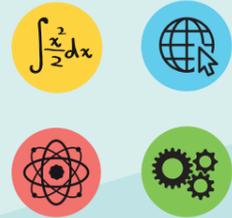


EXPERIENTIAL LEARNING DAY



In order to promote STEM learning, we organised the Experiential Learning Day on 11-12th December. We welcomed primary school students to join our STEM workshops, such as **electrostatic stickers DIY**, **coding for mini game**, and experiencing the excitement of **controlling robots and drones**. Our students became instructors to the juniors. An enjoyable day they had!



STEM FUN DAY



We arranged a **micro:bit Model Hovercraft Competition** for all S3 students during the post-exam period. The competition requires students to design a hovercraft model and make use of coding knowledge to complete a race competition.



ROBOMASTER AND ROBOTICS TEAM



RoboMaster is a robot combat competition founded by DJI, in which participants form teams and engage in **4 VS 4 tactical shooting battles** by operating their self-developed or modified robots themselves.

Multiple tasks are to be completed during the competition, including projectile reloading by **"the Engineer"**, automatic recognition and line inspection as well as activation of power runes by **"the Standards"**, and the breaking of base armours by **"the Aerial"**.



Our school team spent months equipping themselves for the **RoboMaster 2021**, modifying and programming the robots after school. No effort was spared in the thrilling tournament last October. Our team eventually ranked **fourth** in the group stage.



SCIENCE @ SALESIAN 8

STEM Activities showcase
Academic year 2021-22



55TH JOINT SCHOOL SCIENCE EXHIBITION



Joint School Science Exhibition (JSSE) is one of the oldest and most prestigious local STEM events in Hong Kong, and we have been participating in this competition for many years.

Each year, students need to work as a team to research on a daily life issue, which by means of an innovative invention using their talents from all STEM aspects, to come up with creative solutions to address the issue. The product invented will then participate in the JSSE exhibition being held during summer holiday every year.



With reference to the theme "Vitality", our students invented "BM-X", a **bike-machine chair with device charging ability**. It consists of a motor generator with pedals installed under an office chair. The electricity generated can be delivered to a USB output port, and they can keep track of the amount of electricity produced while pedalling on BM-X. We aimed at promoting renewable energy and sports while reducing the risk of infection while doing exercise.



Our team with 24 students showcased the final product to visitors in the exhibition held in late August, and successfully won **two awards**: "The most popular booth" and "The best presenter".

SCIENCE ACTIVITIES



Biology

With the help of our alumni practice teacher, we organised an interactive workshop on **pig heart dissection** in early June. Students demonstrated their STEM skills in finding ways to study the elasticity of major blood vessels on a pig's heart.



Chemistry & Physics

During the post-exam period, a site visit was arranged for senior form science students to visit the **CLP Power Low Carbon Energy Education Centre**. Through joining interactive exhibitions, lab visits and a 3D printing workshop, students had a chance to learn more about the application of nuclear energy in our country, as well as how technology and science could be used to improve the quality of life of citizens.

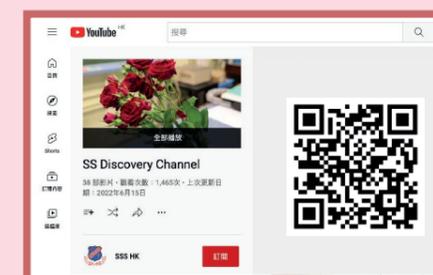


MORE DISCOVERIES AHEAD...

Minecraft campus tour

Wanna have a quick look at our campus? Our alumni had spent almost five years to create a realistic virtual campus using **Minecraft** with beautiful rendering modification. Such dedication!

Link: <https://youtu.be/dbxcFauN4v4>



SS Discovery channel

To further promote **self-directed learning**, our science teachers also regularly prepared video clips on introducing interesting science concepts.

Link: <https://bit.ly/3SeaNVW>

Wanna know more? Just visit our **school's website** for the latest news in our school's STEM education development.

Link: <http://www.ssshk.edu.hk>



VR Campus Tour

You can tour around our **virtual campus** too!

Link: <http://vr.ssshk.edu.hk/>



Acknowledgements:

STEM Team, Biology, Chemistry and Physics Panels, Robotics Club and Robotics Team, Programming Design Club, Academic Affairs Committee, JSSE Sub-committee, Multimedia Production Team

Salesian English School 2022

SALESIAN ENGLISH SCHOOL

16 Chai Wan Road, Hong Kong Tel: 2560 2134 / 2884 3581
Web: <http://www.ssshk.edu.hk> Email: admin@ssshk.edu.hk