



Vidya Vikas Education Trust's

Universal College of Engineering

Approved by AICTE, DTE, Maharashtra State Government and Affiliated to Mumbai University

Accredited with B+ Grade by NAAC | Recognised as Linguistic (Gujarati) Minority Institution



ELECTRONICS ENGINEERING DEPARTMENT MAGAZINE

COMPILED AND DESIGNED BY:

MS. SAMPADA PIMPALE - MAGAZINE COORDINATOR

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DEPARTMENT VISION:

To be recognized for practicing the best teaching-learning methods to create highly competent, resourceful and self-motivated young electronics engineers for benefit of society.

DEPARTMENT MISSION:

- To nurture engineers who can serve needs of society using new and innovative techniques in electronics.
- To improve and apply knowledge of electronics subjects through participation in different technical events.
- To enhance carrier opportunities of electronic students through industry interactions and in plant training.
- To install the passion and spirit among students to pursue higher education in electronics and entrepreneurship.

DEPARTMENTAL ACTIVITIES

CONVOCATION

DATE: 04/01/2020

VENUE: Seminar Hall

Fourth Convocation ceremony for the batch 2018-19, was arranged by Electronics department on 4th January 2020. The first and second toppers were awarded with gold and silver medals respectively along with degree certificates to all students.



The Convocation Ceremony of Electronics Engineering: Batch 2018-19

TOPPERS

1. Pratik Panchal: 8.04

2. Dhanwade Rajesh:7.82



Robotics Session at The Green Acres Academy

DATE: Saturday, 11th January 2020.

VENUE: - The Green Acres Academy (TGAA), Mulund (W)

- This workshop was conducted for 8th std students.
- They were taught about the upcoming technology on ROBOTICS like wired and wireless robot, Introduction to Arduino boards, Controlling and designing wired robot using remote control, Bluetooth and ZigBee.
- Hands-on experience were given to the students. The main motto was to create awareness in schools about the Robotic environment and the trending technologies in today's era.
- Faculty / Staff Coordinators: Mr. Sandeep Dubey and Mr.Gaurav Shete→ Student Coordinators : Mr. Parag Dhanawade and Mr.Hardik Parmar



INNOVATION CELL

- The company had given the requirement for their ongoing project in their company.
- Our students worked on it and assembled the project in the given time and have submitted the project to the company
- Students were working on the company based project under innovation cell.

PROJECT ON PELTIER COOLING SYSTEM

Project on Peltier cooling system

Company Name: Labtop Instruments

Venue: Vasai

Students: Jatin Gohil and Ganesh Basyal



PROJECT ON PELTIER COOLING SYSTEM

Project on Timer valve circuit

Company Name: WinAir Compressor

Venue: Vasai

Students: Vinit Salvi



Follow UCOE INNOVATION CELL AT SOCIAL PLATFORMS AND STAY TUNED! INSTAGRAM - @innovation.ucoe
FACEBOOK – Innovation cell ucoe

National Level Hackathon by IEEE PES

DATE: 9th, 10th & 11th January 2020

VENUE: S. B. Jain Institute of Technology, Management and Research, Yerla

Lumino 2.0: A 24 hour National level Hackathon was organised by IEEE PES chapter under IEEE Student Branch of S. B. Jain Institute of Technology, Management and Research in collaboration with Nagpur subsection, where our team AVR Hackers from Universal college of Engineering secured the runner up position and won a cash prize of 6000/- . The AVR Hackers team members are Akshay Laddha, Ganesh Basyal, Jatin Gohil and Sahil Ranim from TE ETRX branch.

The students created a smart traffic light system using RG leds and Arduino UNO. The RG leds were grouped together to create led bulbs which were driven by MOSFETs. In additional stage, they also created a 5x5 led matrix and displayed digits 0-9 using the same.



Robotics Workshop at Kala Vidya Mandir

One day on Campus workshop on Robotics and Arduino Board for Diploma/ Bifocal science (11th& 12th)/ Science students (11th& 12th) to promote robotics and automation.

Workshop on Wired and Wireless Robot covered following topics:

- Introduction to upcoming technology – ROBOTICS.
- Introduction to wired Robot.
- Introduction to wireless Robots.
- Introduction to Arduino Board (Arduino Platform & Software, LED Interfacing, LCD Interfacing etc.).
- Controlling and designing wired robot using remote control.
- Controlling wireless robot using Bluetooth and ZigBee.
- Hands-on / Practical experience.

Resource Persons:

1. Mr. Gaurav Shete
2. Mr. Deepak Modi



AURORA 2020

Aurora - the annual cultural festival of Universal College of engineering since its inception has always brought out the best talents in the college to the forefront.

Aurora is a thoroughfare along with the engineering students is able to unveil their talent on the much isolated turf of performing arts. This is an event where students take a brief time off their busy schedule and strive hard to acclaim proficiency in the field of arts.

Students from all departments (Computer, IT, EXTC, ETRX, CIVIL) enthusiastically participated in the booth sports and cultural events. It was a weeklong event starting from 11/01/2020 to 18/01/2020.



WEBINAR ON VLSI DESIGN USING VERILOG HDL

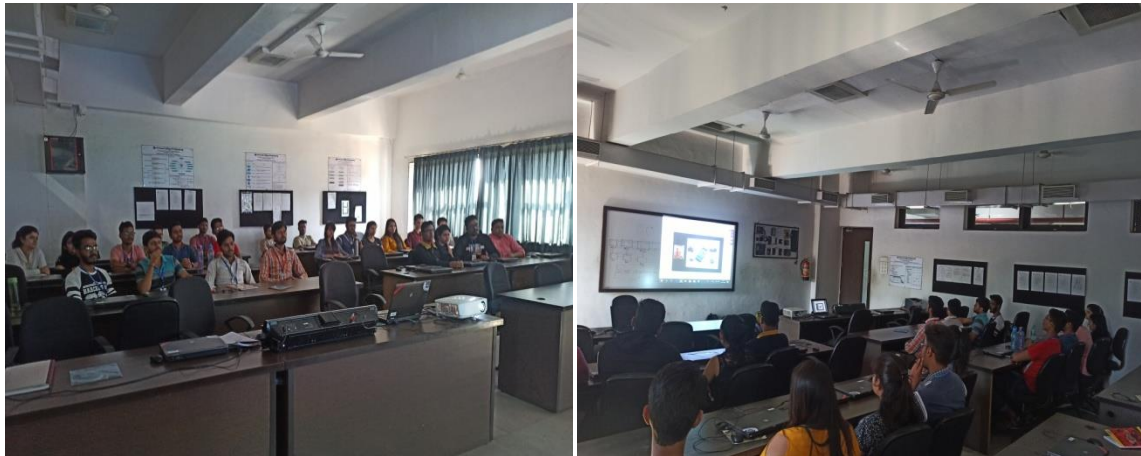
DATE: 30/01/2020

VENUE: Programming Lab 218, Ucoe

Webinar on VLSI design using Verilog HDL was arranged by department webinar coordinator Ms. Sampada Pimpale in collaboration with Maven Silicon, Bangalore. Following topics were covered by the speaker Mr P. R. Sivakumar, CEO of Maven Silicon:

Overview of VLSI Design

- IPs, Chips and SoCs, SoC Design, ASIC Vs FPGA, RTL Design using Verilog HDL
- Overview of Verilog, Verilog Language Concepts, Verilog Language Basics and Constructs, Verilog Abstraction Levels
- Data Types, Data type concepts, Nets and Registers, Non hardware equivalent variables, Arrays
- Verilog Operators, Logical operators, Bitwise and Reduction operators, Concatenation and Conditional, Relational and Arithmetic, Shift and Equality operators, Operators precedence



ELECTRONICS DEPARTMENT TOPPERS A.Y. 2020

CONGRATULATIONS

Semester VII

Ist: Dipankar Nandi (8.23 SGPI)



Semester V

Ist: Ganesh Basyal (8.67 SGPI)



IInd : Hiral Mehta (7.92 SGPI)



IInd: Meet Shah (8.56 SGPI)



REPUBLIC DAY CELEBRATION

DATE: 26/01/2020
VENUE: UCOEGROUND

The Republic Day celebration started at morning on 26th January 2020.

The ceremony took place in the presence of Dr. Jitendra Pat and HoDs of various departments, faculty, staff members and students.

The ceremony commenced with the welcoming of our Director Dr. Jitendra Patil by our NSS volunteers and then unfurling of the National Flag.



UPCOMING EVENTS

JUNIOR TANTROTSAV

Date: 7th March 2020

Venue: Universal college of Engineering

ACES Vidya Vikas Education Trust's **Universal College of Engineering**
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AND
The Institution of Engineers (India)
PRESENTS

CIVIL

- BRIDGE IT
- URBANIA
- TECHNICAL QUIZ
- TUG OF WORD'S WAR
- TECH TALKS
- RAPID SURVEY
- CONQUER IT

FUN EVENTS

- EGG DROP
- BALLON PYRAMID
- MINUTE CHALLENGE
- FOOT VOLLEY
- PUBG
- SHORT FILM
- TECHNICAL STANDUP
- SELFIE MANIA

EXTC & ETRX

- MYSTERY ROOM
- ROBO SOCCER
- ROBO CARROM
- ROBO RACE
- BLIND CODING
- CIRCUIT DESIGNING
- QUIZ

CONTACT US

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EXTC & ETRX

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BUS COORDINATOR

- JAY JAGADA (BORIVALI) - 887936373
- DIVIT MISTRY (THANE) - 8452996498
- VIGHNESH (VASAI) - 8552879485

JR. TANTROTSAV
CELEBRATION OF UPCOMING ENGINEERS!!
7th MARCH, 2020
(Saturday)
TROPHIES & CASH PRIZES
UPTO RS. 50,000/-
&
CHAMPION TROPHY

Registration for Jr. Tanrotsav

STAY TUNED!!!
aces_ucoe

FREE ENTRY

NATIONAL LEVEL PROJECT EXHIBITION CUM POSTER PRESENTATION

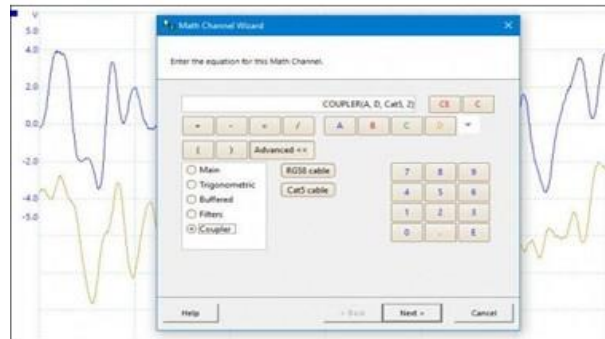
Date: 13th March 2020

Venue: Universal college of Engineering

This is a National level competition for Diploma and Degree Engineering students organized by IETE-ISF. In this event, the selected poster and projects get awarded with prizes and the participants get the participation certificates.

LATEST ETHERNET TESTING ADVANCES TO BE REVEALED

Pico Technology has released a new BroadR-Reach decoder/analyzer package that simplifies Automotive Ethernet integration testing and debugging. The package includes a novel non-intrusive Software Directional Coupler to separate up- and downstream traffic on full-duplex communication lines, and electronics designers will be able to discuss this latest advance, and other offerings in the Pico Technology portfolio, at the forthcoming PCB



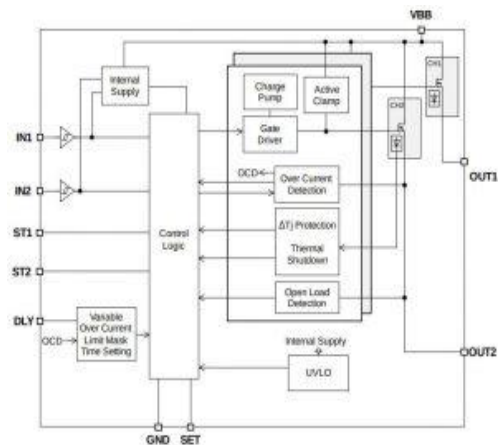
Live event on March 12th. BroadR-Reach allows multiple in-vehicle systems to simultaneously access information over single unshielded twisted-pair cables. The technology delivers relatively high-speed data, 100 Mbps, with low connectivity costs and cabling weight.

Source: <http://www.newelectronics.co.uk/electronics-news/latest-ethernet-testing-advances-to-be-revealed-at-pcb-live/223941/>

DUAL HIGH-SIDE SWITCH IS PROTECTED AND QUALIFIED FOR AUTOMOTIVE USE

Rohm is aiming at electric vehicles with a 41V dual output high side switch for transmission and engine electronic control units(ECUs).

Called BV2HD045EFU-C, the part is AEC-Q100 Grade 1 qualified and includes numerous protection functions include thermal protection that detects both when the control circuit is too hot, and if the output mosfets are much hotter than the control circuit. The load is re-connected after the thermal fault condition has cleared. In-rush current to the chip is limited to 21A, while steady state output over-current detection can be set independently for the two channels between 1A and 10A. An optional capacitor sets a time delay on output over-current detection.



Source: <https://www.electronicweekly.com/news/products/power-supplies/dual-high-side-switch-protected-qualified-automotive-use-2020-02/>



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