Open to students in grades K – 12, students will participate collaboratively in a variety of construction and puzzle solving challenges using the most recent version of the popular video game Minecraft (Bedrock Edition). Students will work to construct communities, learn about the importance of infrastructure, how to properly design buildings and towns, composting and gardening, as well as basic electrical wiring using a system called Redstone. Servers will be running on a Monday, Wednesday, Friday schedule sometime between 1 and 5 pm, depending on the age group. Minecraft (Bedrock) is cross-console compatible, and can be run on Windows 10 PC, Xbox One, Nintendo Switch, PlayStation 4, mobile phone, tablet, and iPad systems.

Youth in the K – 5 grade group are creating a “zoo.” The zoo has two components, the “peaceful” and the “hostile” creatures. Before any animals can be brought in, the team must engineer: enclosures and gates, multiple concessions stands for food and other goods, an aviary, and a reptile building. The creatures for the “peaceful” section of the zoo consist of cows, sheep, pigs, llamas, and other similar animals. The “hostile” section encloses ravagers, skeletons, ocelots, zombie horses, and other analogous creatures. This project is played in “survival mode,” so that participants must gather building materials in addition to capturing and caring for the animal inhabitants. Students navigate the world using the (X, Y) coordinates that appear on their screen as they travel.

Team members of the 6 – 8 grade group have built multiple shorter projects. An example of a challenge they were given was to each design a house that had to be exactly 7x7 blocks in length and width. A crafting table, a furnace, a chest, a bed, and one “non-decoration” item used as décor were the items that must be in each house. Upon completion, each participant was gifted a pet of their choice, in which they also got to choose a name. The current endeavor the group is undertaking is the design and creation of an amusement park. This project usually operates in “creative mode,” which gives players and unlimited amount of resources of most objects in the game.

The high school group, for grades 9-12, have been alternating between building challenges in which they construct structures that create obstacles and difficulties for each other, and challenges that require collaboratively completing a quest or an adventure-type task, isolated on an island with limited supply...
access. An example that describes the first variety of challenge is an obstacle course. Each student designed and built a portion of an overall obstacle course. Once complete, the participants raced each other to see who could complete the course first. The winner of the course was allowed to choose which resource out of a few options to bring to the island. Their projects are most commonly conducted in “survival” mode.

For more on this academy, registration, and project leader contact information, please visit https://reg.cce.cornell.edu/20204HMinecraft_222.