

**Gujarat Technological
University**



**Community Innovation &
Co-Creation Center (CIC3)**

RASTRIYA AVISHKAR ABHIYAN



29TH DECEMBER 2015, AT B0 CONFERENCE HALL, GTU CHANDKHEDA CAMPUS

On 29th December 2015, under the visionary direction of Honourable Vice Chancellor Dr. Akshay Aggrawal, Community Innovation and Co-Creation Center, GTU organized one day Science workshop at GTU as a part of **“Rashtriya Avishkar Abhiyan (RAA)”**, which was launched on 9th July, 2015 by late **Dr. A.P.J. Abdul Kalam**, Former President of India at New Delhi for **School Students of 9th, 10th, 11th & 12th** standard with four Teachers. The Focus of this Programme was to nurture a spirit of enquiry and creativity, love for science and mathematics, and to encourage those children who show an inclination and talent for these subjects so that they can excel in these.

The program was attended by more than 45 Students and 4 Teachers of **IDP school, Sarvayogam School and NIOS School**. The aim of the program was to aware students about recent technologies and to provide hands on experience of Electronic components.

The Workshop began with a Saraswati Vandana.



Then the Session was began with a welcome address and introduction of **GTU-CiC3** to student by **Prof. Rutika Ghariya**. **CiC3 team** including **Prof. Rutika Ghariya, Prof. Krutika Paradkar, Prof. Raj Hakani, Prof. Mitesh Solanki and Prof. Hemal Nayak** were present and helped students to solve their technical quarries.

In First session, **Prof. Rutika Ghariya** started with Introduction of Engineering and Different Engineering Streams. She gave the basic introduction about Electronics. She discussed about different types of Electronic components like resistor, capacitor, inductor, and different types of diodes, LED, LASER and their applications. She taught how to find resistor value using Colorcode. She also explained about 3-D Printer and Vinayl cutter and their applications. She had shown a video of 3-D Printer & Vinayl cutter and Demo of Printing Nut-Bolt in 3-D Printer.



In Second session, **Prof. Raj Hakani** discussed about different types of Processors and Controllers. He explained Arduino Controller and its application. He taught LED blinking and different LED patterns using Arduino Board. He discussed about numbers of Sensors available in Market and their uses. He gave overview about Raspberry Pi Processor. He told students about running and future CIC3 activities.



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Students from different GTU affiliated colleges who are currently doing their Innovative Projects in CIC3, gave overview and demo of their Projects to the School Students. The Projects were Gesture base wireless robot, Quad copter, Earth quake early warning System.



At the end of the workshop, Cic3 team invited all students to visit CiC3 lab to convert their innovative ideas into reality.



(CIC3 team and IDP School Teachers (Ms. Harveeta Patel, Mr. Urvish Patel, Mr. Manan Patel, Mr. Bhargav Patel))



(Students of IDP School, Sarvayogam School, NIOS School and Faculty Members)

Feedback:-

It was a great experience for all the Students. This happens very Seldom that the Student enjoy as well as learn. Practical as well as theoretical knowledge was given to Students which they will surely remember. We will definitely look forward to this sort of programs ahead. Thank you for a wonderful experience. Everyone had a great time.

- IDP School

(Ms. Harveeta Patel(Faculty)

Mariah Albin, Rushali Panchal, Margi Sharma (Students))

The Event was excellent. We had got information about many new things of electronics and sensor. I liked it very much and was impressed by it.

- Vishmay Ketan Vora(Sarvayogam school Student)

It was a great experience in GTU. When we entered we saw the LED display by Sensors "Welcome to GTU". The Teachers explained very well and The projects were very good.

- Drashan Jain(IDP School Student)

It was a Pleasant experience to be out here. Had a great time with robots and Science. Really showed a path about our future.

- Nishant Jha(IDP School)

(Newspaper Cutting (03-01-2016),Gujarat Samachar Plus)

વિજ્ઞાન પ્રત્યે રહેલી ગેરસમજને દૂર કરવા જીટીયુમાં સાયન્સ વર્કશોપ યોજાઈ

ગિત અને વિજ્ઞાનના આ બન્ને વિષયોના નામ આવતાની સાથે જ સ્ટુડન્ટની ઉંચી સરખામણી જતી હોય છે. શાળામાં પણ શિક્ષકો દ્વારા ગણિત-વિજ્ઞાનના વિષયને ખૂબ અધરા વિષય તરીકે હોવાનું અવારનવાર વિદ્યાર્થીઓને કહેવાયતા મોટાભાગના સ્ટુડન્ટસ અગાઉથી ગભરાઈને આ વિષયોથી દૂર ભાગતા હોય છે. હાલની શિક્ષક પ્રવૃત્તિની નબળાઈ કહી કે અન્ય કોઈ કારણ તરવો પણ આવી ગેરમાન્યતાના કારણે સાયન્સ અને ગણિત જેવા વિષયો પ્રત્યેનો રસ સ્કૂલના બાળકોમાં કેળવાતો નથી. જે બાબતને કેન્દ્રમાં રાખી દિલ્હી ખાતે જુલાઈ ૨૦૧૫માં વિજ્ઞાન અને રંગસ ચલાવવામાં આવી રહ્યું છે. જે અંતર્ગત ગુજરાત ટેકનોલોજીકલ યુનિવર્સિટી ચાંદખેડા કેમ્પસ ખાતે 'વિજ્ઞાન વર્કશોપ' યોજવામાં આવ્યો હતો.

જીટીયુ ચાંદખેડા કેમ્પસ ખાતે યોજાયેલા આ વર્કશોપમાં રાહેરની વિવિધ સ્કૂલમાંથી આવેલા ૪૫ સ્ટુડન્ટે ભાગ લીધો હતો. આ સથે શિક્ષકોએ પણ સાયન્સ અને ગણિતના રહસ્યો અને સરળ



ગુજરાત ટેકનોલોજીકલ યુનિવર્સિટી ખાતે સ્કૂલના સ્ટુડન્ટસ માટે 'વિજ્ઞાન વર્કશોપ' યોજવામાં આવી હતી

પ્રદર્શનો વિશે જણકારી મેળવી હતી. સ્કૂલના સ્ટુડન્ટને સાયન્સ વિષય પ્રત્યેની ગેરમાન્યતા દૂર થાય તેવા મુખ્ય ઉદ્દેશ્ય સથે વિજ્ઞાન વર્કશોપને આગળ લઈ જવામાં આવ્યો હતો.

ઉલ્લેખનીય છે કે ખૂબ પૂર્વ રાષ્ટ્રપતિ ડૉ.એ.પી.જે અબ્દુલ કલામના હસ્તે નવી દિલ્હીમાં ગત ૮ જુલાઈ ૨૦૧૫થી શરૂ કરવામાં આવ્યો હતો. જેમાં ધોરણ ૮થી ૧૨ના સ્ટુડન્ટસમાં સર્જનાત્મકતાના ગુણો કેળવવા, વિજ્ઞાન-ગણિત પ્રત્યે સ્કૂલના બાળકોમાં પ્રેમ વધે અને આ વિષયોમાં નવા નવા સંશોધનો થાય તેવા હેતુથી આ પ્રોગ્રામ ચલાવવામાં આવી રહ્યો છે.

ક્યા વિષય પર સ્ટુડન્ટસને અપેર કર્યા

- હાલની લેટેસ્ટ ટેકનોલોજી અંગે માહિતી
- રિમોટ સંચાલિત વસ્તુમાં વપરાતા હાર્ડવેર અને સોફ્ટવેર
- એમ્બેડેડ સી પ્રોગ્રામિંગ
- સેન્સર તેમજ પ્રકાર
- વિનાઈલ કટર
- ક્રી ડી પ્રિન્ટર

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CIC3 WORKSHOPS

- CIC3 WORKSHOPS

1. Faculty Development Program on Amazon AWS Cloud Computing 15-18th December, 2015
CIRCULAR - http://files.gtu.ac.in/circulars/15Nov/23112015_02.pdf
2. STUDENT SELECTION (Student Selection Interview & Written Test)
CIRCULAR - http://files.gtu.ac.in/circulars/15Oct/21102015_12.pdf
3. 36 HOURS HECKATHON- Code For Gujarat
CIRCULAR - http://files.gtu.ac.in/circulars/15Nov/10112015_3.pdf
REPORT - http://files.gtu.ac.in/circulars/15Oct/23102015_11.pdf
4. 3-Days Program on Lab VIEW for Research Partners
CIRCULAR - http://files.gtu.ac.in/circulars/15SEP/11092015_04.pdf
REPORT - http://files.gtu.ac.in/circulars/15Oct/15102015_05.pdf
5. Open Source Board - Arduino on 14th Sept - 2015, Open Source Board - Raspberry Pi on 15th Sept – 2015
CIRCULAR - http://files.gtu.ac.in/circulars/15SEP/10092015_04.pdf
REPORT - http://files.gtu.ac.in/circulars/15Oct/15102015_06.pdf
6. Signal Processing and Basic of an Antenna
CIRCULAR - http://files.gtu.ac.in/circulars/15Jul/27072015_04.pdf
REPORT - http://files.gtu.ac.in/circulars/15SEP/21092015_01.pdf
7. Arduino Open Challenge
CIRCULAR – REGISTRATION OF IDEAS WAS DONE BY STUDENT WHO ATTEND THE WORKSHOPS OF CIC3 .
KINNER VAGHELA SIR – INTERVIEW PANEL.
REPORT - http://files.gtu.ac.in/circulars/15Oct/15102015_07.pdf
8. My- Rio Challenge after National Instrument - Hack A Thon
CIRCULAR – REGISTRATION OF IDEAS WAS DONE BY STUDENT WHO ATTEND THE National Instrument -
Hack A Thon OF CIC3 . KINNER VAGHELA SIR - INTERVIEW PANEL.
REPORT - http://files.gtu.ac.in/circulars/15Oct/15102015_04.pdf
9. National Instrument - Hack A Thon
CIRCULAR – <http://files.gtu.ac.in/circulars/15Jul/17072015.pdf>
REPORT - http://files.gtu.ac.in/circulars/15Oct/15102015_04.pdf
10. Faculty Development Programme on AVR Microcontrollers
CIRCULAR - http://files.gtu.ac.in/circulars/15Jul/13072015_12.pdf
11. RASHRITYA AAWASHKAR ABHIYAN OF MHRD FOR SCHOOL STUDENTS
CIRCULAR- http://files.gtu.ac.in/circulars/15Dec/22122015_02.pdf

- UPCOMMING CIC3 EVENTS

1. ON 6-1-2016 TO 8-1-2016 FDP – INDUSTRIAL APPROACH TO DESIGN & PROJECT EXECUTION USING MATLAB
CIRCULAR- http://files.gtu.ac.in/circulars/15DEC/19122015_02.pdf
2. ON 7 -1-2016- HUMANOID ROBO – NAO WORKSHOP
CIRCULAR- http://files.gtu.ac.in/circulars/15DEC/18122015_01.pdf
3. ON 2 – 1 – 2016 TO 3-1-2016- EYE ROBOTICS WORKSHOP
CIRCULAR- http://files.gtu.ac.in/circulars/15DEC/11122015_06.pdf