Engineering Science Quest
UNIVERSITY OF WATERLOO

Voyager A

Sneak Peek!

Micro: Pet

What's better than a furry friend? A Micro:bit computer friend with light up faces! Use Micro:bit's block code to create an adorable tamagotchi pet.

Faculty Frenzy

From engineering to the arts, the University of Waterloo has a lot to offer. Faculty Frenzy is an exciting scavenger hunt across campus to explore its coolest highlights!

Cultured Surfaces

Become a microbiologist for the day! Swab different surfaces, culture samples on agar plates, and discover just how much microscopic life surrounds us!

Nite Lite

Get your goggles on, it's time for a soldering lab! Create a fully functioning night light through soldering various circuit components to your very own PCB!

Code and Crunch

Can you code the ultimate math challenge? Campers will learn the basics of Python programming as they code custom math games packed with puzzles, points, and plenty of brainpower.

MoonCraft

The race to the Moon is on! Work in groups to build an addition to NASA's new lunar base. Then present your vision for humanity's future beyond Earth in an exciting pitch!

Project: Heat Shield

It's time to grab your tools and get started! Your task is to create a heat shield to protect an astronaut on their journey back into Earth! Are you up for the challenge?

CAD Creations

Uncover the world of design through TinkerCAD. Explore different elements and use the software to create a personalized 3D-printed keychain!

Mystical Circuits

Making decisions is hard; but Mystical Circuits has you covered! Using Arduino kits, you will put together and code a crystal ball ready to answer all your questions!

Groovy Guesser

It's time to boogie! Learn about AI and machine learning by using Teachable Machine to create your own dance guessing game!

Cranes and Gains

From pulleys to power, campers will learn about mechanical advantage and consider how to make work easier as they build and test their own cranes.

Brain Battle

Construct hats incorporating the different parts and functions of the most incredible computer out there: The human brain! Then, participate in an exciting brain games trivia!

Digital Detectives

Oh no! A series of cyber attacks have hit ESQ Headquarters and we need your help to crack the case! You must decrypt messages, catch scams and practice your cyber safety to find the culprit!

Ultimate Aerodynamics

It's a bird, it's a plane, it's a...frisbee? In this outdoor investigation, you will explore the forces of flight and optimal launch angles to make your frisbee soar through the sky!

Berry Bonds

Use simple lab tools and everyday materials to squish, swirl and separate a strawberry's DNA. This is your chance to unravel the hidden code of life!

Haul or Nothing

Can your tractor out-pull the rest? In Haul or Nothing you will use LEGO Spike Primes to build and optimize robotic tractors, then battle it out in a series of tug-of-war challenges.

Warped Wonders

Let your imagination run wild as you explore the world of anamorphic art. Use concepts of optics and the science of light reflection to design your own artistic creation.

Voyager vs. Voyager

Team work makes the dream work! Work together with your fellow campers to defeat the opposing Voyager camp in a series of STEM challenges!