



C3C0D003C

Coding Course (Level III)

Creative Coding with JavaScript (P5JS) and Artificial Intelligence

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sketch.js* Var a=75,b=100,c=85.5,d=50,e=110,f=72.5,g=87.5; var h=68.5,i=105.5,j=99,k=62,r=68.5,s=105.5,t=57.5,o=95; var p=86,q=100,1=62.5; function setup() { createCanvas(400, 400); } function draw() { background(255,255,255); fill(255,0,0); rect(360,30,40,160); Ctear

Intended Learning Outcomes

Result Release 6 July 2023

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

- 1. master p5.js fundamentals and core programming concepts to create captivating graphics and interactive web experiences;
- 2. utilize AI techniques, like machine learning and natural language processing, to generate innovative digital art;
- 3. develop and execute collaborative final projects, demonstrating teamwork and effective application of skills learned throughout the programme.



Introduction

Discover the magic of p5.js, an exciting JavaScript library that opens up the world of coding to artists, designers, educators, and beginners alike! With its user-friendly approach, p5.js simplifies the process of crafting visually captivating graphics and interactive experiences on the web, making it an engaging and accessible gateway for you to explore the limitless potential of digital creativity.

The course covers p5.js programming fundamentals, including canvas, shapes, colors, and interactivity, as well as core programming concepts like variables, loops, conditionals, functions, and objects. Students will integrate Al algorithms, such as machine learning and computer vision, into their projects.

This programme is under the collaboration with Department of Computer Science and Engineering, The Chinese University of Hong Kong.

Session	Date	Time	Venue
1	17 Jul	9:30 a.m. – 12:30 p.m.	Room 123, 1/F, Ho Sin Hang Engineering Building, The Chinese University of Hong Kong (<u>MAP</u>)
1	18 Jul		
2	19 Jul		
3	20 Jul		
4	21 Jul		
5	24 Jul		
6	25 Jul		
7	26 Jul		

Schedule

Remark: Students can bring your own iPad, tablet or laptop with a webcam to the class.

Target Participantsz

- S1 S6 HKAGE student members in 2022/23 school year
- Class size: 36
- Student members would be selected randomly by the computer system. The decision of HKAGE on the result of the selection should be final.

Pre-requisite

No special prerequisites are needed

Medium of Instruction

English with English handouts

Certificate

E-Certificate will be awarded to participants who have:

- attended 6 sessions; AND
- completed all the assignments with satisfactory performance



