The John C. Dunham STEM Partnership School will serve students in grades three through eight from the East Aurora, Indian Prairie and West Aurora school districts. The school is expected to prepare the community’s talented young learners in mathematics and science in ways that will ignite, sustain and increase their interest, motivation and achievement. Their achievements will keep the doors open to future opportunities and increase the likelihood that these students will become leaders in STEM fields.

stem.aurora.edu
As adults, we do not segment our time into the subject areas we studied in school. Rather, these areas are integrated and applied into the many facets of our lives. The curriculum for the John C. Dunham STEM Partnership School will be implemented in a similar way. Reading, writing, mathematics, science, social studies, art, music, health and physical activity will be integrated around six topic areas that will spiral through the grades. The topic areas were specifically derived from the Next Generation Science Standards. They include: (1) matter and energy; (2) forces and motion; (3) structure and function of organisms; (4) ecosystems and adaptations; (5) geology and space; and (6) weather, climate and human impact.

The lessons created around these overarching topics ask essential questions that allow students to investigate, analyze, solve problems, and work in teams as they acquire, integrate and apply new knowledge. The school’s not-for-profit partners and corporate engineers and staff will continue to be involved in the STEM Partnership School, serving as instructional guides and providing industry and world connections to learning. Each unit will be aligned to the Next Generation Science Standards, common core standards in English/language arts and mathematics, to the supply chain process, to a workforce/corporate framework, and to the Illinois Pathways.

Student learning focused on these essential questions will be assessed through teacher-made tests, criterion-referenced tests, nationally normed tests, state assessments and project-based assessments. Student progress will be reported through a STEM Partnership School report card and biannual parent conferences.

In addition to student workshop space, students will learn in science laboratories in the areas of (1) energy education and exploration; (2) material science; (3) field studies; (4) manufacturing, modeling and design; (5) geology, energy and resources sustainability; and (6) biomedicine, which are part of the STEM Partnership School. Technology will be an important learning tool used by students, faculty, not-for-profit and corporate partners.

All teaching and learning within the school will meet Illinois State Board of Education requirements. Support will be provided to assist students with unique learning needs.