

# DIRECT SCHOOL ADMISSION FOR 2016

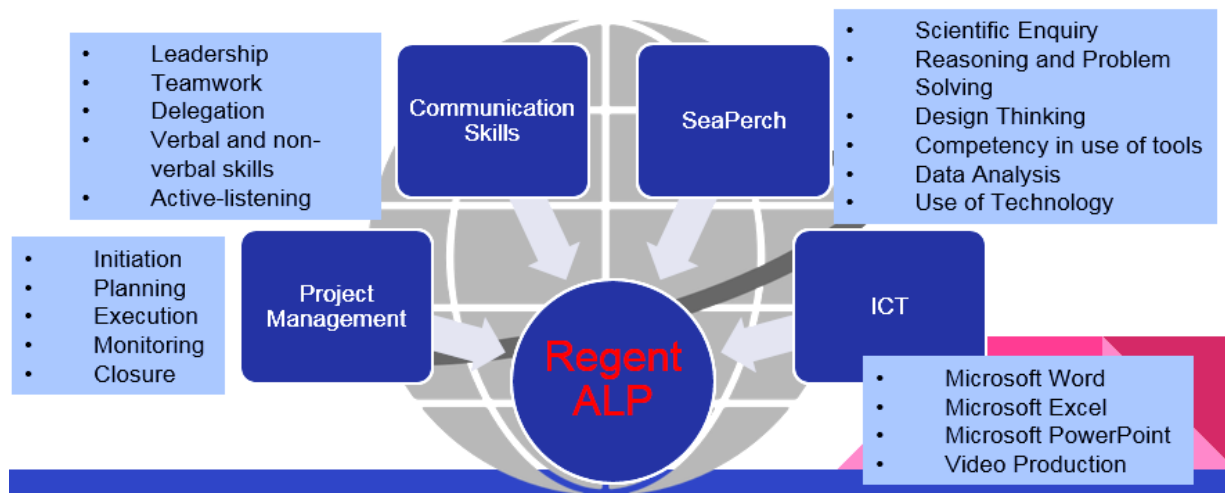
## Regent Secondary School

### Information for Robotics (Applied Learning Programme) Track

#### 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 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, develop stronger motivation to acquire knowledge and skills and heighten their interest level in the field of engineering.

In Regent, ALP uses the construction of an Underwater Remotely Operated Vehicle - ROV (named Sea Perch) as the platform to expose our students to the work of Engineers. Through the programme, students build an Underwater ROV from scratch while learning to work in a small team and applying thinking, problem-solving and decision-making skills. The 4 key skills that students will acquire and develop themselves in are given in the diagram below



#### Achievements

The following are some of our achievements and recent past activities:

1. Marketing Innovation Challenge 2014 – 1<sup>st</sup> Position
2. SHELL STEM Youth Innovation Challenge 2015 – Gold YEA (Young Engineer Award)
3. Intra-school Sea Perch Challenge 2015
4. National Underwater Challenge 2015 – 1<sup>st</sup> Runner up
5. Nanyang Science and Technological Challenge 2015 – 2<sup>nd</sup> Runner up (Overall)
6. National Destination Imagination Challenge 2016 – 1<sup>st</sup> Runner up in Musical Mashup Category
7. Global Destination Imagination 2016 in Atlanta, USA

### **Eligibility criteria**

The applicant must satisfy any one of the following:

- Actively involved with Robotics Club/Interest group
- Have basic programming background in Arduino (Sketch) or Lego Mindstorm program
- Represented school at robotics competition (e.g. National Junior Robotics Competition, First Lego League, National Robopreneur Carnival, etc)
- Have any other outstanding achievement in relevant areas (in robotics or one the 4 key skills mentioned in the above write-up)

### **Shortlisting criteria**

All applicants are shortlisted as long as they satisfy any one of the eligibility criteria.

### **Selection criteria**

In addition to individual achievements and contributions, shortlisted applicants must attend a session comprising an interview and demonstration of practical skills & knowledge. It will be conducted by a selection panel.

For applicants trained in Lego Mindstorm EV3:

1. Construct a simple robot using Lego Mindstorm EV3 core set.
2. Program the constructed robot to move based on given instruction/s.

For applicants trained in Arduino programming:

1. Perform basic sketch/ mBlock programming to do simple task.
2. Show basic understanding of how an Arduino Microcontroller board works (MCQ test)

Selection will be based on outcome of interview (applicant's sense of commitment, prior experience and existing robotics skills/proficiency) and at least a pass in the overall scoring.

### **3. Dates to remember (secondary school's side, specific to Robotics)**

| <b>Date(s)</b>                  | <b>Events</b>   |
|---------------------------------|---|
| 09 May 2016 – 05 August 2016    | Application period for Robotics (Applied Learning Programme) track with supporting documents. Please adhere to deadline.  |
| 08 August 2016 – 15 August 2016 | Shortlisted applicants/their parents will be contacted to confirm the exact date(s) for the interview cum practical demonstration. The teacher-in-charge may also conduct a pre-interview conversation. |
| 17 August 2016                  | Date for interview cum practical demonstration (3pm onwards).   |
| 25 August 2016 – 31 August 2016 | Notification of outcome via email to shortlisted applicants who attended the interview cum practical demonstration.   |

The teacher in-charge will contact the applicant to confirm the date for the interview cum practical demonstration. They are strongly encouraged to attend the planned one on 17<sup>th</sup> August. However, we will accommodate requests for other dates (but before 25<sup>th</sup> August), subject to availability of selection panel.

### **Documents to submit (specific to Robotics)**

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.

In addition, an applicant must submit the:

- Registration number slip from MOE if they are studying in a non-MOE school
- Outcome letter for AEIS (for international students who are required to pass the test)

Please arrive about 20 minutes before your appointment with the selection panel to complete the verification of documents. Present the above documents to the General Office staff. If you do not have the original document, please have the photocopy certified by the issuing school/organisation before sending in together with your application form.