

# **REGENT SECONDARY SCHOOL**

## **(Applied Learning Programme - Robotics)**

### **Background**

The Applied Learning Programme (ALP) serves to connect academic knowledge and skills with the real world. The emphasis is on the application of thinking skills, connecting knowledge across subject disciplines, stretching the imagination and applying these in authentic settings in society and industries. The intent is to help students appreciate the relevance and value of what they are learning in the academic curriculum and develop stronger motivation and purpose to acquire knowledge and skills.

In Regent, the ALP was introduced in 2015. ALP uses the construction of an Underwater Remotely Operated Vehicle - ROV (named Sea Perch) as the platform to guide and expose our students to area of STEM education. Through the programme, we hope to equip students with the relevant skills that are closely related to the industry. Students will have the opportunity to build an Underwater ROV from scratch while learning to work in teams and building students in their thinking skills, problem-solving and decision-making in a self-directed environment.

Our ALP focuses on four key skills, namely, technical skills, ICT skills, presentation skills and project management skills. Students will go through a two-year programme, with exposure to authentic learning situations while applying their content knowledge from various subjects such as English, Mathematics and Science. The ALP team aims to equip our students with the relevant and critical skills essential for the STEM industry and to heighten students' awareness and interest in the field of engineering.

### **Achievements**

The following are some of our achievements:

1. SHELL STEM Youth Innovation Challenge 2015 – YEA Gold (Young Engineer Award)
2. Sea Perch Challenge 2015
3. National Destination Imagination Challenge 2016 – 1<sup>st</sup> Runner up in Musical Mashup Category
4. 8<sup>th</sup> Assembly of Youth for Environment 2016 (Fastest Sea Perch Challenge) – 1<sup>st</sup> Position
5. YEA Distinction (Young Engineer Award) 2016 – 2 Awardees

### **1. Eligibility criteria**

The applicant must satisfy any one of the following:

- have attended Robotics Club CCA/ Interest group
- have basic programming knowledge in Arduino (Sketch) or Lego Mindstrom
- represented the school at a local/international robotics competition (e.g. National Junior Robotics Competition, First Lego League, National Robopreneur Carnival)
- have any other outstanding achievement in relevant areas

### **2a. Internal: Shortlisting criteria**

All applicants will be shortlisted if they meet any one of the eligibility criteria.

## **2b. Selection criteria**

Shortlisted applicants must attend an interview.

## **3. Selection date**

Interview Date: 15<sup>th</sup> August 2017 (3pm onwards)

Closing date of application: 4<sup>th</sup> August 2017

The teacher in-charge will contact the applicant to confirm the interview date. Applicants are strongly encouraged to attend the planned interview on 15th August. However, we will accommodate requests for other dates, subject to availability of the selection panel.

## **4. Documents to submit**

Applicants are encouraged to submit any of the following documents:

1. Certificate of participation in any robotics related activities.
2. Certificate of achievement in any robotics related activities.
3. Testimonial (in relation to robotics) from seniors/ teachers.