

Career & Technical Course Offerings through the College Express Program

ThyssenKrupp Youth Apprenticeship Program (NIMS)

The NIMS (National Institute for Metalworking Skills) program is offered during the afternoon College Express. From grinders to lathes, from tools to trade, students will learn the latest metalworking skills used in the machining industry to prepare them for the NIMS certification. This coursework will give the students on the job experience at a local/global manufacturing company. In addition, the NIMS program works hand-in-hand with the ThyssenKrupp Youth Apprenticeship Program where qualifying students will have an amazing opportunity to participate in a paid internship at ThyssenKrupp.

Students that earn the NIMS certification can earn employment as a CNC Milling Operator, Machinist, or Tool and Dye Maker. Students enrolled in the NIMS program can earn college credit during high school and will take the following classes if they complete both years of the program:

MFRG 160 Machining I (Fall) 3 hours

This course is offered for first year NIMS students. This course is an introduction to machine tools and processes associated with the machine trade. Students are taught the fundamentals of shop safety, the use of metal hand tool, bench and layout work and the skills needed for the preparation for metal removal processes. Machine shop measurements using precision measuring devices are stressed in the course.

Matt 132 Technical math (Fall) 4 hours

This course is offered for first year NIMS students. Review of arithmetical processes with special topics in measurement, formula usage, solution of simple equations, applied geometry, and ration and proportion.

MFRG 161 Machining II (Spring) 3 hours

This course is offered for first year NIMS students. This course is an introduction to the lathe engine. Students are taught the fundamentals of shop safety and skills associated with the operation of the lathe engine for metal removal processes.

ELEC 104 Key Principles of Advanced Manufacturing (Summer) 3 hours

This course is offered for first year NIMS students. An explanation of requirements and recommended programs for improvement of job safety and health under current Federal and State mandates. Emphasis given to preventive program procedures.

MFRG 162 Machining III (Fall) 3 hours

This course is offered for second year NIMS students. This course is an introduction to the mill and surface grinder. Students are taught the fundamentals of shop safety and skills associated with the operation of the mill and surface grinder for metal removal processes.

MFRG 163 Machining IV (Spring) 3 hours

This course is offered for second year NIMS students. This course will allow the student to demonstrate and advance the skills acquired in Machining I, II and III through the development of an independent project. Students are further prepared for NIMS testing.

MFRG 290 Special Project (Summer) 2 hours

This course is an individual study for second year NIMS students.

Education for Employment 400

VVEDS

Vermilion Vocational Education Delivery System



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