Northern Kane County REGION 110
EDUCATION THAT WORKS

REGIONAL CAREER PATHWAY PROGRAM

The Regional Career Pathways programs are designed to offer high-quality Career and Technical Education programs to students who are unable to access programs in their home districts. All of the selected programs are nationally recognized and offer students the opportunity to earn industry-recognized credentials before graduation. Any student residing within the boundaries of Community Unit School District 300, Central Community Unit School District 301, St. Charles Community Unit School District 303, or School District U-46 who is in good standing and meets program requirements is eligible to apply for admission to the program.

Transportation: Provided by each student's home school district **Cost: No additional cost to students/families**

PRECISION MANUFACTURING

The Precision Manufacturing program is housed in School District U-46 at both South Elgin High School and Streamwood High School. The program is accredited through the National Institute of Metalworking Skills.

PRODUCTION TECHNOLOGY

Grade Level: 10th **Length:** Year-long 1 period class

Prerequisite: None

Content: This course provides entry-level skills in the manufacturing and design fields. Topics include safety, blueprint reading, precision- and semi-precision measurement, lathe and mill. Students will be actively engaged in project-based hands-on activities. Theory and practices used in the industry will be taught. This course leads to Precision Manufacturing, Advanced Precision Manufacturing, post-secondary machine tool programs and careers in manufacturing technology. Skills learned will prepare students for industry-supported certifications such as the National Institute for Metalworking Skills (NIMS) (https://www.nims-skills.org/). Additional costs for projects may apply.

PRECISION MANUFACTURING

Grade Level: 11th **Length:** Year-long 2 period class

Prerequisite: Production Technology

Content: This course provides entry-level skills in the manufacturing and design fields. Topics include safety, blueprint reading, precision- and semi-precision measurement, lathe, mill, surface grinder, and Computer Numerical Control (CNC) machines. Students will be actively engaged in project-based hands-on activities. Theory and practices used in the industry will be taught. This course leads to Advanced Precision Manufacturing, post-secondary machine tool programs and careers in manufacturing technology. Skills learned will prepare students for industry-supported certifications such as the National Institute for Metalworking Skills (NIMS) (https://www.nims-skills.org/). Additional costs for projects may apply.

ADVANCED PRECISION MANUFACTURING

Grade Level: 12th **Length:** Year-long 2 period class

Prerequisite: Precision Manufacturing

Content: This course builds on the fundamental skills learned in the Precision Manufacturing course. Students will advance their techniques and build additional skills on manual up, operation, manual and CAM programming will be taught. Additional NIMS (https://www.nims-skills.org/) certification will drive the project-based hands-on activities offered in this career path. Additional costs for projects may apply.

INDUSTRY CREDENTIALS AVAILABLE

Measurement, Materials & Safety, Job Planning, Benchwork & Layout, Manual Milling Skills I, Turning Operations: Turning Between Centers, Turning Operations: Turning Chucking Skills, Grinding Skills I, Drill Press Skills I, CNC Turning: Programming Setup & Operations, CNC Milling: Programming Setup & Operations, CNC Turning: Operations, CNC Milling: Operations

Manufacturing