Registration Form

3 DAYS ICTSIG JUNIOR DIGITAL CLASS (SCHOOL HOLIDAY)

BUILD YOUR PROJECT WITH ELECTRONICS AND CODING

11 December 2019 to 13 December 2019 (Wednesday to Friday) | Wisma IEM Organised by: Information and Communications Technology Special Interest Group, IEM

Name of Organisation		
Mailing Address		
Email:	Hand Phone:	
Tel (Office):	Fax:	
Contact Person:	Designation:	

I/We wish to enrol the following person(s) for the above-mentioned Course:

Name		Reg. Fee (RM)
	SUB TOTAL	
	ADD SST @ 6%	
	TOTAL PAYABLE	

Enclosed herewith a crossed cheque No. for the sum of RM issued in favour of "The Institution of Engineers, Malaysia" and crossed 'A/C payee only'. I/We understand that the fee is not refundable if I/we withdraw after my/our application is/are accepted by the Organizing Committee but substitution of participant will be allowed. If I/we fail to attend the workshop, I/we will still pay the registration fee in full.

Signature:

Date:

Registration Fee (Subject to 6% SST)					
GRADE	<u>ONLINE</u>	NORMAL (OFFLINE)			
SCHOOL STUDENT IEM MEMBER'S FAMILY	RM 300.00	RM 350.00			
SCHOOL STUDENT NON IEM MEMBER'S FAMILY	RM 350.00	RM 400.00			

PERSONAL DATA PROTECTION ACT

I have read and understand the IEM's Personal Data Protection Notice published on IEM's website at http://www.myiem.org.my and I agree to IEM's use and processing of my personal data as set out in the said notice.

Correspondence

The Institution of Engineers, Malaysia Bangunan Ingenieur, Lots 60/62, Jalan 52/4, P.O.Box 223 (Jalan Sultan), 46720 Petaling Jaya, Selangor Darul Ehsan Tel No.: +(603) 7968 4001/4002 Fax No.: +(603) 7957 7678 Email: <u>amira@iem.org.my</u> (Ms. Nur Amira)

SST shall be at 6% with effect from 1 March 2019



BUILD YOUR PROJECT WITH ELECTRONICS AND CODING 3 Days ICTSIG Junior Digital Class (School Holiday – Secondary School)

Date: 11 December 2019 to 13 December 2019 (Wednesdary to Friday) Venue: IEM Maker Space Room, Ground Floor, Wisma IEM, Petaling Jaya, Selangor Speaker: Ir. Amir Hussein Bin Jaafar

Organised by: Information and Communications Technology Special Interest Group (ICTSIG), IEM

Each students is REQUIRED to bring own laptop Required electronic kit will be prepared (on loan) for each students

Terms & Conditions:

- For ONLINE REGISTRATIONS, only ONLINE PAYMENT is applicable [via RHB and Maybank2u –Personal Saving & Personal Current; Credit Card Visa/Master].
- Payment via CASH / CHEQUE / BANK-IN TRANSMISSION / BANK DRAFT / MONEY ORDER / POSTAL
 ORDER / LO / WALK -IN will be considered as NORMAL REGISTRATION
- FULL PAYMENT must be settled before commencement of the course, otherwise participants will not be allowed to enter the hall. If a place is reserved and the intended participants fail to attend the course, the fee is to be settled in full.
- Fee paid is not refundable. Registration fee includes lecture notes, refreshment.
- The Organizing Committee reserves the right to cancel, alter, or change the program due to unforeseen circumstances. Every effort will be made to inform the registered participants of any changes. In view of the limited places available, intending participants are advised to send their registrations as early as possible so as to avoid disappointment.

Cancellation Policy

IEM reserves the right to postpone, reschedule, allocate or cancel the course. Full refund less 30% if cancellation is received in writing more than 7 days before start date of the event. No cancellation will be accepted prior to the date of the event. However, replacement or substitute may be made at any time with prior notification and substitute will be charged according to membership status.

Synopsis

Ministry Ministry of Education Malaysia (MOE) and Malaysia Development Economic Corporation Sdn Bhd (MDEC) launched Science Technology Engineering Mathematics or STEM education initiatives to address the reducing number of students interested in Science studies. IEM being the forefront in promoting and advancement of the science and profession of engineering is taking up the challenge to deliver higher quality STEM activities for school students in the area of physical computing, software development and engineering design.

In this Junior Digital Class, students will explore Arduino basics to build up their familiarity with the electronics hardware, sensors and output. Arduino is an open source electronic hardware for makers, designers, engineers, students and curious tinkerers of all ages. With Arduino (IDE), students will explore new libraries and programming syntax for managing sensors and output.

On the first day, student will learn the **microcontroller theory and basics of circuitry, electronic output, and coding and electronic input and coding.** Students will try different types of sensors and trinkets configurations and different control logics and operation parameters to understand how sensor and output trinket works.

On the second day, student will learn the **combination of electronic output input** and then the **process of project creation**. Students will try different types of input and output combination and different control logics and operation parameters to explore futher how sensor and output trinket can interatect with each other.

On the final day, with knowledge in microntroller circuitry, input and output and Arduino software platform, student will start to **build and code their own project**. Student will finally present their idea.

Biodata of Speaker



Ir. Amir Hussein Bin Jaafar graduated from University of Technology Petronas (UTP) with Bachelor Engineering (Electrical and Electronics) and from Universiti Teknologi Malaysia (UTM) with Master of Science (Real Time Software). He is registered as a Professional Engineer (Electronics) status with Board of Engineers Malaysia since 2007. He has more than 17 years of experience in electronics hardware and embedded software development projects, and development and testing of advance powertrain and

electronic control system for automotive application, and development of IoT applications. With the industry experience, he has been curating and conducting specialized green technology training to TVET trainers and also curating and conducting STEM courses for school students since 2016. He is currently the Technical Director for Micro Concept Tech Sdn Bhd.

Tentative Program					
	Program Name + Description	Target Participants			
11 th Dec 2019 9:30 am - 4:30 pm	Microcontroller and basics of circuitry - Explore microcontroller basics block diagrams and schematics diagrams				
	Electronics output and coding - Explore output circuit connection, simulation and coding on different types of devices	(s			
	Break	ente			
	Electronics input and coding - Explore input circuit connection, simulation and coding on different types of devices	nme I stude			
12 th Dec 2019 9:30 am - 4:30 pm	Combination of electronics input and output - Introduction to conditional coding structure in Arduino, combining input and output circuit and simulation of combination	orogran / schoo			
	Break	/ r			
	Process of project creation - Step-by-step guide to brainstorm, plan, simulate and create a project	tudents seconc			
13 th Dec 2019 9:30 am - 4:30 pm	Project creation - Explore Arduino knowledge in electronic controller, LED output, Push Button input, Buzzer output, Potentiometer input, Light Sensor input and Electric Motor output to build a project	10 s Open to			
	Break	Ŭ			
	Project enhancement and presentation - Further enhance project already created using electronic controller, LED output, Push Button input, Buzzer output, Potentiometer input, Light Sensor input and Electric Motor output and present the project				

Due to limited number of laptops in the IEM Maker Space, each student is REQUIRED to bring own laptop. However, do contact the secretariat if there are difficulties