HKETS

2019 SUMMER WORKSHOPS

Following the success of previous years, we are again taking limited enrolment for our popular summer workshops. This is a great chance for dedicated students to engage in an intensive learning environment, designed to review important topics of respective subjects for targeted learning. Join our workshops to ensure a good start to your new academic year.

New courses with AI Academy

we are collaborating with AI Academy to offer 4 new summer courses for young tech enthusiasts.

Get a Head Start

with our introductory courses for students about to start secondary school, IGCSE, A Level or IB studies.

Boost Your Grades

with our grade booster courses for students heading into their final year of IGCSE, A Level or IB studies.

University Applications

IELTS, SAT, SAT Subject Tests, ACT
Personal Statements

Learn a New Language

with our beginner French and Spanish courses

HKETS
Education & Tutoring Services

AI Academy
2019 SUMMER TECH WORKSHOPS

THE CONTENT
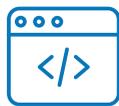
Python Programming — $4000 (5 day course)
- understand the theory of programming
- write simple code in Python
- build a simple game with Python

A.I. Facial Recognition — $4500 (5 day course)
- understand basic the theory of Artificial Intelligence (A.I.)
- apply A.I. mthods in Facial Recognition
- build a Facial Recognition program

Robotics Control — $4500 + $650 (5 day course + materials)
- understand Arduino
- basic control theory
- build a robotic car with sensors
- receive and forward data to a PC, the internet and mobile devices

Mobile App Development — $4000 (5 day course)
- understand the theory of App development
- become familiar with Android Studio
- build an App using the latest mobile technology

For secondary school students. No prior knowledge necessary.

SCHEDULE
All workshops are 10 hours long (2 hours x 5 days)

Week 1	15 - 19 July	**Week 3**	29 July - 2 August
Week 2	22 - 26 July	**Week 4**	5 - 9 August

Workshops will be held at any one of these times:
(10:00AM – 12:00 noon) or (2:00PM – 4:00PM)

Think, Create, and Inspire.

Our courses are tailor made to give young tech enthusiasts aged 12-18 a head-start into the next technological wave.

We offer regular term courses, holiday camps and workshops that are designed to augment formal education.

A.I. Focused Curriculum with hands-on learning.

AI Academy is the first Artificial Intelligence (A.I.) focused education organization led by a group of top universities researchers.

Introduction to Python

Most demanded programming language for AI and Machine Learning.

A.I. Beginner - Facial Recognition

Learn why and how A.I. is rapidly changing the world.

Introduction to Robotics Control

Autonomous car combines A.I. and advance robotics.

Introduction to Mobile App Development

Uber, Whatsapp, Instagram. Mobile apps are changing our lives.

Our Lecturers

Henry Wong
HKU BEng(ME)

Rocky Fan
Cambridge
BEng MEng(ME)

Shen Zhong
HKU PhD(ENG)

Wario Wong
HKU BEng(EE)

AI Academy

Introduction to Python

Learning Outcomes

- Understand the theory of programming
- Write simple code in Python
- Build a simple game with Python

Regular Course -
2hrs/lesson, 5 classes

Want to learn programming?
Python is one of the most demanded, popular, versatile programming language used today with wide application.

From AI, machine learning to data science, Python is the language of choice.

Lesson 01	Syntax and Data types	**Learn how to set up an environment for python programming, the basic syntax, and the expression**
02	Decision Structures	**Learn the decision control and the logic flow of python programming: While Loop, If Else, For Loop**
03	Python with Data Structure	**Using Lists in python to store an array of data**
04	Function Design	**Learn the conquer and divide theory and the function design for the projects**
05	Build your own game / graph	**Utilize the knowledge from past lesson to build a game with Python**

AI Academy

Introduction to A.I. - Facial Recognition

Regular Course
2hrs/lesson, 5 classes

_____

Join this course to get your children familiar with machine learning and data science using Python, and apply it on facial recognition technology.

AI Academy

Learning Outcomes

- Understand the basic theory of Artificial Intelligence
- Able to use Artificial Intelligence method and apply in Facial Recognition
- Build a Facial Recognition program

Lesson	Topic	Description
Lesson 01	Introduction to Artificial Intelligence	**Learn about the fundamental theories of AI and related programming**
02	Introduction to logistic classification	**Mini project: Build a programme that classifies cat images with logistic classification**
03	Introduction to Neural Network	**Learn how to use neural network to identify a cat image**
04	Facial recognition with OpenCV	**Use the Dlib and OpenCV library to build a classifier of your face**
05	Testing on the Facial recognition model	**Test between HOG and CNN model to learn the latest technology changes on AI**

Introduction to Robotics Control

Regular Course
2hrs/lesson, 5 classes

_____

Our course consists of a series of practical problems on making things that work independently.

We will demonstrate how to assemble such devices and programme them using the Arduino platform as a basis.

Learning Outcomes

- Create devices that read the data about the external world with a variety of sensors
- Receive and forward this data to a PC, the Internet and mobile devices, and control indexing and the movement

Lesson 01	Introduction to Robotics	**The basic robotics concept and general knowledge on robotic DIY**
02	Robot assembly and MCU programming	**Assemble a robotic car.** **Learn how to read off digital and analog signals, exchange data with a computer.**
03	Learn to use sensor	**Measure the real time environment parameter with Display**
04	Motor Control	**Introduce basic motor control theory and use MCU to control the car**
05	Project time	**Have fun!**

Introduction to Mobile App Development

Learning Outcomes

- Understand the basic theory of Application Development
- Able to use Android Studio and the latest mobile application technology to develop an application

Regular Course
2hrs/lesson, 5 classes

_____

Our course consists of a series of skills on Mobile Application Development.

We will demonstrate how to use the Android Studio to develop a simple mobile application and deploy it in your mobile.

Lesson	Topic	Description
Lesson 01	Introduction to Mobile App Development	**The basic Android Development concept and the environment set up**
02	Creare a simple UI	**Learn the basic UI components and how to design the interface**
03	Start an Activity with mutliple fragments	**Learn how to add a fragment to an activity and their communication**
04	Application Life Cycle	**Learn the basics of the application life cycle and the advance theory of mobile app development**
05	Project time	**Have fun!**

- Recommend to have basic programming knowledge

AI Academy

IGCSE and IB Diploma
2019 SUMMER WORKSHOPS

THE CONTENT

Introductory Workshops
(prospective Year 10 and 12 students)

From experience, even very capable students find the transition from Key Stage 3 to IGCSE or from IGCSE to IB very demanding and challenging. Students will learn ahead and tackle the more difficult topics and concepts so they are more confident when they are finally introduced.

Grade Booster Workshops
(prospective Year 11 and 13 students)

Grade Booster Workshops are important for IGCSE students who are to take their upcoming Mock/Christmas exams in a few months time and, for IB students, a chance to review past topics thoroughly and to learn ahead for the finals.

SUBJECTS ON OFFER

IGCSE (Edexcel or CIE)

Maths
English Language
English Literature
Physics (single/double)
Biology (single/double)
Chemistry (single/double)
Computer Science
Economics
Business Studies
History
Religious Studies

IB Diploma

Maths (HL / SL / Studies)
English Language and Literature
Physics
Biology
Chemistry
Computer Science
Economics
Business and Management
History
World Religion

Note: Non-listed subjects or particular A-level syllabuses can be arranged by request

COST

IGCSE: $ 4440 per workshop   **IB/A-Level: $ 4800 per workshop**

SCHEDULE

All workshops are 12 hours long

| Workshop A | **Mondays, Wednesdays and Fridays (2 hour sessions)** **15, 17, 19, 22, 24, 26 July** |

| Workshop B | **Mondays, Wednesdays and Fridays (2 hour sessions)** **29, 31 July, 2, 5, 7, 9 August** |

Weekday workshops will be held at any one of these times:
(10:00AM – 12:00pm), (1:00PM – 3:00PM) or (4:00PM – 6:00PM)

| Workshop C | **Saturdays (3 hour sessions)** **20, 27 July, 3, 10 August** |

Weekend workshops will be held at any one of these times:
(10:00AM – 1:00pm) or (2:00PM – 5:00PM)

University Applications
2019 SUMMER WORKSHOPS

IELTS

This workshops covers all four components of the IELTS: Reading, Writing, Listening and Speaking. Those sitting the exam for the first time will benefit from a greater understanding of the exam's format and practice in all four areas of the test. Many students in Hong Kong take the IELTS to supplement the language requirements for universities. Throughout the course, students will be able to practice IELTS questions and get feedback from the teacher directly. Exam techniques or strategies will also be taught alongside each of the different components so that students are prepared for all question types and patterns.

SCHEDULE

All workshops are 6 hours long

| Workshop A | **Saturdays (3 hour sessions)** **20, 27 July** |
| Workshop B | **Saturdays (3 hour sessions)** **3, 10 August** |

COST

$2400 per workshop

These workshops will be held at any one of these times: (10:00AM – 1:00pm) or (2:00PM – 5:00PM)

PERSONAL STATEMENT

An excellent personal statement is reflective of a student's ambitions, achievements and experiences. In order to stand out from the crowd, a personal statement should show a student's transferable skills - do they know their subject matter? The aim of this workshop is to teach students the skeleton of an effective personal statement followed by practice in evaluating sample personal statements and finally, the opportunity to plan and write their own statements. This workshop will cover the differing styles of writing personal statements and guide on having the right format.

COST

$1600 per workshop

SCHEDULE

Our personal statement workshops are 4 hours long (1 day)

Saturdays (2:00-6:00pm)
20, 27 July, 3, 10 August
(Please choose one)

*Contact us if you would like to arrange individual lessons to work on your personal statement.