



VIGNAN'S

INSTITUTE OF MANAGEMENT AND
TECHNOLOGY FOR WOMEN



Department of Information Technology

ITSPECTRUM

IT Newsletter | Issue : Apr - Jun, 2025 | Volume : 18

Vision of the Department

“To impart technical education producing competent and socially responsible engineering professionals in the field of Information Technology”.

Mission of the Department

- M1: To make the teaching–learning process more engaging, effective, and stimulating.
- M2: To impart strong foundational knowledge in sciences and information technology while fostering a positive attitude.
- M3: To create a conducive environment for developing skills and technologies aligned with industry needs.

Program Educational Objectives

- PEO1: Apply knowledge of mathematics and information technology to Analyze, design, and implement effective solutions for real-world problems in core as well as multidisciplinary domains.
- PEO2: Communicate effectively, work collaboratively in teams, uphold professional ethics, and leverage computing technologies for the betterment of society.
- PEO3: Pursue professional growth through lifelong learning, continuous skill enhancement, or higher education.

Program Specific Outcomes

- PSO1: Apply standard practices for software project development using hands-on programming skills for analysis, design and creation of software solutions.
- PSO2: Design networks and awareness of network security related issues.
- PSO3: Develop IT Application services with the help of different current engineering Tools.

Editorial Board

Mr Venkat Rao Ubbala

Assistant Professor, Dept of IT.

Ch.Vaishnavi (IV-I Student)

R.Bhanu (III-I Student)

K.Poojitha (III-I Student)

K.Sravya (II-I Student)

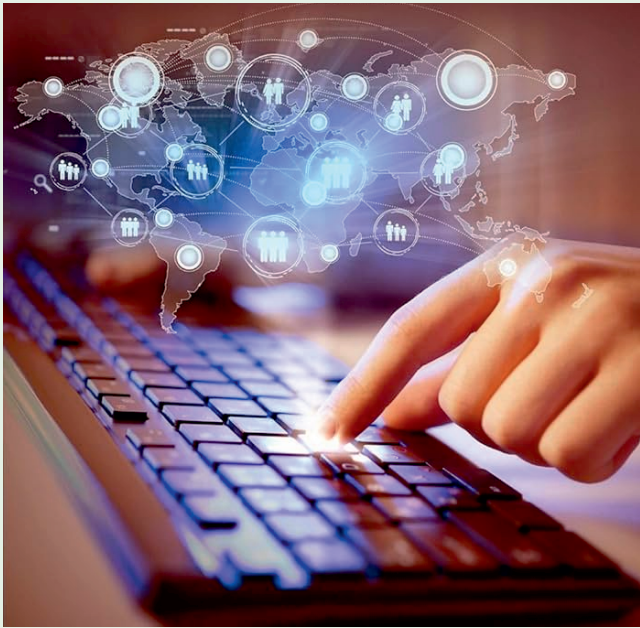
INFORMATION TECHNOLOGY

The Department of Information Technology was established in 2019 with an initial intake of 60 students. Since its inception, the department has been committed to providing excellent learning facilities and a dynamic academic environment that nurtures competent engineers capable of meeting both national and global industry standards.

The department's success is driven by the creativity, innovation, and dedication of its faculty and students. To strengthen technical competence, students are offered various in-house training programs designed to enhance their practical skills and domain expertise. The academic focus extends beyond theoretical knowledge, emphasizing holistic personality development through a blend of technical, analytical, and interpersonal skills.

The department regularly organizes workshops, seminars, and conferences to keep students and faculty abreast of emerging technologies in the field of Information Technology. Many of our students have secured placements in leading IT companies, while others have pursued higher education at top-ranked universities in the USA and other countries.





The collective efforts of both faculty and students have significantly contributed to the department's achievements and recognition. Furthermore, students are encouraged to participate in social outreach programs and extracurricular activities, fostering a spirit of leadership, teamwork, and community engagement.

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HOD'S MESSAGE

Dr. D. Shanthi

Postdoc (USA), PHD(CSE),
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Dr. D. Shanthi brings 18 years of experience to her role as Professor and Head of the Department of Information Technology at VMTW, Hyderabad, India. She completed her Postdoctoral research at California Public University (USA) and holds a PG Diploma in AI & ML with a 3.66 CGPA from NITW. Dr. Shanthi earned her Ph.D. in Computer Science from JNTU Hyderabad in 2020. She comes from a core Computer Science Engineering background. She also qualified the UGC NET examination in 2024. Additionally, she holds 3 copyrights, including 2 national and 1 international. Dr. Shanthi has been invited as an expert by esteemed organizations such as RCI (Hyderabad), IEI (Hyderabad), Telangana State Residential Degree Colleges, Thiruvalluvar University (Tamil Nadu), SRM (AP),

and Chaitanya Deemed University (Hyderabad). She has 2 scholars from CDU and Lincoln University College (Malaysia), under her guidance one scholar got his PHD. She has also been recognized as a research guide by JNTUH. She has authored 45 research papers in prominent international and national journals, including IEEE, Springer, and Inderscience, and few are presented at notable conferences. Her research citations are 537 H-Index: 12 and I10 Index: 13 and one of her research article won the “Best Paper Award” in 2019. Her accolades include the “Young Scientist Award” from DK International Research Foundation Faculty Awards in 2019, the “Outstanding Research Faculty Award” from Amaravathi Research Academy Faculty Excellence Awards in 2020, and the “APJ Abdul Kalam Award” from Shikshak Kalyan in 2021. Dr. Shanthi has published 2 national-level books, 4 international books, 3 Scopus-indexed book with Bentham Science, and 1 AICTE local language translation of a Software Engineering textbook. She is an active member of professional bodies such as FSIESRP, MIAENG, LMCSI, MEMRC, and MIEEE, and serves on the editorial boards of several journals, including the American Journal of Software Engineering and Applications, IJERT, and Microprocessors and Microsystems (SCI Journal), Discover Computing (springer Journal).



1.FACULTY ARTICLE ON THE ART & SCIENCE OF RESEARCH PAPER WRITING”

By Mrs. Sandhya Rani

Associate Professor, M.Tech, Dept of IT

Title: On The Art & Science Of Research Paper Writing”

Research paper writing is a crucial skill that bridges the gap between knowledge creation and dissemination. It is both an art and a science—the art lies in presenting ideas clearly and persuasively, while the science lies in following systematic methods and analytical precision. A well-written research paper reflects not only the depth of investigation but also the researcher's ability to communicate findings effectively. The process begins with identifying a significant research problem, conducting an extensive literature review, and formulating clear objectives and methodologies. Attention to structure, logical flow, and proper citation enhances the paper's academic value. Furthermore, maintaining ethical standards, avoiding plagiarism, and ensuring data authenticity are vital for credibility. Writing a research paper also requires critical thinking, clarity of expression, and the ability to interpret results meaningfully. Modern tools such as reference managers, plagiarism checkers, and visualization software support researchers in refining their work. Ultimately, mastering the art and science of research paper writing empowers faculty and students to contribute effectively to their disciplines, promote innovation, and strengthen the institution's academic excellence.



STUDENT ARTICLE ON THE LIFE OF AN ENGINEERING STUDENT

By HINDU BEJUGAM, 22UP1A1209, IV-IT.

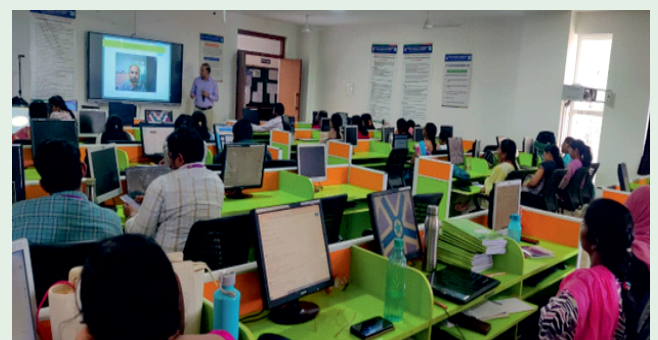
Title: The Life Of An Engineering Student

Life as an engineering student is a mix of challenge, chaos, and unforgettable memories. The excitement of entering college soon turns into the reality of managing tough subjects, long lab hours, and unexpected deadlines. Hostel life brings friendships that last a lifetime, late-night talks, and endless cups of tea. Students learn not only formulas and codes but also independence, teamwork, and the value of discipline. Between juggling studies, fests, and social life, they experience moments of pressure and pride alike. Engineering teaches much more than academics—it shapes patience, adaptability, and problem-solving skills. While exams and backlogs test endurance, cultural events and achievements fuel passion. By the end of four years, every engineering student emerges stronger, wiser, and ready to face the world with confidence, carrying memories that define some of the best years of their life.

Conducted Events In Department



The Department of Information Technology, Vignan's Institute of Management and Technology for Women (VMTW), Hyderabad, in association with the Electronics & ICT Academy (Hub), NIT Warangal, and E&ICT Academy (Spoke), IIITDM Kurnool, successfully organized a Faculty Development Programme (FDP) on “Harnessing Machine Learning from Fundamentals to Applications” from 30th June to 5th July 2025, sponsored by the Ministry of Electronics and Information Technology (MeitY), Government of India. The FDP aimed to provide educators and researchers with a comprehensive understanding of Machine Learning (ML) concepts ranging from theoretical foundations to advanced real-world applications. The week-long program emphasized the growing significance of ML in transforming industries and academia, preparing participants to integrate modern technologies into research and pedagogy. The sessions covered a broad range of topics including supervised, unsupervised, and reinforcement learning, algorithm design, data preprocessing, model optimization, and deployment of end-to-end ML solutions. Participants engaged in hands-on sessions using cutting-edge tools and frameworks such as Python, Scikit-learn, TensorFlow, and Keras, which provided practical insights into building intelligent systems. The FDP also focused on ethical and responsible AI, addressing key concerns related to bias, fairness, and transparency in machine learning models.



Renowned academicians from IITs, NITs, IIITs, and reputed industries shared their expertise through interactive lectures and discussions, creating an enriching learning environment. The program not only enhanced the technical competency of the participants but also fostered a research-driven mindset and collaborative spirit among faculty members. The event was well-coordinated and hosted at VMTW's ATF-305 C&D campus, equipped with modern infrastructure that facilitated both theoretical and practical sessions effectively. The FDP on Harnessing Machine Learning from Fundamentals to Applications concluded with a valedictory session, where participants shared their positive feedback and expressed gratitude for the valuable learning experience. Overall, the program served as a remarkable platform for professional development, knowledge sharing, and innovation, reaffirming VMTW's commitment to promoting academic excellence and advancing the frontiers of emerging technologies in education and research.

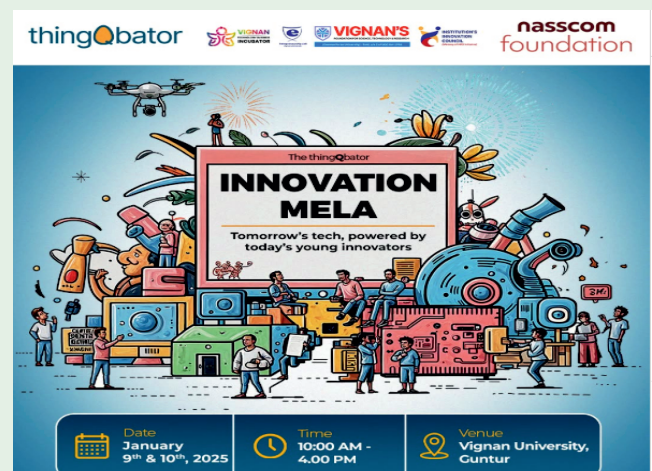
Student's Participation

S. N O.	Name of the Student	Name of the Event	State/National/ International level	Date of the Event
1	Narsing Divya Sri	CODEATHON-ILLUMINATE 2K25	National	2nd April 2025
2	Alane Ruthika	CODEATHON-ILLUMINATE 2K25	National	2nd April 2025
3	Dachepally krishnasri	CODEATHON-ILLUMINATE 2K25	National	2nd April 2025
4	Rakonde Rishika	CODEATHON-ILLUMINATE 2K25	National	2nd April 2025
5	Sreepathi Srivarshini	CODEATHON-ILLUMINATE 2K25	National	2nd April 2025

SAC Activities:



The Department of Information Technology organized an inspiring event titled “ThingQbator Program” on Friday, 3rd May 2025, to foster creativity, entrepreneurship, and technological innovation among students. The program provided a platform for young innovators to explore ideas, learn product development fundamentals, and transform concepts into prototypes. Designed to build an entrepreneurial mindset, it emphasized innovation and problem-solving in today’s digital era. Expert mentors and faculty guided students through sessions on design thinking, ideation, prototyping, and startup creation, helping them turn challenges into opportunities. Participants enthusiastically proposed IoT, AI, and digital solutions, showcasing teamwork, creativity, and a spirit of innovation. The initiative bridged learning with practical application, empowering students to take their first step toward entrepreneurship.



Through brainstorming sessions and hands-on learning, the event nurtured critical thinking and leadership qualities among participants. With active guidance from faculty mentors and resource persons, the session was highly engaging and informative, inspiring students to innovate with confidence and purpose. It concluded with a reflection session where students shared their ideas and experiences, expressing gratitude for the valuable learning opportunity. Overall, the ThingQbator Program was a remarkable success, fostering a spirit of innovation, entrepreneurship, and creative thinking. It reinforced the department's vision of empowering young minds to become future innovators and change-makers in technology and business.

NSS Activities

AWARENESS OF MOCK DRILL SESSION – VMTW CAMPUS (09-05-2025)

The NSS Unit of Vignan's Institute of Management and Technology for Women (VMTW) organized an Awareness Mock Drill Session on 9th May 2025 to educate students and staff on emergency preparedness and disaster management. The session focused on safety measures, evacuation procedures, and prompt action during emergencies like fires or earthquakes. Trained professionals demonstrated mock drills, including the use of fire extinguishers, first aid, and safe assembly practices. Students participated actively, gaining practical knowledge on handling crises calmly and responsibly. The program emphasized teamwork, alertness, and adherence to safety protocols. Faculty members and NSS volunteers efficiently coordinated the event, ensuring its success. Overall, the session enhanced awareness, built confidence in emergency response, and reinforced VMTW's commitment to campus

safety and social responsibility.

II. A RALLY ON “SAY NO TO TERRORISM” – GHATKESAR (29-04-2025)

The NSS Unit of Vignan's Institute of Management and Technology for Women (VMTW) organized an impactful Rally on “Say No to Terrorism” on 29th April 2025 at Ghatkesar, promoting peace, harmony, and unity. The rally aimed to raise awareness about the destructive impact of terrorism and the importance of collective responsibility in creating a peaceful society. NSS volunteers and faculty coordinators marched through the main streets carrying placards and banners with slogans promoting non-violence and national integrity. Students' enthusiastic participation reflected their commitment to social awareness and patriotism. The rally engaged the local community and concluded with a pledge to uphold unity, compassion, and national harmony, symbolizing VMTW's dedication to fostering socially responsible and peace-driven citizens.



Program Outcomes (Adapted from NBA)

Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

Problem Analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

Design/Development of Solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

Conduct Investigations of Complex Problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

Modern Tool Usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

The Engineer and Society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

Environment and Sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

Project Management and Finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

Life-long Learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

