

FRESHMEN FOUNDATIONS

Construction Foundations 1/2 credit

Length of course: 1 Sem.

Students will learn principles in basic safety, construction math, hand and power tool use and operation, blueprint reading, material handling, communication and employability skills. An emphasis will be placed on safe and green construction practices.

Digital Design Foundations 1/2 credit

Length of course: 1 Sem.

The worlds of art designers, performers and media artists intersect historically, culturally and aesthetically. In this introductory course for the Arts and In the communication Career Field, students learn the basics of performance, design, audio, and video. They review brochures, photographs, news stories, videos and other products common to the visual, media and performing arts industries

Engineering Foundation 1/2 credit

Length of course: 1 Sem.

Students in the pre-engineering programs acquire knowledge and skills in problem solving, teamwork and innovation. Students explore STEM careers as they participate in a project-based learning process, designed to challenge and engage the natural curiosity and imagination of middle school students. Teams design and test their ideas using modeling, automation, robotics, mechanical and computer control systems, while exploring energy and the environment.

HVAC/R Foundations 1/2 credit

Length of course: 1 Sem.

Students learn physical principles and fundamental skills across mechanical systems in construction. Students will select materials and assemble and test basic electrical circuits. Students will select materials and assemble simple copper and plastic plumbing applications for supply and drains. They will maintain electric motors, electric fixtures, and plumbing fixtures. Students will be able to select and install basic ductwork components and learn the operation and maintenance of heating and cooling equipment.

Manufacturing Foundations 1/2 credit

Length of course: 1 Sem.

Students will learn the production processes applied across manufacturing operations. Students will be able to demonstrate a broad array of technical skills with an emphasis given to quality practices, measurement, maintenance and safety.

Teacher Academy Foundations 1/2 credit

Length of course: 1 Sem.

Students will examine the goals of education and training as well as environments in which education and training are delivered. They will identify learners' and stakeholders' roles, rights, and responsibilities in educational systems; assess legal and ethical issues related to education; and determine careers of interest in education and training. Employability skills and state requirements for becoming an educator will also be addressed.

Some courses may not be offered every year.