

JNTUK



Directorate of IT Infrastructure

Information
Booklet



KEY SERVICES

- Digital Monitoring Cell
- Web Development Cell
- CDTO Office
- Trainings and Awareness Programs



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DIGITAL MONITORING CELL

JNTUK Digital Monitoring Cell (DMC) was established in 2017 to maintain and monitor the IT infrastructure of the University. DMC strengthens IT infrastructure to support university operations.

KEY ACTIVITIES

1. Campus Surveillance

CC Cameras were installed at strategic locations in the campus, and the monitoring unit is housed in the Hon'ble VC's chamber, to get a quick review of the activities in the university and to enhance security.

2. Development & Maintenance of IT Infrastructure

Supports the procurement, installation and maintenance of IT Infrastructure in the university. Maintains the key computing and networking infrastructure like the University Firewall, Servers, and Network Routers, Switches & WiFi Access Points.

3. Bandwidth Management

Looks after the distribution of Internet Bandwidth from Internet Leased Lines and NKN Network across different university units and schools.

4. E-Office

Supports the university units in the usage and issues related to e-office.

5. IT Support for Meetings

Provides IT support for virtual meetings and events organized in university meeting halls.

6. Facial Attendance System

Established facial attendance devices to record the attendance of ad-hoc and outsourcing staff.



TRAININGS

- Organized 15 trainings/awareness programs on Cyber Security, AI, Open Source Tools, and e-Learning for various stakeholders of university



E-STUDIO

An e-Studio is established in DMC to facilitate video recording of lectures and delivery of MOOCs.

E-CLASSROOM

Established an e-classroom to facilitate ICT-based teaching and to enable students to attend online lectures/webinars.

E-WASTE

E-waste collection bins were setup to collect and recycle e-waste generated in different university units.

WEB DEVELOPMENT CELL



The JNTUK Web Development Cell (WDC), established in 2021, manages and updates the university website, and other web portals ensuring seamless digital communication. The WDC team develops web platforms, supports e-learning, and provides technical assistance for efficient digital operations.

KEY ACTIVITIES

Actively participated in the revamping of the university Website, and responsible for maintaining the new university website and results portal.

Developed portals for DMC, Director Academic Planning, Research and Development, IQAC, NSS, ECOSAK, Biotechnology and Food Technology, etc.

E-MEDHA (LMS)

With an aim of promoting advanced learning and making students industry ready, JNTUK started offering Massive Open Online courses (MOOCs) since 2015. Since 2016, 20 MOOCs courses were delivered by experts from USA, IITs and industry. E-Medha was developed by WDC to facilitate MOOCs offering across various colleges.

CDTO OFFICE

The Director IT Infrastructure, JNTUK also looks after the responsibilities of Chief Data & Technology Officer (CDTO).

CDTO and his team, in coordination with APSCH and different university units oversees the integration and management of key digital initiatives:

- APAAR / Academic Bank of Credits (ABC), and Digi Locker implementation.
- Collection, preparation, and submission of data as per the shared template on records digitisation.
- Identification of top priority areas for Samarth implementation

E-TICKETING SYSTEM

WDC developed E-Ticketing System, a centralized platform for logging, tracking, and resolving IT-related issues efficiently across university offices.

APPLICATIONS DEVELOPED

- Developed PhD Tracking Software for the Director of Evaluation. This web service enables PhD Supervisors and Scholars to track PhD thesis status in real-time.
- Developed IQAC portal that displays comprehensive data required for several accreditation, and also enables the collection of feedback from various stakeholders such as Alumni, Faculty, Industry, and Students.
- Developed an online integrated PBAS form (to be included) on the IQAC portal.
- Developed a portal for JNTUK Open Distance Learning (ODL) / Online Learning (OL).
- Developed an application software for the University Exam Section for the Online Evaluation of Pre-PhD Papers (to be deployed).
- Developed JNTUK Online CAS application for Registrar's office.
- Developed Grievances module for the examination section
- Developed Internships portal for the DAP office



CoE in CS & DF

As per the directions of the Hon'ble Chief Minister, a plan to establish the Centre of Excellence in Cyber Security and Digital Forensics (CoE in CS&DF) and to offer consultancies for nearby Government offices is in the pipeline.

The same facility will be used for research and to offer certificate/diploma courses in the domain of Cyber Security and Digital Forensics.

JNTUK CCC

To establish the University Command Control Centre (CCC) for setting up and monitoring:

- IP-based CC cameras with face-tracking
- IP-based speakers that facilitate centralized announcements across the campus.
- Vehicle Over Speed & High Horn Sound Alerts

Web Services



Samarth

To customize and implement Samarth modules for key university services, making it a giant leap towards complete digitalization of the university.



Application for Retired Employees

To create a secure web application for retired employees, that enables them to view their pension details and submit necessary certificates.



Chatbot

To develop an AI-enabled conversational agent for the university website and other portals, taking user experience and grievance redressal to the next level.



Reservation App

To develop an application that provisions reservation and tracking availability of Guest House rooms and Meeting Halls.

Other Plans

Fixed Wing Drone

- To introduce drone training
- Facilitate drone research
- Provide disaster response
- Consultancy Services

Low Cost IoT Projects

- Building Water Supply Automation
- Diesel Generator Monitoring
- Automating Common Area Lighting Controls

e-Darshini

- Custom Free Video Conferencing Tool for the university
- To support up to 1,000 participants per meeting

VR/AR Lab

- To facilitate training and research in Virtual and Augmented Reality
- To provision VR/AR in teaching
- To develop virtual tours

Web 3 Lab

- To capture JNTUK using a 360-degree camera
- To develop a QR linked 3D map of the university

more...

- Geo-fencing to track staff and university vehicles
- Digital display and information boards
- Sharing of printers and other common resources across offices
- Cybersecurity awareness programs
- Digital Literacy for Government Schools during summer vacation and weekends

