



Title of Event:	Integrated System Design Project (UTP): Voice Controlled Drones			
Description:	This short course covers the fundamentals of solar energy and its utilization in houses as well as industry. This course includes different methods of sun trapping and how effective these techniques are in solar system designs. What factors to consider in designing a new solar energy system and how to monitor various parameters in a system to find its efficiency.			
Course Objective	<ul style="list-style-type: none"> To design voice controlled drone 			
Keywords:	Solar Energy, Solar System Design, Monitoring.			
Category:	<input type="checkbox"/> Professional	<input checked="" type="checkbox"/> Technical	<input type="checkbox"/> Non-Technical	<input type="checkbox"/> Administrative
Sub-category:	Professional:	<input type="checkbox"/> Continuing Education	<input type="checkbox"/> Professional Development	<input type="checkbox"/> Industry Relations
	Nontechnical:	<input type="checkbox"/> Social	<input type="checkbox"/> Awards Dinner	<input type="checkbox"/> Pre-Univ. activities
	Administrative:	<input type="checkbox"/> Excom		<input type="checkbox"/> Officer training
Date and Time:	Date: 4 th Dec 2019	Start Time: 09:00am	End Time: 05:00pm	
Event Location:	Block 22 Ground Floor, Universiti Teknologi PETRONAS			
Organizational Unit:	University Teknologi PETRONAS and IEEE RAS Malaysia Chapter			
Attendance:	No. of IEEE attended:	12	No. of Guests attended:	26 Students
Registration:	<input checked="" type="checkbox"/> No registration required			
	<input type="checkbox"/> Registration required			
Registration Fees:	-			
Trainer:	Dr Saiful Azrin Zulkifli			
Corresponding Name:	Dr. Syed Saad Azhar Ali, Assoc. Prof., University Teknologi PETRONAS & Treasurer, IEEE RAS Malaysia			
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ISDP May-Sept 2019

VOICE-CONTROLLED DRONE



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Round 1:
Fly up, hover & land.

Drone to fly up vertically to a height of 4-6 feet, hover for 10 seconds and move back down to land softly on the floor.

FINAL DEMO - 4 DEC 2019
2:30 PM - ISDP LAB
GND FLR BLOCK 22

Round 2:
Fly up, forward, down, capture image & land.

Drone to fly up vertically 4-6 feet high, move forward ~10 feet and move slightly down to ~2 feet, take photo of an object & land softly on the floor.

Round 3:
Fly up, forward, around a pillar, forward, down, rotate, capture image & land

Drone to fly up vertically 4-6 feet high, move forward ~10 feet, fly around a pillar, fly back towards launch pad, move slightly down to ~2 feet, rotate left/right to take photo of another object & land softly on the floor.

TO DESIGN, BUILD & OPERATE A FLYING DRONE WHICH:

1. RESPONDS TO REMOTE VOICE COMMANDS TO NAVIGATE IN CLOSED ENVIRONMENT (INDOORS)
2. FLIES CERTAIN REQUIRED PATHS, MAINTAINING CERTAIN ALTITUDE RANGE, WITHIN CERTAIN AMOUNT OF TIME
3. CAPTURES IMAGE OF OBJECTS DURING FLIGHT, TO BE TRANSMITTED WIRELESSLY TO BASE STATION

Electrical &
Electronics
Engineering
Department

