



**VIGNAN'S INSTITUTE OF MANAGEMENT AND
TECHNOLOGY FOR WOMEN**



Department of Information Technology

ITSPECTRUM

IT NEWS LETTER

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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

Dr. A. Sudheer Babu,
Associate Professor, Dept of IT.
M. Vasanthi (IV-I Student)
T. Madhavi (IV-I Student)
Jukanti Anjali (III-I Student)
Manasi Agarwal (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),
M.Tech(CSE), B.Tech(CSE), PG.Diploma
in AI(NITW), (M.SC.(Psychology), AU)
Professor & Head of the Department,
Department of Information Technology
Mobile: +91 8125174595
Email: drshanthicse@gmail.com

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'S ON IMPORTANCE OF RESEARCH CULTURE IN ENGINEERING INSTITUTIONS

By Mr. Venkat Rao U
Assistant Professor
Dept of IT



Importance of Research Culture in Engineering Institutions

A strong research culture enhances the intellectual environment of engineering colleges and influences academic excellence. Encouraging faculty and students to pursue funded research, patents, and publications contributes to institutional growth and reputation. Establishing research centers, fostering collaborations, and supporting interdisciplinary studies help create innovative solutions for real-world challenges. When research becomes integral to teaching, classroom discussions become deeper and project outcomes improve. As a result, students gain analytical skills, creativity, and exposure to professional research practices, ultimately benefiting both academia and industry development.



2. FACULTY ARTICLE'S ON STRENGTHENING INDUSTRY-ACADEMIA PARTNERSHIPS FOR CAREER READINESS

Mr. S. Chandra sheker
Assistant Professors
Dept of IT

Strengthening Industry-Academia Partnerships for Career Readiness



Engineering education must be closely aligned with industry expectations to enhance student employability. Strategic partnerships with companies enable colleges to organize internships, industrial visits, expert talks, and certification programs. These initiatives provide students with practical exposure to workplace culture, real-world design problems, and current technological standards. Faculty also benefit through knowledge exchange, consultancy opportunities, and updating instructional content based on market needs. Such collaborations bridge the skills gap, ensuring students graduate not only with theoretical knowledge but also with practical competencies needed to succeed in competitive job roles.



1. STUDENT ARTICLE'S ON BUILDING LEADERSHIP SKILLS THROUGH STUDENT CLUBS

By Gorige Akhila _22UP1A1226 (IT)

Title: Building Leadership Skills Through Student Clubs

Student clubs provide an excellent platform for developing leadership, communication, and organizational abilities. Serving in roles such as event coordinator, team leader, or club president helps students take responsibility, plan activities, and work with diverse groups. These experiences enhance confidence and enable students to handle complex tasks while balancing academic commitments. Leadership skills gained through student clubs support personal development and prepare students for future managerial and professional responsibilities in their careers.

2. STUDENT ARTICLE'S ON IMPACT OF ONLINE LEARNING PLATFORMS ON ENGINEERING EDUCATION

By Thangeda Radhika_22UP1A1258 (IT)

Title: Impact of Online Learning Platforms on Engineering Education

Online learning platforms have transformed the academic experience for engineering students by offering flexible access to high-quality lectures, tutorials, and certification programs. Students can explore advanced topics, revise complex subjects, and learn at their own pace. Platforms such as NPTEL, Coursera, and MOOCs supplement classroom learning and support skill enhancement. Online assessments and interactive content further improve understanding. This blended approach helps students achieve better academic outcomes and prepares them for technologically advancing industries.

Student Participation

S. No.	Name of the Student	Name of the Event	State/National/ International level	Date of the Event
1	Chintha Reddy Neha	TECHBURN-2023	National	15-05-2023
2	Erukulla Prasanna	TECHBURN-2023	National	15-05-2023
3	G Deepthi Sree	TECHBURN-2023	National	15-05-2023
4	Gaddam Keerthi	TECHBURN-2023	National	15-05-2023
5	Gaddam Sharanya	TECHBURN-2023	National	15-05-2023

Conducted Events In Department

IEEE PROJECT EXPO NATIONAL 26-04-2023

The IEEE National Project Expo was successfully conducted on 26-04-2023, providing a dynamic platform for students to showcase their innovative technical projects. Participants from various institutions presented solutions addressing real-time engineering challenges, highlighting creativity, analytical thinking, and practical application of emerging technologies. The event aimed to encourage research orientation, collaboration, and industry-ready problem-solving skills among budding engineers.



Expert evaluators, faculty members, and invited industry professionals interacted with participants, offering constructive feedback

and insights to help refine their work. The expo covered diverse domains including IoT applications, artificial intelligence, robotics, communication systems, and renewable energy. The event served as a valuable opportunity for students to present their ideas, gain exposure, and experience competitive academic learning. Overall, the IEEE National Project Expo 2023 proved to be a successful and inspiring platform for promoting innovation and technical excellence.



SAC Activities

Title: Self-Defence workshop

A Self-Defence workshop was organized at VMTW on 6 June 2023 in collaboration with the Lions Club Women's Self Defence team. The session was led by trainer Y.R. Shiva Kumar, who provided hands-on demonstrations of practical combat and safety techniques. The program aimed to equip students with the confidence and presence of mind required to respond effectively in unsafe situations. Participants learned vital skills including body awareness, reflex control, and protective strategies applicable in real-life scenarios. The workshop successfully empowered girl students with self-confidence, physical preparedness, and the importance of staying alert, contributing to their overall personal safety and development.

Title: Being Swadeshi – Reality or Theory

VMTW conducted a debate session on 16 June 2023 under the Samvaad Programme titled “Being Swadeshi – Reality or Theory,” delivered by Mr. Anand Rao Ji. The program encouraged students to analyze the continued relevance of the Swadeshi movement in modern India. Participants discussed economic self-reliance, promotion of indigenous products, and challenges in the era of globalization. The debate highlighted differing viewpoints, enabling students to critically evaluate whether Swadeshi functions as a practical economic philosophy or remains primarily ideological. The session fostered intellectual engagement, national awareness, and meaningful academic discussion, providing participants with a platform to express analytical thinking and informed opinions.

NSS Activities

Title: Butter Milk Distribution Program

The VMTW Extension Activity Center organized a Butter Milk Distribution Program at Kondapur on 31-05-2023 to provide relief during the summer heat. Faculty and student volunteers actively participated in preparing and distributing buttermilk to villagers, commuters, and workers in the locality. The initiative aimed to promote health, hydration, and community welfare during peak temperatures. The activity also emphasized the importance of social responsibility, compassion, and public service among students. The event received positive appreciation from local residents, reinforcing VMTW's commitment to community outreach and humanitarian service. The distribution drive successfully created awareness on staying hydrated during summer while supporting the community.

Title: “Your Blood Saves Life”

A Blood Donation Camp titled “Your Blood Saves Life” was organized at the VMTW campus on 13-05-2023 by NSS, Red Cross, and NYK. The event witnessed enthusiastic participation from students, faculty, and staff, who came forward to donate blood as a humanitarian gesture. Medical professionals ensured safe procedures, screening, and guidance to all donors. The camp aimed to support hospitals and patients in need while educating youth on the importance of voluntary blood donation. The initiative not only contributed to saving lives but also promoted social consciousness, empathy, and civic responsibility. The program was successfully completed with commendable participation.



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.

