



## Invitation for Provision of Services

The HKAGE aims to deliver top quality programme & services to stakeholders. We now invite service providers to provide the following service(s). If you are interested, please contact us for more details.

<b>Service Required</b> <i>e.g. Course Delivery, Staff Training, Translation, Pest Control</i>	
Aerospace Course (Level IV): Space Mission (Phase 1) (A4AER001C) Aerospace Course (Level IV): Space Mission (Phase 2) (A4AER002C) Aerospace Course (Level IV): Space Mission (Phase 3) (A4AER003C)	
<b>Target Audience</b>	
<input checked="" type="checkbox"/> Students	approx no.: <u>30(A4AER001C)</u> <u>30 (A4AER002C)</u> <u>30 (A4AER003C)</u>
<input type="checkbox"/> Parents	approx no.: _____
<input type="checkbox"/> Teachers	approx no.: _____
<input type="checkbox"/> Staff	approx no.: _____
<input type="checkbox"/> Others, please specify: _____	approx no.: _____
<b>Service Details</b>	
<b>Date/time of Delivery:</b>	Phase 1 (A4AER001C): (i) Weekdays (16:00 – 20:00) and Saturdays in school period, preferably -Within Dec 2022 to Jan 2023; OR (ii) Weekdays and weekends in school holidays, preferably -Within Dec 2022 to Jan 2023  Phase 2 (A4AER002C): (i) Weekdays (16:00 – 20:00) and Saturdays in school period, preferably -Within Feb to Mar 2023; OR (ii) Weekdays and weekends in school holidays, preferably -Within Feb to Mar 2023  Phase 3 (A4AER003C): (i) Weekdays (16:00 – 20:00) and Saturdays in school period, preferably -Within May to Jun 2023; OR (ii) Weekdays and weekends in school holidays, preferably -Within May to Jun 2023
<b>Venue:</b>	Service Provider's Campus / Others (please specify in the proposal)
<b>Scope of Services</b> <i>e.g. Programme Objectives, Medium of Instruction</i>	
1. Programme Objectives: Phase 1 (A4AER001C) aims to: <ul style="list-style-type: none"><li>equip students with the in-depth scientific knowledge about rocket propulsion system and orbital mechanics;</li><li>introduce students the essential parts of designing rockets;</li><li>guide students to understand how to command the rocket.</li></ul> Phase 2 (A4AER002C) aims to: <ul style="list-style-type: none"><li>give students an introduction of mobile robotics;</li><li>teach students to understand the mars rover mechanism;</li><li>demonstrate mars rover control systems to students;</li><li>guide students to complete the simulated missions.</li></ul>	



Phase 3 (A4AER003C) aims to:

- teach students the knowledge about the physics of flight and the techniques of flying an aircraft;
- give an introduction of glider to students;
- guide students to design and make a glider model;
- enhance student's personal skills, such as communication, teamwork and problem-solving skill via group project.

2. Intended Learning Outcomes:

Upon completion of the programme (A4AER001C), the participants should be able to:

- demonstrate understanding of rocket propulsion and orbital mechanics;
- acquire theories and concept of spacecraft design;
- verify the effectiveness of efficiency of rocket by conducting some missions in simulator.

Upon completion of the programme (A4AER002C), the participants should be able to:

- acquire the knowledge of mobile robotics;
- demonstrate understanding of virtual mars rover design;
- discriminate essential parts of rover control system.

Upon completion of the programme (A4AER003C), the participants should be able to:

- demonstrate the understanding of the knowledge of flight;
- create and design a model remote-controlled glider.

3. Target Participants:  
S2 – S4 students

4. Class and class size:  
1 class;

Phase 1 (A4AER001C): 30 participants in total

Phase 2 (A4AER002C): 30 participants in total

Phase 3 (A4AER003C): 30 participants in total

5. Programme Hours:

104 hours in total, the distribution of hour in each phase:

Phase 1 (A4AER001C): 34 learning hours for 30 students, including 24 contact hours

Phase 2 (A4AER002C): 40 learning hours for 30 students, including 30 contact hours

Phase 3 (A4AER003C): 30 learning hours for 30 students, including 20 contact hours

The learning hours includes self-learning hours via online learning platform, self-reading with learning materials provided by service provider or consultation hours. Contact hours means face-to-face or online lesson.

6. Medium of Instruction: Cantonese, with English handouts

**Contact Information**

**Any enquiries concerning this *Invitation for Provision of Services* shall be directed to:**

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- Telephone: 3940 0501