

# Information Technology Department

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About GMRIT

Newsletter Issue-3

[www.gmr.it.org](http://www.gmr.it.org)

GMR Institute of Technology is situated at Rajam, a small industrial town about 100 KMs from the 'city of destiny', Visakhapatnam in Andhra Pradesh. The campus of the institute is spread over sprawling 117 acres of land. The lush sylvan and idyllic surroundings at the heart of the agricultural belt, offer an ideal setting for higher studies. The institute is affiliated to the Jawaharlal Nehru Technological University, Kakinada and is approved by AICTE New Delhi. The institute has been accredited NAAC – 'A' grade of UGC. The institution is also having ISO 9001:2008 Quality Systems. The department of EEE has been accredited by National Board of accreditation (NBA). GMRIT offers 4-year B.Tech. Programs in seven core disciplines, 2-year M. Tech programs in six specializations. The approved annual intake of the institute is 1038 students. The institution received the grant extension of autonomous status for a period of ten years w.e.f 2018-19 to 2027-2028.

## About IT Department

### Vision

To be a preferred department of learning for students and teachers alike, with dual commitment to academics and research, serving students in an atmosphere of innovation and critical thinking.

### Mission

To provide adoptable education for the graduates in preparing them for a rewarding career to develop academic and research in collaboration with industry and other institutions in the field of Information Technology. **(M1)**

To prepare the students as thinking professionals and good citizens who will be able to apply their knowledge critically and innovatively in solving professional and social problems. **(M2)**

### Overview

GMRIT's Information Technology Department was formed in 1999 and covers the technical attributes of

IT, its multiple applications and the appropriate management of IT resources. Courses especially focus on the application of IT in various information and administrative systems. The annual intake of this Department is 120 students.

### Facilities & Infrastructure

Three state-of-the-art laboratories - Interactive, Networking, & Unix Labs.

- Over 170 high configurations branded (HP) systems and two Intel Xeon dual processor servers.
- 1 GBPS Bandwidth Internet connectivity from BSNL & Airtel through dedicated leased lines.
- Video conferencing, Digital library, e-journals, e-learning & e-book facilities through INDEST (Indian National Digital Library in Engineering, Science & Technology) membership.
- CTLP and Video Courses on LAN.
- LAN connectivity through OFC, Wireless & Intranet.
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### Major Courses Offered

- Data Structures
- Computer Networks
- Computer Organization
- Object Oriented Programming through Java
- Operating Systems
- Data Base Management System
- Middleware Technologies

- Software Engineering
- Information Security
- Object Oriented Analysis and Design
- Cloud Computing
- Distributed Databases
- Human Computer Interaction
- Design and Analysis of Algorithms
- Web technologies
- Network Programming
- Data Warehouse & Data Mining
- Data Analytics

### Academic Achievements

#### Papers Published in Journals

1. Chundururu Anilkumar et.al published a paper on "A Method for Specifying Yoga Poses Based on Deep Learning, Utilizing OpenCV and Media Pipe Technologies ". Journal: Scalable Computing: Practice and Experience, 25(2), 739-750. (2024). Retrieved from DOI:10.12694/scpe.v25i2.2590.(Q3, impact factor SJR(2023):0.31).
2. Kotti jayasri et al, Published a paper on "A Multi-level brain tumor classification using hybrid coot flamingo search optimization Algorithm Enabled deep learning with MRI images" jornal: Network: Computation in Neural Systems, 1-32 Retrieved from DOI: https://doi.org/10.1080/0954898X.2024.2343342.( Q3, impact factor SJR(2023):0.55).
3. Kotti Jayasri., et. al published a paper on "Enhancing Gesture-Controlled Virtual Mouse and

- Virtual Keyboard Using AI Techniques". Journal: Journal of Mobile Multimedia, 437-494. (2024). Retrieved from DOI: <https://doi.org/10.13052/jmm1550-4646.2029>. (Q2, impact factor SJR (2023):0.24).
4. Anilkumar, C., et.al published a paper on "Automated License Plate Recognition for Non-Helmeted Motor Riders Using YOLO and OCR" journal: Journal of Mobile Multimedia, 239-266.(2024). Retrieved from DOI: <https://doi.org/10.13052/jmm1550-4646.2021>. (Q2, impact factor SJR (2023):0.24).
5. Ramya, V., et.al published a paper on "Identification of lung cancer using archimedes flow regime optimization enabled deep belief network". Journal: Multimedia Tools and Applications, 1-30. retrieved from DOI: <https://doi.org/10.1007/s11042-024-19211-x>.

### Book Chapters

- Mrs. Kotti Jayasri publish a book chapter on "Integration of Nature-Inspired Mechanisms to Machine Learning in Real Time Sensors, Controllers, and Actuators for Industrial Automation". In Robotics and Automation in Industry 4.0" (pp. 1-25). CRC Press. (2024). eBook ISBN - 9781003317456.
- Mrs. Kotti Jayasri publish a book chapter on " Emerging Soft Computing and Machine Learning Techniques Applicable in Industrial and Automated Applications ". In Robotics and Automation in Industry 4.0 (pp. 65-88). CRC Press. (2024). eBook ISBN - 9781003317456.
- Mrs. Kotti, Jayasri publish a book chapter on " Utilizing Big Data Technology for Online Financial Risk Management ". In Artificial Intelligence Approaches to Sustainable Accounting (pp. 135-148). IGI Global. (2024). DOI: 10.4018/979-8-3693-0847-9.ch008.

### Papers Published in Conferences

#### Patents

- Mrs. Vaggi Ramya published a patent titled on "BLACK WIDOW OPTIMIZATION ALGORITHM FOR DETECTING BRAIN TUMOR USING MAGNETIC RESONANCE IMAGE SEGMENTATION". Application no: .202441040742 A. date of filing: 25/05/2024, publication date: 31/5/2024.

### Webinars and Faculty Development Programs

- Hari krishna** marrapu has successfully completed 21 days Masterclass on Natural Language Processing at Pantech e Learning Pvt Ltd, Chennai from 10.04.2024 to 30.04.2024.