PROGRAMME: Value added course
INTRODUCTION TO ARDUINO (MODULE 1)
PARTICIPANTS: BSc Electronics Degree students (INHOUSE)
VENUE: DEPARTMENT OF ELECTRONICS
ST. EDMUND'S COLLEGE,
DATE: 16TH - 26TH August 2022

The Department of Electronics conducted a Value Added Course on **"Introduction to Arduino (Module 1)"** for **Electronics Major** students of 1st,3rd and 5th semester. The whole programme was planned and coordinated by Prof Bawan Pyntngenlang Thangkhiew .

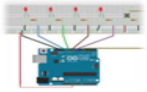
The Programme was planned for ten days starting from the 16th of August.2022 till 26th. August 2022 . The Programme was conducted for about one and half hours duration every day. The detailed program is shown below.

SESSION: I: TIME: 2-3:30 PM (Day 1 & Day 2)		
NAME OF THE TEACHERS	**DATE & DURATION**	**TOPICS**
Prof. B P Thangkhiew	16 th.Aug.2022- 17 th.Aug.2022 Duration: 3 hours	1.Introduction to microcontrollers and arduino boards. 2.Introduction to Arduino IDE . 3.Demo programs and familiarization to Arduino programming.
SESSION: II: TIME: 2-3:30 PM (Day 3 & Day 4)		
Dr. Dhruba Roy Choudhury & Prof. Soumen Chakraborty (day 3 and day 4)	18 th.Aug.2022- 20 th.Aug.2022 Duration: 3 hours:	1. LEDs theory and applications 2. LEDs currents and voltages 3. Practical Series and parallel connections for resistors and calculations. 4.Potentiometer connection. 5.Voltage divider using LDR. 6.Current divider . 7.Breadboard connections.
SESSION: III: TIME: 2-3:30 PM (Day 5 & Day 6)		
Prof. B P Thangkhiew	22 nd. Aug.2022- 23 rd. Aug.2022 Duration: 3 hours	**Hands on session** 1.Blinking an inbuilt LED, external LED, Fading a LED. 2.Reading analog voltages.. 3.Controlling a LED using LDR
SESSION: IV: TIME: 2-5 PM (Day 7)		
Prof. Kishore Chakraborty & Dr H C Medhi	24 th. Aug.2022- Duration: 3 hours	1.Switches types and uses 2.Motor types and their construction 2.Switching Circuits . 4.Relay construction & circuits
SESSION: IV: TIME: 2-3:30 PM (Day 8 and Day 9)		
Prof. B P Thangkhiew	25 th.Aug.2022- 26 th.Aug.2022- Duration: 3 hours	**Hands on session** 1.Serial communication 2.Controlling a motor using a IR sensor & using an Ultrasonic sensor 3.Controlling a Relay 4.Introduction to Arduino Shields 5.Summary,feedback, interaction & Exams.

St Edmund's College
Department Of Electronics
(In collaboration with IQAC)

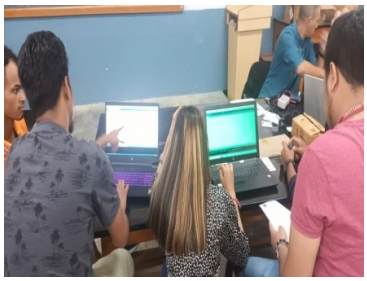
INTRODUCTION TO ARDUINO.
(Module 1)
Value Added Course

Registration only for
BSc Electronics students
[All semester]
(No prerequisite)



Date: 16-August-2022 to 26-August-2022
Time: 2 PM - 3:30 PM .
Venue:
Department of Electronics
Laboratory.
Coordinator : S P Thanglhlow
8794582274

CLICK TO REGISTER



Conclusion

The VAC on Introduction to Arduino (Module 1) was an attempt by the department to give the students of the department a brief yet strong background about Arduino as a microcontroller, how to program it and make necessary hardware connections. This VAC has been designed to make students understand about the various ways by which an external device/sensor can be program and depending on parameters, to sense the analog world, thereby bringing in a deep understanding about actual control of a device via programming. The students were encourage to make their own circuits and introduce changes in the circuits/programs as per their understanding. A test was also conducted to check the their understanding which showed that the students has grasped the knowledge about basics of Arduino programming and in the process of learning the students had also gained problem solving skills which is the need of the hour and will help them in the long run .

Bawan Pyntngenlang Thangkhiew

Program coordinator

Value Added Course

on

Introduction to Arduino

(Module 1)