K-ROCKETS

Engineering & Technology School

105 West Road, Ellington, CT 06029, 860-375-3042, www.k-rockets.com

SUMMER PROGRAMS

1) June 17-21 : Game Zone: Ages: 6-13 (Grades 1-8)

Focus: Collaboration & Team building, Strategic thinking, Fun

All work and no play? No way!! The first week of camp is definitely all things kids love. They will learn and play strategic board games - Chess, Monopoly, Scrabble, Risk, Clue to name a few. Kids will also enjoy their favorite video games - Minecraft, Rocket League, FIFA, Forza, Madden, and so much more.

To limit the screen time, Kids will spend no more than 30 minutes at a stretch playing video games, with a maximum of 2 hours per day.

2) June 24-28 : CSI-Ellington: Ages: 6-13 (Grades 1-8)

Focus: Analysis, Logical thinking, Critial observations, Draw conclusions

Twist in the tale with forensic engineering. This time, the location is Ellington, and YOU are the investigators. Help solve the mysteries that have recently surrounded the town. Students will encounter hidden clues, evidence and suspicious characters. They must use their scientific observations, sample examinations, analysis, lab work, testing, interviews, and field work to catch the culprit/s.

3) July 1-5 : Minecraft Mod Design: Ages: 6-13 (Grades 1-8)

Focus: Creativity, Collaboration, Programming, Problem solving

This course is specially inspired by kids, who love to play Minecraft. Students will learn how to manipulate every aspect of the Minecraft world, and create their own mini-games. Students will explore the latest Vox-L engine to test their mods and games.

4) July 8-12 : Lego Engineering : Ages: 6-13 (Grades 1-8)

Focus: Design, Creativity, Engineering concepts, Team work

Machines and mechanisms come to life with LEGO bricks and help you discover how the real world works. Students will come across engineering principles such as gear trains, worm drives, and loading constraints. Mechanical and structural build-ups of the mechanisms that we see around us,will help students develop

analytical skills that are necessary while designing and testing their creations.

5) July 15-19 : Coding - Game Design - I : Ages: 6-13 (Grades 1-8)

Focus: Critical thinking, Problem solving, Math, Persistence

Come and explore the power of computer programming using state of the art tools and technology. Run with your imagination to create cool games, design characters and generate music with fun and animated activities. Students learn at their own pace in this course. Each student will be evaluated prior to assigning a competency level to maximize the program effectiveness.

Returning campers will work on new projects per their skill level.

6) July 22-26 : A Pirate's Life-Treasure Hunt: Ages: 6-9 (Grades 1-4)

Focus: Science, Survival, Facing challenges, Critical thinking, Optimizing solutions

Students transform into pirates & work together to navigate the mysteries of the ocean. Focus will be on hands-on, scientific experiments and critical thinking. Students must work together to accomplish challenging tasks such as building catapult, tying knots, making maps, and following them to hidden treasure!

7) July 22-26 : Need for Speed: Ages: 10-13 (Grades 5-8)

Focus: Science, Facing challenges, Critical thinking, Optimizing solutions

Put your racing gears (or, thinking caps) on to enjoy this thrilling ride. You must think fast and apply scientific principles to win the fast-paced challenges that are sent your way. Physics is disguised in the form of this fun-filled program - use your critical thinking skills to explore technical subjects such as laws of conservation of energy and friction in this competitive program.

8) July 29-Aug 2 : Robotics: Ages: 6-13 (Grades 1-8)

Focus: Technology, Creativity, Collaboration, Problem Solving, Innovation

This program will cover everything robotics - starting from "what is a robot" to programming a robot, to creating your own. Learn robotic concepts, operating principles and algorithms. Students will learn machine and electronic foundation as they build multiple robots including a Line Tracer, Avoider, Battle Robot, Soccer Robot, and more.

Returning campers will work on new projects per their skill level.

9) Aug 5-9 : Mad Science & Fun Math: Ages: 6-9 (Grades 1-4)

Focus: Scientific experiments, Collaboration, STEM foundation

Children will become scientists for a week and create funky experiments. Join the scientific journey to mind-blowing experiments - sunset in a tube, colorful volcano, magic ooze and much more.

Math will never be a boring subject after this. Kids will be introduced to math in a fun way using all the founding concepts - measurement, algebra, number sense, geometry and data/probability.

10) Aug 5-9 : Video Production: Ages: 10-13 (Grades 5-8)

Focus: Technology, Creativity, Collaboration, Literature

Students will learn all the aspects of film-making - history, story-telling, composition, tech advancements, and genres. They will learn all the technicalities in making digital videos - importance of lighting, audio and editing. The final release will be their creativity coming to life with a film production!

11) Aug 12-16 : Coding-Game Design: Ages: 6-13 (Grades 1-8)

Focus: Critical thinking, Problem solving, Math, Persistence

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Returning campers will work on new projects per their skill level.

12) Aug 19-23 : Game Zone: Ages: 6-13 (Grades 1-8)

Focus: Collaboration & Team building, Strategic thinking, Fun

All work and no play? No way!! The last week of camp is back with all the fun times. Kids will learn and play strategic board games - Chess, Monopoly, Scrabble, Risk, Clue to name a few. Kids will also enjoy their favorite video games - Minecraft, FIFA, Forza, Madden, Rocket League and so much more.

To limit the screen time, Kids will spend no more than 30 minutes at a stretch playing video games, with a maximum of 2 hours per day.