VASIREDDY VENKATADRI INSTITUTE OF TECHNOLOGY
(AUTONOMOUS)
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DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

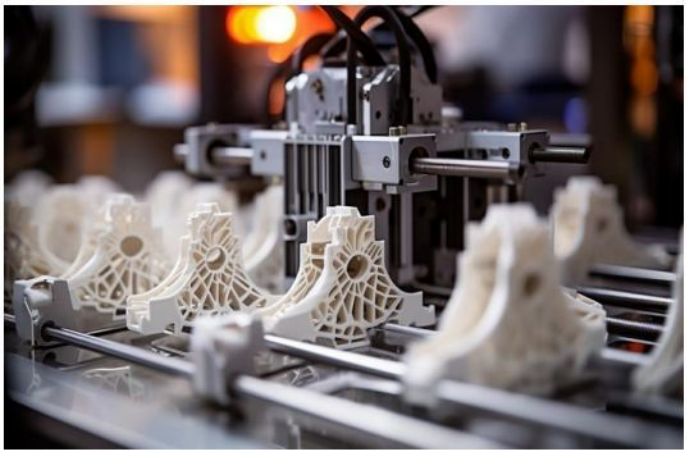
MONTHLY NEWSLETTER MAY 2024

DEPARTMENT VISION: To produce globally competitive and socially responsible engineering graduates and to bring out quality research and education, generating knowledge in the frontier areas of Electronics and Communication Engineering

DEPARTMENT MISSION:

- To achieve self-sufficiency on all fronts to ensure qualitative Teaching-Learning practices.
- To provide quality education, student-centred Teaching-Learning processes and state of art infrastructure for professional aspirants hailing from both rural and urban areas.
- To impart technical education that encourages independent thinking, developing strong domain knowledge, contemporary skills and attitude towards holistic growth of young minds.
- Responsiveness to both local and global industry needs and creating opportunities through incubation and implementation of innovative programs
- To serve the community as disciplined responsible citizens in a rapidly changing and expanding global community.
- Evolving this organization into a centre of academic and research excellence.

ADDITIVE MANUFACTURING (3D PRINTING):



Additive manufacturing, or 3D printing, is a revolutionary technology that has been transforming the global manufacturing landscape. It involves the layer-by-layer construction of three-dimensional objects based on digital designs. The relevance of additive manufacturing stems from its versatility, cost-effectiveness, and ability to create complex and customized parts. At recent exhibitions like ADIPEC and REAM, it was evident that numerous industry players are not only providing 3D printing services but also the essential hardware and printers, underscoring the technology's growing significance.

TECHNOLOGIES:

- **Multi-Material Printing:** Advancements in 3D printers now allow for the use of multiple materials in a single print, enabling the creation of complex parts with varied properties
- **Large-Scale Printing:** The ability to print large components has improved, with industrial-scale printers capable of producing parts for sectors such as aerospace and construction.

APPLICATIONS:

- **Semiconductors:** The semiconductor industry is leveraging additive manufacturing to address chip shortages and streamline production.
- **Healthcare:** There's a growing trend of using 3D printing for producing personalized medical devices at the point of care, including implants and surgical tools.

QUOTE: Additive manufacturing is the language of innovation, spoken in layers of potential.