



Vidya Vikas Education Trust's

Universal College of Engineering

Accredited with B+ Grade by NAAC

(Permanently Unaided | Approved by AICTE, DTE & Affiliated to University of Mumbai)

Current Wave

The Official Newsletter of Dept. of EXTC, UCOE
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College Profile:

Everything you need to know about us:

Embraced by lush greenery and scenic beauty, Universal College of Engineering is a treasured place for aspiring engineers to leave their imprints on success.

As a college within the wider network frame, we are one of the fastest-growing institutions in India. Our institute has been accredited by the National Assessment and Accreditation Council (NAAC) with a B+ grade in the first cycle of accreditation. Times of India Survey Ranked No.1 in India among Top Emerging Private Engineering Institutes for 6 consecutive years 2015, 2016, 2017, 2018, 2019, and 2020 and the saga of accolades continues.

In response to the expectations of quality technical education, our college is approved by the All-India Council for Technical Education (AICTE), New Delhi; Recognized by the Directorate of Technical Education (DTE), Government of Maharashtra; affiliated to Mumbai University. Our college is also associated with professional bodies like IEEE, IETE, ISA, and CSI to update the revolutionary technological advancements.



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We offer 4 years of full-time Bachelor of engineering programs in Computer Engineering, Civil Engineering, Artificial Intelligence & Machine Learning, Information Technology and Data Engineering.

The unique state-of-the-art facility of the institute has been carefully designed to accommodate the needs of the students. Laboratories are equipped with world-class facilities based on the latest technology of different sectors. Our smart classrooms are well ventilated, spacious, and equipped with overhead and LCD projectors along with the public address system. The College library provides arich collection of specialist library resources and services to support student's academic work and enrich their research skills.



We are obliged to equip our students to get placed in highly reputed companies by mentoring their necessary skill set for cutting-edge technologies. The core highlighted areas are helping students with their technical competency, communication skills along with career guidance and counseling.

Universal College of Engineering has produced many successful alumni who are working in reputed organizations in India and abroad and have contributed immensely to the cause of nation- building and society. We welcome all engineering aspirants to create an incredible legacy in the field of engineering.





PILOT AOI version 7 offers more Flexibility and Automation

The AOI system software PILOT AOI version 7 offers numerous new functions regarding performance and comfort. Especially with regard to the flexibility when using the AOI system in small and medium-sized service companies, a new, outstanding possibility arises: Since these companies may not have Gerber data available for AOI programme creation, a function has been integrated with the new software release that automatically generates this information based on a bare board. In combination with placement data and a finished assembly, the award-winning MagicClick function can then be used as usual for fully automatic test programme generation.

In order to further live up to the status of “THT-AOI expert” the test programme generation for through-hole components has been further simplified. The basis for this is provided by the import of ODB++ process (OPM) data from which THT-specific information such as size, shape, colour, etc. is used to automate the otherwise manual process for defining inspection tasks.

The convenient and simple operation has always been our demand for powerful inspection software, says Jens Kokott, product manager for AOI systems at GOEPEL electronic. The Mission Commander of our latest software version makes a small but fine contribution to this. As an intelligent and flexible to-do list, it guides you through tasks related to the actual AOI inspection, such as inserting bath marks or comments. You can also be reminded of the well-deserved coffee after the audit programme has been created.





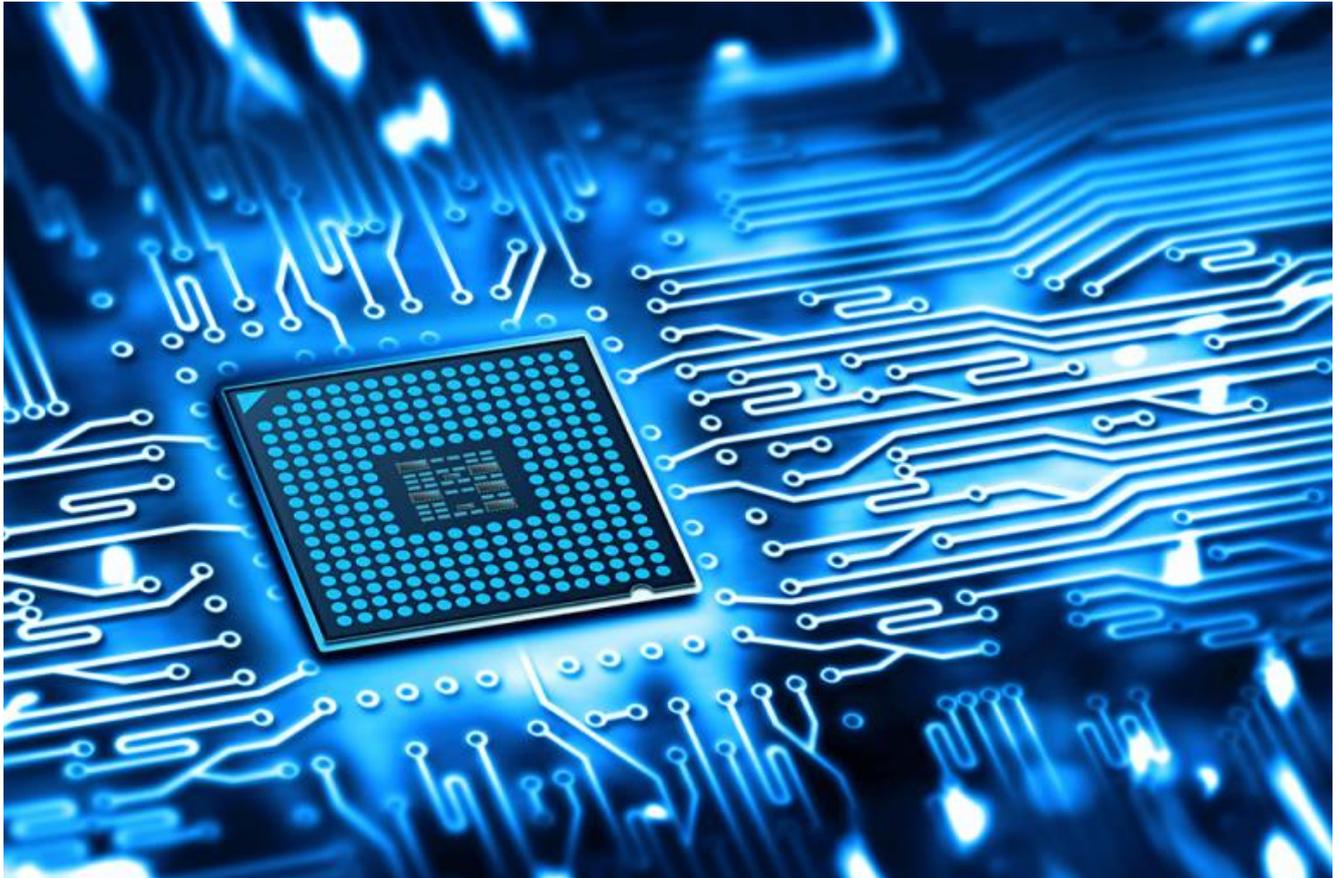
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India's Semiconductor Industry to Reach at Around \$100 Billion



The semiconductors industry is growing ever since the advent of electronic products. The Indian semiconductor market was valued at USD 27.2 billion in 2021 and according to the India Electronics and Semiconductor Association. India's semiconductor market is expected to grow more than double between 2021-2026 and reach US\$ 64 billion. Adding to the latest news in recently India-Samsung Semiconductor India Research (SSIR) announced a new partnership with the Indian Institute of Science (IISc). They will promote research and development (R&D) in the field of on-chip Electrostatic Discharge (ESD) Protection.

The research agreement was exchanged by Balajee Sowrirajan, CVP & MD at Samsung Semiconductor India Research, Bengaluru, and Prof Govindan Rangarajan, Director, Indian Institute of Science (IISc), in the presence of delegates from Samsung and IISc.

There is a scope that the semiconductor industry is seeing a boom. The figure is estimated to reach around \$100 billion shortly. India could have a large role to play in the semiconductor industry as the world's fifth-largest economy looks to boost its domestic chip sector.

The partnership seeks to build cutting-edge ESD device solutions. Moreover, this is to protect ultra-high-speed serial interfaces in advanced Integrated Circuits (ICs) and system-on-chip (SoC) products. The related research will be carried out by Prof Mayank Shrivastava's group at the DESE, IISc.



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Further, solutions arising from this research will be deployed in Samsung's advanced process nodes. ICs and SoCs are essential for practically any system, from small to big, that we see around us. They are very sensitive to ESD failures, especially those developed using advanced nano-scale CMOS technologies. The majority of IC chip failures and field returns are attributed to ESD failures. Further, industries holding the art of designing ESD protection devices and interface concepts lead the market. R&D in ESD technology for highly reliable interfaces and SoCs that operate at low power and high speed is an integral part of the effort. Meanwhile, IISc is one of the few institutes in the world leading ESD device research.

India's First Hydrogen Truck Launched



RIL in collaboration with Ashok Leyland has come up with Internal Combustion Engine (H2-ICE) powered heavy-duty truck, making it India's first hydrogen truck. The heavy vehicle was flagged off by PM Modi in Bengaluru at India Energy earlier this week. Dr. N Saravanan, President, and Chief Technology Officer, Ashok Leyland said, "Working with RIL, we have once again demonstrated our technological leadership and our commitment to the Clean Mobility Mission."

Green hydrogen is hydrogen generated by renewable energy or from low-carbon power. It is the cleanest form of fuel. A recent Niti Aayog report noted that green hydrogen is critical to India's economic development and net-zero ambitions, adding that the technology can help abate 3.6 gigatons of cumulative CO2 emissions by 2050.

Commenting on the launch, N Saravanan, President, and Chief Technology Officer, Ashok Leyland, said, "Working with RIL, we have once again demonstrated our technological leadership, and our commitment to the Clean Mobility Mission. Having one of the best R&D teams in the country, we want to continue our path to innovate and leverage new technologies to be a leader in sustainable and environment-friendly mobility."



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NSS Residential Camp

Day 1: The opening ceremony, 1st day of NSS camp started with meeting and Setup. Lecture By NSS PO related to activities to be carried out during the entire camp duration. Volunteers cleaned the space, settle down, discuss about activities and then divided into 3 teams for work.

Day 2: Today's session started with yoga and exercise at 6:00am after that in the morning at around 8:30am 30 volunteers took the rally in the village to spread awareness about girls education. In the evening at 6:00pm again 30 volunteers took a survey about making voter ID.

Day 3: Today's session started with exercise at 6:00am. Volunteers were divided into 3 group and every group was assigned with a particular area of village to clean. In the evening volunteers perform skit on blood donation to spread awareness.

Day 4: Today's session started with exercise at 6:00am. Volunteers were divided into 5 group and every group was assigned with a particular area of village for survey of shauchalay. In the evening, Volunteers helped the villagers for the registration of their new voter Id.

Day 5:- Today's session started with exercise at 6:00am. Volunteers were divided into 5 groups for school visit and every group was assigned with a particular class to volunteer. In the evening volunteers perform skit on blood donation to spread awareness.

Day 6: Today's session started with exercise at 6:00am. A swimming session of 2 hour for both boys and girls separately were organized for some enjoyment and after some rest the Volunteers were divided into 3 group and every group cleaned the area near the temple.

Day 7: Today's session started with exercise at 6:00am. Volunteers were divided into 5 groups and every group was assigned with a particular task for the making of Bandhara, After the lunch the camp was over. The camp was a great success.





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REPUBLIC DAY 2023

Republic Day is the day when India marks and celebrates the date on which the Constitution of India came into effect on 26th January 1950. The republic day is celebrated with happiness and enthusiasm. First, the chief guests were felicitated by NSS leaders. Later, the chief guests did the Flag Hoisting together. After the flag hoisting, National Anthem was sung by everyone. Then, the great parade by NSS was done along with the band. Everyone went inside and cultural activities like singing and dancing on cultural songs were done and then at last, everyone were given lunch boxes in the end. The event was a great success.





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Universal College of Engineering
Kaman-Bhiwandi Road, Survey
No. 146 (Part), Village Kaman, Taluka Vasai,
District Palghar-401208

Ph- 8007090722, 8407979167, 8007478659

Website: www.ucoe.edu.in/www.universalcollegeofengineering.edu.in