

DRONE WORKSHOP

In February 2024, the Innovate STEAM Foundation orchestrated a captivating "Drone Workshop," welcoming around 50 enthusiastic students eager to unravel the mysteries of drone technology. The event wasn't just about theoretical concepts; it was an immersive experience where children could engage firsthand with drones, particularly the Tello model. The workshop commenced with an enlightening introduction to drone technology. Attendees were captivated as the facilitators elucidated the principles behind drone flight, including aerodynamics, propulsion, and control systems.

They delved into the diverse applications of drones, from recreational flying to commercial uses like aerial photography, surveillance, and delivery services, fostering a sense of awe and curiosity among the young minds. Following the theoretical groundwork, the spotlight shifted to practical exploration. Each student was provided with a Tello drone, a compact yet powerful model ideal for beginners. With guidance from experienced mentors, the children embarked on a hands-on journey into the world of drone piloting. Excitement filled the air as the students familiarized themselves with the Tello's controls. They eagerly experimented with takeoffs, landings, and maneuvers, their faces lighting up with joy and wonder as they witnessed their commands translate into graceful aerial movements. Through trial and error, they honed their piloting skills, gradually mastering the art of controlling the drones with precision and finesse. As the workshop progressed, the activities grew more challenging, pushing the boundaries of the participants' capabilities.

They embarked on exhilarating flight missions, navigating obstacle courses and completing aerial challenges with dexterity and determination. Amidst the adrenaline-fueled action, valuable lessons in problem-solving, teamwork, and perseverance emerged, enriching the educational experience. Beyond piloting, the workshop delved into the underlying technology powering drones. Through interactive demonstrations and hands-on experiments, the students gained insight into key components such as gyroscopes, accelerometers, and wireless communication protocols. They marveled at the engineering ingenuity behind these cutting-edge devices, fostering a deeper appreciation for the intersection of science, technology, engineering, art, and mathematics (STEAM).

Throughout the event, collaboration and camaraderie flourished as the students collaborated on group projects and shared insights and discoveries. Mentors provided guidance and







encouragement, nurturing a supportive learning environment where creativity and innovation thrived. As the workshop drew to a close, the students reflected on their journey, empowered with newfound knowledge and skills. They departed with a sense of accomplishment and inspiration, eager to continue exploring the boundless possibilities of drone technology. The "Drone Workshop" had ignited a spark of curiosity and passion, leaving an indelible impression

on the young minds and paving the way for future innovation and discovery in the realm of STEAM

GDD & FORMULA

An auspicious collaboration unfolded as the InnovateSTEAM Foundation and the Discovery Egypt Foundation inked a cooperative protocol. This alliance aimed to orchestrate two enthralling events: the GDD Submarine Competition and the Formula Car Racing. The GDD Competition promised to plunge participants into the depths of innovation. Teams would navigate their custom-built submarines through an intricate underwater obstacle course, employing cutting-edge technology and strategic prowess to emerge victorious under the cloak of darkness.

This unique challenge would not only test engineering prowess but also ignite creativity and problem-solving skills in an electrifying aquatic arena. Meanwhile, the Formula Car Racing event would rev up the excitement on land, as sleek, high-performance vehicles vied for supremacy on the racetrack. Drivers would push the limits of speed and precision, maneuvering through twists and turns with adrenaline-fueled intensity. Spectators would be treated to a spectacle of speed and skill, as teams showcased the culmination of months of design, testing, and refinement in a thrilling showcase of automotive ingenuity. With this partnership, the stage was set for an unforgettable fusion of technology, competition, and exploration, poised to inspire the next generation of innovators and adventurers.

