WCL STEAM Outreach Programs

WCL STEAM Outreach programs available to schools and homeschool groups in our service area. All supplies and equipment provided by WCL. Programs can also be held at the Colfax branch of WCL in the TEK Center.

Coding and robotics:

Coding Camp 1: Light Sequencing with Arduino Uno

During this 2 hour camp students will configure electronic circuit and write the code to complete 5 LED light sequencing experiments using C ++ language and Arduino Uno microcontroller.

Ages 12 and up, maximum class size 20, 2 hour class

Coding Camp 2: RedBot line patterning robot

During this 2 hour camp students will write code to maneuver SparkFun RedBot through 5 line following experiments using SparkFun Redboard microcontroller.

Ages 12 and up, maximum class size 20, 2 hour class

Coding Camp 3: Arduino Sound projects

During this 2 hour camp students write code to complete sound experiments using Arduino Uno.

Ages 12 and up, maximum class size 20, 2 hour class

Ozobot Bit

Mini robots invade this class! Students draw color combination codes to command line following Ozobots. Students then advance to control robots through drag and drop coding in Blockly (Javascript). Once code is complete students flash code to robot and watch their program run.

Grades K-5, maximum class size 20, 1 & 2 hour draw and digital programs available, 5 week- 1 hour per week digital programs available to explore all 5 levels of Blockly coding.

Ozobot EVO

This class explores robotics and coding just like in Ozobot Bit class but with robots that have more functionality, lights, sound, and proximity sensors.

Grades 6 and up, maximum class size 20, 1 & 2 hour draw and digital programs available, 5 week- 1 hour per week digital programs available to explore all 5 levels of Blockly coding.

Lego Mindstorms EV3

Students design, build and program their own robotic Lego creations. Once build is complete students use drag and drop code to program robot movements to complete challenges, mazes and more.

Grades 4-12, maximum class size 16 (working in pairs), 2 hour program, Consecutive multi week programs available to explore advanced coding.

Micro:bit

The micro:bit is a pocket-sized computer that will allow students to get creative with digital technology. Students will code using Microsoft MakeCode (Javascript) and/or Python Editor to create robots and musical instruments, control games and 25 LED light messages and More!

Grades 4-12, maximum class size 30. 2 hour program, Consecutive multi week programs available.

Electronic Circuits:

littleBits

Magnetic electronic building blocks for creating inventions big and small. Create an ArtBot, a 3 wheeler, a windmill and so much more. Add recycled materials or Legos and the possibilities are endless.

Grades K-12, maximum class size 16 (working in pairs), 1 & 2 hour classes available

Snap Circuits

Students build working electronic circuits with snap together components. This class covers all topics of electricity and electronics with real world applications and problem solving.

Grades K-12, maximum class size 20 (working in pairs), 1 & 2 hour classes available

Hot Wheels Speedometry

Hands on Hot Wheel fun while exploring the concepts of energy, force and motion. Students also learn scientific and engineering practices such as analyzing and interpreting data.

Grades K-12, maximum class size 20, 1 & 2 hour classes available

Call Nichole Kopp 509-397-4366 to schedule program.