







## **Report: Workshop on Arduino?**

In pursuance to the Student Startup and Innovation Policy (SSIP) initiated by the Education Department, Government of Gujarat and GTU Design Innovation Center Spoke initiated by MHRD, Dr. S. & S. S. Ghandhy Government Engineering College, Surat has organized the Workshop on Arduino under the guidance of Mr. Akash Patel, Co-founder, ACDC, Surat for inculcating the awareness about Arduino and motivating the students to take advantage of Arduino.

The Workshop was arranged in the Centre of Excellence (CoE) seminar hall of Electrical Department from 11:00am onwards on 26th July, 2019 (Friday). The target audience was the students and faculties of our Institute. More than 100 students attended the workshop along with the faculty members of the every department.

Mr. Akash Patel of Advance Circuit Development Centre (ACDC), Surat was invited for conducting this workshop. Dr. Vijay D. Dhiman, SSIP Co-ordinator welcomed the dignitaries and addressed the students motivating them to be innovative and venture into startups through novel ideas accomplishing projects by using Arduino with benefits making the best use of the opportunities in the campus.

Mr. Akash Patel is the Co-founder of the renowned firm Advance Circuit Development Centre (ACDC), Surat. He has completed his Bachelor of Engineering in Electronics and Communication Engineering from Surat. Then after one year he has started his own start-up along with his friends. He has also given so many expert talks and develop tinkering lab in many colleges as well as in schools.

During the session, Arduino is an open source development board used by developers and hobbyist for creating projects and prototypes. Arduino has vast collection of supporting libraries developed by open source users across the world. Learning this platform might help students in rapid prototype development their project. Keeping these facts in mind content of workshop was designed and delivered.

In the session students got familiar with various development boards of Arduino and learnt the development environment for Arduino. Working with Arduino I/O pin was taught initially and students run small practical like blinking LED, interfacing Pushbutton switch. Later important concept of debounce was covered and practical implementation for switch debounce logic was performed.

Overall student learnt the basics of working with Arduino and gained basic knowledge of various Arduino development boards; Programming environment; onboard features of Arduino Uno: I/O, Analog, PWM; Arduino shields and IoT using Arduino. Feedback students was collected and it suggested that they welcomed this initiative and they are motivated to explore more dimension in this platform also they are willing to use this board in their projects in future.

## **Glimpses of Expert Talk**









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SSIP Co-ordinator Dr. V. D. Dhiman is thankful to Mr. Akash Patel for enhancing knowledge about Arduino and its real applications in project. The expert talk was coordinated by the Departmental SSIP coordinators Prof. Darshan J. Mehta and Prof. Urvi Patel. As Government is continuously promoting the SSIP activity, College would put up continuous efforts to encourage the student for fulfilling the goals of SSIP activities.