We believe many kids who are uninterested in learning math for math’s sake can be inspired to develop STEM skills when they get a chance to see how they’re employed in the real world.

For middle and high school students, we:

- Offer career camps and robotics competitions that provide hands-on fun and experiences that show how STEM skills can be used in real-world jobs.
- Develop career pathways that allow students to earn while they learn - from diplomas and in-demand certifications, to 2-year, 4-year and post-graduate degrees.
- Host tours of manufacturing, career expos and other events that help students see the wide variety of careers available to them in specific industries.

For more information, visit the Minnesota State Centers of Excellence main office website (minnstate.edu/coe) or call 651-201-1672 to explore all the available opportunities and career paths in each industry.

NITRO-X: This is not your parent’s summer camp — or is it?

In the last 30 years, many parents have become convinced that diplomas and degrees from technical colleges won’t prepare their children for high-paying jobs. The airline pilots and master auto technicians who took advantage of Minnesota State programs and went on to earn more than $100,000 per year would like to disagree.

Jon Friton, an automotive technology instructor at Minnesota State’s Ridgewater College, recalls how horrified his parents, teachers and guidance counselors were when he told them he wanted to repair cars for a living. “You’re better that than that,” he was told. He surprised them by going on to earn $120,000 per year working as an automotive master technician before becoming an instructor where he earns less than half that amount.

“Being an educator may have more prestige, but my automotive career certainly paid better,” says Friton. “In both careers I’ve done work I loved – and what parent wouldn’t want that for their child?”

When the Minnesota State Transportation Center of Excellence approached him about hosting a Nitro-X summer camp at Ridgewater College, he was immediately on board.
Nitro-X Summer Camps — a learning experience for students and their families

Nitro-X is a summer camp where middle school campers work on remote controlled cars. They learn about how vehicles work, build their confidence with technical skills, work in teams to develop life and employability skills, gain exposure to industry by going on tours of local businesses and have fun showing off their skills at the end of the week with a race.

The Transportation Center developed the Nitro-X concept and helped launch the first camp at St. Cloud State University in 2015. More camps at other Minnesota State campuses were added each summer. In 2019, over 60 students attended Nitro-X camps hosted by six Minnesota State colleges around the state.

Friton only began hosting the camp on the Ridgewater College campus in Wilmar two years ago, but he can already tell that Nitro-X is having an impact, “None of the middle school kids who attended our camps are old enough yet to have started college or chosen careers, but several have approached me about coming back to be junior leaders for the younger kids. Once they’ve experienced it, they want to come back to the shop.”

Bringing home the benefits of transportation careers

Field trips to auto dealerships during Nitro-X don’t just expose campers to technicians working in the service bay, they also meet automotive professionals in a wide variety of careers from warranty administrators to new car salespeople and finance managers.

At the end of the day, students bring home the perspective that working in the automotive industry is fun, challenging and might something they’d might like to do. “The Transportation Center has been working to create some cohesion about recruiting students into automotive programs at Minnesota State,” said Friton. “Nitro-X has really helped that effort gain traction.”