

# INSIGHT



DEPARTMENT OF ELECTRONICS AND COMPUTER SCIENCE (Formerly known as Electronics Department)

July 2023 • ISSUE 04 • VOLUME 14

#### Vision of the Department:

To be recognized as a center of excellence in the field of Electronics Engineering where learners are nurtured in a scholarly environment to evolve into competent professionals to benefit society

#### Mission of the Department:

- Evolve a curriculum which emphasizes on strong engineering fundamentals with the flexibility to choose advanced courses of interest and gain exposure to tools and techniques in Electronics Engineering.
- Encourage a teaching-learning process in which highly competent faculty share a symbiotic association with the institutes of repute.
- · Facilitate creation and dissemination of Electronics engineering knowledge through a digitally-enabled learning environment.
- · Develop academic and infrastructural facilities with modern equipment and other learning resources and encourage reciprocal sharing with other institutes through networking.
- Establish a center of excellence to enhance academia Electronics industry partnership and work on collaborative projects for benefit of society.

#### **Programme Educational Objectives**

PEO1. To enable the students to apply Electronics Engineering knowledge to design technically sound systems, adapt to new technologies through lifelong learning and excel in their career

PEO2. To inculcate research and development ability and enable the students to analyze real life problems in diverse domains to become entrepreneurs

PEO3. To make the students understand human, social, ethical and environmental context of their profession and contribute positively to the needs of individuals and society

# WHAT'S INSIDE

Fintech Activity
ExcelR Activity

Student Talk

Soham Bagade

Aluminus Talk

• Kavita Satose

EESA Activities
Department Staff

- Prof. Anuradha Joshi
- Prof.Manoj Suryawanshi
- Department FDP

Departmental Updates

### Dr. Arun Chavan

HEAD OF DEPARTMENT, ELECTRONICS AND COMPUTER SCIENCE

Hi Everyone,

I welcome you all to this exciting new semester with full of energy.

The Department of Electronics and Computer Science has a record of having distinguished teaching faculty and research profile. Faculty members have excellent academic credentials and are highly regarded. They have been conferred with many prestigious awards at national and international levels. Several faculty members serve on the editorial boards of national and international journals, review technical articles for journals on a regular basis, and organize international symposia and conferences.

The department is committed to provide quality technical education and develop skillset required for industry. It concentrates on high academic standard backed by updated syllabus and industrial partnership. The primary focus of the curriculum in the department is to impart technical knowledge to students, promote their problem-solving skills and inculcate the culture of research & innovation.

Excited to see you all! You are going to have an amazing semester ahead learning new things.



Go as far as you can see; when you get there, you'll be able to see farther- J.P.Morgan



## **FINTECH Committee**



The event was conducted to

- To increase awareness about Stock Trading amongst engineering students
- The concepts of Option Trading, Long Term and Short Term Investment.
- How to invest in various kinds of Stocks.
- How to get high return on investments.
- Understanding why the markets rise or
- Recognizing the winning and losing stocks
- Root cause of failures in the market.
- Making big with a small trading capital.

# **EXCELR (MoU with Department)**



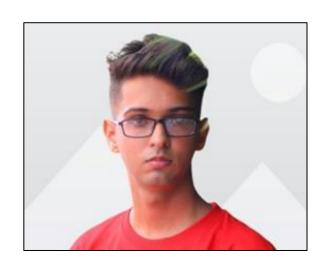
The course was of 30 Hours covering emerging field technologies like

- Python
- · Statistics.
- Machine Learning
- Neural Network
- Machine Learning

**66** The human foot is a masterpiece of engineering and a work of art-Leonardo da Vinci

# Student's Speak

Soham Bagade (TE ETRX A)



Greetings, fellow readers!

My name is Soham Bagde, and I am privileged to be an undergraduate student pursuing Electronics Engineering at the esteemed Vidyalankar Institute of Technology (VIT). Here, I aim to share my unique experiences and shed light on the great aspects of my journey at VIT, where excellence is nurtured in every way.

After my engineering entrance examination, I needed clarification about which college to enroll in. I heard some good reviews from my peers about VIT. I ended up joining the institution, which was one of my life's best decisions.

I must express my heartfelt gratitude to VIT's amazing and supportive faculty members. My experience at this institution has been nothing short of extraordinary through their guidance and unwavering support. VIT encompasses the perfect amalgamation of learning and enjoyment. Here, teachers and students maintain a friendly rapport, fostering an environment where students can understand concepts easily. The faculty imparts quality education and goes the extra mile to ensure that each student's needs are met.

During my coursework in electronics, I came across some brilliant and experienced professors like Professor Amaya Pethe and Professor Rakshak Sood. They have constantly helped me understand every intricate detail of the subjects, do real-world projects and get a broader perspective.

VIT also encourages its students to pursue various internships and courses. It provides students access to platforms like Coursera, edX and Matlab. Recently, it also provided students to intern at BSNL (Bharat Sanchar Nigam Ltd) to help them gain practical knowledge.

Departments at VIT are well equipped with excellent labs and the latest software. The department conducts many webinars, programs, and boot camps where renowned Industrialists and personalities are invited to share their knowledge and experience. They also promote extra and co-curricular activities. The Electronics department has its student committee, "EESA", to conduct various activities where students can put forth their creative ideas in the technical field.

In the end, I want to say, "I am a proud Vitian and would cherish this beautiful journey forever".

66 Any institutions' alumni are key to its growth. We are focused on giving a global experience to our students-Shiv Nadar 99

# Know an Alumnus

Kavita Satose (2015-2018)



Hello Dear VITians,

It gives me immense pleasure to share my professional journey with you. I am currently working in Greeksoft Technologies Private Limited, Borivali

Eight years ago In 2015, I stepped into Vidyalankar Institute of Technology to earn a degree Electronics Engineering to enrich my education. After the completion of my studies, I started my career as faculty in Vikas Junior College, Vikhroli After that I did Software testing Course and I joined Greeksoft Technologies PVT Ltd Company

I am grateful that I started my graduation studies Journey from Vidyalankar College. I must say it was my best decision, I ever made so far, to choose vidyalankar College.

My belief is "First Believe in yourself and then Believe in Institution

Friends, always welcome difficulties and challenges in your life. This makes us stronger, better and gives us an opportunity to get the best inside us.

My juniors I advice you to Do Justice with your time when it's time to enjoy college life, live it to the fullest but when it comes to your study, devote your 100% to it. You have to choose first horse among the: Skill, Luck and Mercy in the race of your professional life because only the first one will be with you forever, but to ride this, you must acquire the ability with hard work and passion. This is the right time for you. Thank you.

99

66 Strive for perfection in everything you do. Take the best that exists and make it better. When it does not exist, design it- Sir Henry Royce

## **EESA**



The event was conducted

- To provide a platform to students to showcase their caliber in the diversified domains of AI/ML and Data Science, Embedded Systems and IOT, Robotics, Web development and App Design.
- To give them an opportunity to translate their knowledge and innovative into practical projects
- To provide a platform for the participants to showcase their skills to other students coming in as audience.

#### DEPARTMENT STAFF

Prof. Anuradha Joshi ASSISTANT PROFESSOR

Prof. Manoj Suryawanshi
ASSISTANT PROFESSOR



#### **EDUCATION QUALIFICATION:**

MTech(Embedded system electronics)

#### WORKING EXPERIENCE

Teaching Experience: 14 Years Research/Industrial Experience: 03 Years Technical Papers Published: 05 Books Chapters Authored: 01

#### AREA OF SPECIALIZATION:

VLSI Design Microelectronics Electromagnetic Engineering Digital Electronics

#### **EDUCATION QUALIFICATION:**

M.E.(Electronics & Telecommunication)

#### WORKING EXPERIENCE

Teaching Experience: 11 Years Technical Papers Published: 01

#### AREA OF SPECIALIZATION:

Microcontroller
Embedded Systems
Python Programming





Science can amuse and fascinate us all, but it is engineering that changes the world."

—Isaac Asimov \*\*\*

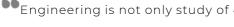
# Department updates



The following points are covered

- Introduction to Semi Custom IC Design Flow
- Cadence Solutions for Semi-Custom IC Design
- Functional Verification using Incisive RTL Synthesis using Genus Synthesis Solution
- Physical Implementation using Innovus that includes. Floor Planning, Power Planning, Placement, CTS, Routing, Timing Analysis, Power Analysis, Parasitic Extraction, Generation of GDSII
- Introduction to Full Custom IC Design Flow
- Cadence Solutions for Custom IC Design
- Schematic Capture using Virtuoso Schematic Editor
- Symbol Creation
- Test-bench Creation using Virtuoso Schematic Editor
- Functional Simulation using SpectreLayout Design using Virtuoso Layout Editor
- Physical Verification which includes DRC & LVS
- Parasitic Extraction using Quantus
- Post Layout Simulation
- Generation of GDSII





Engineering is not only study of 45 subjects but it is moral studies of intellectual life-Prakhar Shrivastav

# Department updates

Interaction sessions with two NGOs: Yuvak Biradari and Mumbai Gujrathi Sangathan

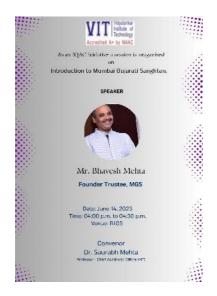
Session-1 on "Introduction to Yuvak Biradari - a voluntary Youth movement"

Speaker: Prof. Swar Karanti, Faculty WeSchool and Director and Managing Trustee, Yuvak Biradari

Session-2 on "Introduction to Mumbai Gujrathi Sangathan Speaker: Mr. Bhavesh Mehta, Founder Trustee, MGS

Date: 14th June 2023 Time: 3:30 pm to 4:30 pm

Venue: M-101





Dr. Sangeeta Joshi attended the POCO conference on 8th June 2023 organized by IEEE Bombay section.

#### Dr Arun Chavan

- Attended webinar on Start ups: How to make it Resilient on 8th April 2023 organized by BVCAM, New Delhi
- Attended webinar on Chaos Engineering on 15th April 2023 organized by BVCAM, New Delhi
- Attended webinar on Metaverse: A new Frontier of Digital Interaction on 29th April 2023 organized by
- Attended webinar on Manage Stress and be Resilient on 6th May 2023 organized by BVCAM, New Delhi
- Attended webinar on Generative AI on 20th May 2023 organized by BVCAM, New Delhi

#### Dr. Girish Gidaye

Manuscript of a paper titled "A systematic approach to optimize Feature Extraction Technique for COVID-19" is accepted for ICCUBEA-23, IEEE conference

Prof. Amaya Pethe successfully completed NPTEL 12 week course on Digital System Design with score of 69% from January-April 2023.

Prof. Manoj Suryawanshi completed the two week from 6th June 2023 to 24th June 2023 internship from Vedanshi Systems Pvt. Ltd. CBD, Belapur. He worked on temperature Monitoring System using Prometheus, Wireshark software, Python programming.

Prof. Rajashree Soman completed one week internship from 26th June 2023 to 1st July 2023 at Grok learning Pvt. Ltd. She worked on the project "Sustainable Farming"

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#### **UPCOMING EVENTS**

- Department of electronics and Computer Science will arrange the on line workshop on "How Deep Learning is being used in Biomedical Engineering research on September 9-10,2023 by Mr. Ankit Kandpal Deep learning Engineer.
- Library Committee will arrange Open House and NDLI awareness Program in July 2023
- IEEE Committee
  - o Hand-Over Ceremony in 4th Week July 2023
  - o Preplacement Talk under IEEE young Professionals by Mrs. Ashwini Patel in 2<sup>nd</sup> week August 2023
  - o 1 week RC Plane workshop at AIR NCC, Churchgate in 3<sup>rd</sup> week August 2023
  - o Drone Workshop by Drona Aviation in 4<sup>th</sup> Week August 2023
  - o Membership Drive in 2<sup>nd</sup> Week September 2023
  - o IEEE Xtreme, a hackathon (Global coding competition) in 4th Week September 2023
- EESA Committee
  - o ELECROSTEER event in 4th week July 2023.
  - o ELECTROVISON event in 2<sup>nd</sup> week August 2023.
  - o Microcontroller Application in 4th Week, August 2023
  - o Beyond the horizon in 1st week September 2023
  - o Developing GUI in Python Workshop in 2<sup>nd</sup> week September 2023
  - o Electronic Engineering and technology in 4<sup>th</sup> Week September 2023

There's nothing I believe in more strongly than getting young people interested in science and engineering, for a better tomorrow, for all humankind-Bill Nye

THE

**EDITORIAL TEAM** 

PROF. AMAYA PETHE

Chief Editor