible to both students and educators.

The studio combines:

- A fully-equipped STEM lab with robotics, 3D printing, and coding tools
- Age-appropriate, standards-aligned curriculum that scaffolds from kindergarten through high school
- Professional development and support so teachers can confidently run high-tech lessons

“And that is what exists in the room that I’m standing in,” Schacht says. “For a company like ours, worried about the workforce of the future, this is where you start, with kids being excited about STEM and learning the fundamentals from kindergarten to a workforce.”

THE CUMMINS INC. DESIGN AND INNOVATION STUDIO

The Cummins Inc. Design and Innovation Studio is designed as a long-term asset for local schools and community partners, not just a one-time event. Through the studio, K–12 students can:

- Visit for field trips, projects, and camps focused on robotics, 3D printing, and coding
- Experience “real” manufacturing and engineering tools in a safe, age-appropriate setting
- Connect classroom math and science to industry-relevant applications

As Cummins Inc. continues to invest in workforce initiatives, the studio model provides a scalable way to reach more schools and more students over time, aligned with IN-MaC’s broader network of Design and Innovation Studios across Indiana.

“We are so excited about the potential here … and so we’re super excited to be here today,” Schacht says.

PARTNERING WITH STEM EDUCATION WORKS

Cummins Inc., Purdue IN-MaC, and STEM Education Works worked together to bring a world-class STEM environment to students in Indiana, creating a Design and Innovation Studio that blends industry-relevant technology with hands-on, career-connected learning.

STEM Education Works®

The Cummins Design and Innovation Studio includes state-of-the-art STEM technologies designed to cultivate collaborative, inquiry-based STEM learning opportunities, from robotics and 3D printing to coding and design. With integrated curriculum and training, teachers can help students explore STEM concepts more deeply and see how those skills connect to real jobs in companies like Cummins Inc.

For companies considering a similar partnership, the Cummins experience highlights how working with STEM Education Works and IN-MaC can turn a workforce concern into a concrete, student-facing solution. As Schacht emphasizes, this is “where you start” when you want young people ready for the jobs of tomorrow.

With the Cummins Inc. Design and Innovation Studio, students in Indiana can better explore STEM concepts through authentic tools and projects, making it the first step toward inspiring their passion for STEM, learning, and future careers.