








Virtual Reality and Its Application in Sustainable Development (TECS1362)

Introduction	Understand the theories behind Virtual Reality, Augmented Reality and Mixed Reality. Experience Virtual Reality. Design mobile phone scale VR panorama, game and then use VR in conjunction with Geogebra to approach Solid Geometry problem in Mathematics. At last we will explore the topic of Urban Heat Island using a 3D gamification approach. This is not a buy-expensive-equipment-and-software course. We are making VR games from ground up using basic free tools such as Geogebra and Smart Koder.
Programme Type / Level	Introductory Course in Innovative Technology (Token-required)
Instructor(s)	Mr LAU Kam Ming (Smart Kiddo Education Limited)
Pre-requisite	<ul style="list-style-type: none"> ▪ Experience in any form of Coding. ▪ Experience in Geogebra is preferred. ▪ Students need to bring their own PC/Mac laptops equipped with WiFi. ▪ Students need to bring their own gyro and accelerometer equipped mobile phones.
Target Participants	 <ul style="list-style-type: none"> ➢ S1-S3 HKAGE student members only in 2019/20 school year ➢ Class size: 30
Medium of Instruction	 <p>English with English handouts</p>
Certificate	 <p>E-Certificate will be awarded to participants who have:</p> <ul style="list-style-type: none"> ❖ Attended at least 3 sessions; AND ❖ Completed all the assignments with satisfactory performance
Intended Learning Outcomes	 <p>Upon completion of the programme, participants should be able to:</p> <ol style="list-style-type: none"> 1. Understand physics and mathematics behind VR, AR and MR technologies; 2. Use Graphical User Interface and Javascript coding to make VR game; 3. Understand basic 3D modelling and 3D coding techniques; 4. Put solid geometry in VR and use coding to find solutions; 5. Approach Urban Heat Island (UHI) problem in 3D gamification.
Application Procedure	 <p><u>This programme is Programmes with No Screening</u></p> <p>There are no screening questions, written test or other screening methods for this type of programmes.</p> <ul style="list-style-type: none"> ● Student members can select up to 5 programmes from a list of selection. Applicants have to state the priority when submitting the application. (1st priority, 2nd priority, 3rd priority, etc). 1 token is required for each programme (For programme list, please refer to the issue 16 of Gifted Gateway (click here)); ● Application can only be submitted once. Once it is submitted, the priority and the programme selection cannot be changed; ● If a student member removes a programme from the application before the application deadline by withdrawal, the choice priority will remain unchanged. (For example: A student has selected three programmes and removed the programme with the 1st priority from the application. The choices of 2nd and 3rd priority will remain unchanged with no promotion in priority.); ● We will select the students based on the student's choice of priorities and a randomly generated selection by the computer system. If there is time clash between the applied programme and other programmes with offer, HKAGE will consider if the application will be accepted; ● Priority will be given to student members who have not completed the applied programmes; ● Student members should avoid applying programmes with time clash; ● The decision of HKAGE on the result of selection should be final.

Application Deadline **28 Oct 2019, 12:00 n.n.**

Application Result
Release Date

1 Nov 2019

If student members withdraw from the programme after the Application Deadline, the token will be deducted.

Schedule



Session	Date	Time	Venue
1	29 Jan 1 Aug	9:00 a.m. – 12:00 n.n. 9:30 a.m. – 12:30 p.m.	St. Paul's Convent School- (Secondary Section) Room 105, HKAGE Online Lecture
2	29 Jan 8 Aug	2:00 p.m. – 5:00 p.m.	Room 105, HKAGE Room 303, HKAGE Online Lecture
3	1 Feb 11 Aug	9:00 a.m. – 12:00 n.n. 9:30 a.m. – 12:30 p.m.	St. Paul's Convent School- (Secondary Section) Room 403, HKAGE Online Lecture
4	8 Feb 21 Aug	9:00 a.m. – 12:00 n.n. 9:30 a.m. – 12:30 p.m. 2:00 p.m. – 5:00 p.m.	

Enquiries



For enquiries, please contact us at 3940 0101 after language selection, press "1".

SCIENCES

科學