

FPV Drone Racing & Engineering

The drone STEAM course aims to build up students' capabilities in drone operating, engineering and programming. It allows students to explore their interests in different aspects of drone and assess their potentials. Students will learn the basic concepts and development of drone and how to pilot their drones. They also get access to the technology of drone, 3D printing and so on while understanding the fundamentals of physics behind drone racing. With a curriculum focused on both academic knowledge and creative projects, the course is designed to increase concentration and collaboration, spark interest of future technologies.

Course Teacher Information:

Siming Pang, Leader of Team China in World Drone Prix in Dubai, Deputy Secretary of China Drone Racing League, Founder of China Micro UAV competition, Founder of Shenzhen UAV Masters

Renjie Zhang, Champion of Guangdong Drone Championship, Specially invited pilot of World Drone Conference, Coach of China Drone Racing League, Researcher of Drone Education and Training Standards Committee



Basic Information Overview	
Year Group (s)	P5-S8
Teacher Source	VGCC Professional Coaches
Number of lessons	1 per week, 15 sessions in Term 2
Language	Chinese
Venue	Oak 305 & QUAD
Class Time	Friday, 3:45-4:45PM

Course Overview

Enrollment Criteria	<p>Students Who are passionate about science and have a strong interest in exploring Unmanned Aircraft and advanced technology.</p> <p>UAV Professional Training Kit (RMB2000 for new students, RMB1500 for remained students, purchased by parents)</p> <ul style="list-style-type: none"> Includes two sets of UAVs: non fixed height brushless motor UAV, spherical UAV (FB200). UAV accessories: UAV simulator encryption key, aircraft model remote controller, UAV charger and battery.
Engage and Assess	<p>Assessing with competitions in three strands of operating, engineering, and programming, the students are able to review and reflect on their learning process. Also, teamwork plays an important role in drone racing, as such, students must abide by safe operation guide which means the discipline will also be one of the key parts in assessments.</p>
Explore and Develop	<p>The feature of sports competition motivates the enthusiasm of students to explore and create while engaging in various hands-on activities.</p>
Refine and Present	<p>High-performing student in the course has the opportunity to explore aerial photography and videography, participate in FPV drone racing games as well as drone programming performance.</p>
Parent Engagement Opportunity	<p>We encourage parent observation of the project presentation if it's available.</p>
Others	

