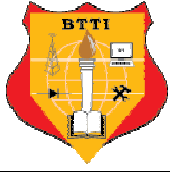




**Electronics Professional Training Course**  
**Course outline of Power Inverter or IPS (PIM101)**

No	Class/Day	Course Details	Com.
1	Class 1	What is Power Inverter or IPS? Different between IPS & UPS. Types of UPS. Power Inverter or IPS Output Frequency and Waveform. PWM details. Ideal features of a Power Inverter or IPS.	
2	Class 2	Block Diagram of Power Inverter or IPS. Details about IC SG3525 and SG3524, MOSFET and MOSFET Drive. How a Sinewave Power Inverter or IPS works with block diagram.	
3	Class 3	What is DSP, VA/Watts, Power Factor, Voltage, Ampere, Frequency etc. Understanding Transistor, MOSFET, Diode, Relay, Resistor, Capacitor, IC etc.	
4	Class 4	Parts of Ideal Power Inverter or IPS. Describe feature a) Smart Charging b) Over Charge Protection c) Under Charge/Deep Discharge Protection d) Over Load Protection e) Short Circuit Protection f) Over and under line voltage protection g) Over temp protection h) Audible Indication i) LED/LCD indication j) Smart Cooling System etc	
5	Class 5	Understanding transformer loop voltages, basic construction processes of Power inverter or IPS. Discuss on SWG, Core quality, winding ratio, conditions of over and under ratio, losses, insulating burnish process etc	
6	Class 6	Design, understanding and construction of CD4047 IC based Power inverter or IPS.	
7	Class 7	Introducing, Understanding and assembled of SG3525 based basic Power Inverter. Test and measurement of Ampere, Voltage and Frequency.	
8	Class 8	Class Retake, Practice & troubleshooting of the topic of Class 7.	
9	Class 9	Introducing, Understanding and assembled of SG3524 based basic Power Inverter. Test and measurement of Ampere, Voltage and Frequency.	
10	Class 10	Class Retake, Practice & troubleshooting of the topic of Class 9.	
11	Class 11	Introducing, Understanding and assembled of Microcontroller (with LCD) based basic Power Inverter. Test and measurement of Ampere, Voltage and Frequency.	
12	Class 12	Class Retake, Practice & troubleshooting of the topic of Class 11.	
13	Class 13	Introducing, Understanding and assembled of Sinewave based basic Power Inverter. Test and measurement of Ampere, Voltage and Frequency.	
14	Class 14	Class Retake, Practice & troubleshooting of the topic of	



**Bangladesh**  
**Technical Training**  
**Institute**  
*Education for Global Leadership*

		<b>Class 13.</b>	
<b>15</b>	<b>Class 15</b>	<b>Troubleshooting of Microcontroller based Power Inverter or IPS</b>	
<b>16</b>	<b>Class 16</b>	<b>Troubleshooting of SG3524/SG3525 based Power Inverter or IPS.</b>	
<b>17</b>	<b>Class 17</b>	<b>Electrical wiring of Power inverter or IPS in residential and commercial Places.</b>	
<b>18</b>	<b>Class 18</b>	<b>Raw materials sourcing, PCB and Circuit sourcing, Instruments List, Business discussion etc</b>	

ফাইনাল পরীক্ষায় উত্তীর্ণ হতে অবশ্যই **BTTI 3S- Student Study System**  
এ চুকে রেজিস্ট্রেশন করে অতিরিক্ত ক্লাস করে অনলাইনে পরীক্ষা দিতে হবে।