Coding and Robotics Flow

K-2 Area

Students will get exposure to the basics of coding and robotics. Skills: creativity and enrichment The K-12 robotics and coding program will allow all students the access to technology in a high interest area. Students will learn practical skills as well as build higher level thinking skills that they can use in other areas. The culminating event of the robotics program will be the certification offering that is available at the high school area. By offering this program across all grade levels the students will be given the opportunity to gain mastery in the field of robotics. This comprehensive program will also have applications for gifted and talented and afterschool programs.

3-5 Area Middle School **High School** Students will learn block Student will continue their Students will continue their coding and works with various work with block coding and work with python coding. They robots. They will problem will master higher level begin their transition to python solve how to build code and based coding. Students will functions in coding. They will use more advanced coding to work to master the python design solutions to the given problem. problem solve a variety of coding language and will be challenges. provided the opportunity to Skills: problem solving, basic earn a certification in python block coding, basic robotics, Skills:problem solving, block coding and creative thinking coding, python coding, engineering and design Skills: problem solving, higher level thinking, python coding, engineering and design

CAD Design and 3-D Printing Flow

K-2 Area

Students will get exposure to the basics of 3-D deign. Skills: creativity and enrichment The K-12 CAD Design and 3-D Printing program will allow all students the access to technology in a high interest area. Students will learn practical skills as well as build higher level thinking skills that they can use in other areas. The culminating event of the CAD program will be the certification offering that is available at the high school area. By offering this program across all grade levels the students will be given the opportunity to gain mastery in the field of CAD Design. This comprehensive program will also have applications for gifted and talented and afterschool programs.

3-5 Area	Middle School	High School
Students will learn the basics of 3 dimensional design. They will build projects according to specifications and work on high interest projects with creative design processes.	Students will continue their work with 3-D printing and CAD design to problem solve a variety of challenges. Skills:problem solving, engineering and design	Student will continue their work with CAD design. They will master higher level functions in 3-D printing. They will be provided the opportunity to earn a certification in 3D Design
Skills: problem solving, basic 3-D design, 3-D printing, and creative thinking		Skills: problem solving, higher level thinking, engineering and design