

JNTU KAKINADA



www.jntukdmc.in

JNTUK

Jawaharlal Nehru Technological University Kakinada



JNTUK KAKINADA

This is formed in the year 2008. University College of Engineering, Kakinada, is one of the constituent colleges of this University playing a significant role since 1946 in imparting technological education in the state of Andhra Pradesh. JNTUK jurisdiction covers the Five districts of Andhra Pradesh having around 159 affiliated Engineering, Pharmacy and Management Colleges. **Jawaharlal Nehru Technological University Kakinada (JNTUK)** is established in the year 2008 vide ACT NO. 30 OF 2008 by the State of ANDHRA PRADESH. The University grew out of the College of Engineering Visakhapatnam founded by the Government of the composite Madras State in the year 1946. Spread over a sprawling campus of 100 acres in the port city of Kakinada, the college became a constituent of JNTU, Hyderabad in 1972. Subject to the trifurcation of the JNTU Hyderabad, it was notified as JNTUK Kakinada by the act of legislature in 2008.

The jurisdiction of JNTU Kakinada extends over districts of East Godavari, West Godavari, Krishna,

Guntur, and Prakasam. The University has 159 affiliated colleges under the jurisdiction of 5 districts and offers Engineering & Pharmacy courses in Under Graduate and Post Graduate Programs and also offers Management programs. The University and colleges are governed by the rules and guidelines provided by the Higher Education Department of AP and AP State Council for Higher Education from time to time. JNTUK has produced highly professional and competitive Engineers by infusing greater quality and content into the curriculum and educating the students with appropriate skills suitable for a rapidly challenging industrial scenario.

To improve the Quality of Technical Education, faculty are encouraged to participate actively in a number of national programmes like the Teacher Quality Improvement Programme, University-Industry Interaction through consultancy, Continuing Education Programmes, and Expansion of infrastructure facilities for Emerging Technologies. University has established higher learning institutes such as Institute of Science and Technology (IST), School of Food Technology(SFT) and School of Management Studies(SMS).

The University Board of Studies is composed with reputed persons from Higher Learning Institutes and industry and revises its course structure and syllabi regularly for every three years. In 2015, JNTUK started offering customized MOOCS with the support from senior faculty of IITs, NITs and industry persons and offered various courses to its affiliated colleges. To enhance and focus on research, the University has established a Research and Development Cell and Research Centers in affiliated colleges and provided Scholarships for fulltime Research Scholars to increase number of in-house researchers.

JNTUK Digital Monitoring Cell (DMC)

JNTUK Digital Monitoring Cell (DMC) Established in 2017 to maintain and monitor the IT infrastructure of the University. DMC is mainly involved in University digitization. DMC Provides Technical support to JNTUK, University Surveillance system, University Network & Firewall, DMC Provides e-office” support to all the University Offices. DMC provides Technical support to all Virtual meetings related to JNTUK.



DMC Activities:

- Shared 150 mbps Internet facility from the University to UCEK (Saved almost 22 Lakhs per year by sharing 150 Mbps to UCEK).
- Prof. **G V R Prasada Raju**, Hon'ble Vice Chancellor, JNTU Kakinada Launched University Surveillance System, JNTUK DIGITAL MONITORING CELL (DMC) website, JNTUK-e Ticket app and JNTUK E-Medha Website (Learning management System) on 28-10-2022.

University Surveillance System (CC Cameras)

Installed 66 CC cameras for the University Surveillance system.

CCTV is installed at strategic locations in the campus and the monitoring unit is housed in the VC's chamber to get a quick review of the activities in the University at different locations. This enhances the security system in the University as it also has recording facility.

Procured and Configured the University Firewall

- IP based Internet
- Managing DHCP Server with VLSM, MAC Binding, IP Reservations.
- Bandwidth Allocation
- Internet Usage Monitoring----> IP Binding
- Established an **E-Studio** for MOOCs at DMC **Video Conferencing Room** located at the Digital Monitoring Cell.



This E-studio is useful for content creation/delivery with online streaming and recording and animations / simulations. This E-Studio will be used to record Video Lectures. The same E-Studio can be used to deliver series of lectures, do e-content development and for MOOCs.

- Provided 200 mbps Internet Facility to Alumni Auditorium from the University Server Room.
- Established a E-Classroom to have ICT based teaching and to listen online classes.
- Established a **E-Classroom** to have ICT based teaching and to listen online classes.
- Procured and installed Face Biometric machines to have attendance of all Adhoc and Outsourcing Staff.

- Established wireless PA system at VC Conference Hall to have uninterrupted online or offline meetings.
- Providing Technical support to all Virtual meetings related to JNTUK.

DMC Events:

Organized a Cyber Security Awareness Programme on “*Countering Cyber Attacks & Cyber Frauds*”, in association with “The Indian Computer Emergency Response Team (CERT-In), Department of Electronics and Information Technology of the Government of India CERT-I, Delhi on 7th September 2022 for the Constituent & Affiliated Colleges Staff & Students.



Coordinated an *Infosys-Faculty Enablement Program (FEP)* on “DevOps – CICD” during 12th to 16th September 2022.

Organized a Cyber Security Awareness Programme on “*Preventive Measures and Reporting Mechanisms*”, in association with “The Indian Computer Emergency Response Team (CERT-In), Department of Electronics and Information Technology of the Government of India CERT-I, Delhi & KOO-India on 14th October 2022 for the Constituent & Affiliated Colleges Staff & Students.



Organized Two-day National Workshop on *Virtual Reality* 28th & 29th October 2022 Senate Hall, JNTU Kakinada.

As a part of Azadi ka Amrit Mahotsav, Directorate of Empowerment of Women & Grievances in association with Digital Monitoring Cell, JNTUK Kakinada is organized a Cyber Security Awareness Programme on “*Countering Cyber Attacks & Cyber Frauds on Women*” on 5th December 2022 at the Alumni Auditorium, JNTUK Kakinada for all the Girl Students & Women Staff members.



Organized a talk on *Free Open Source Software(FOSS) & It's Communities in Digitally Evolving World* in association with Swecha for the Constituent & Affiliated Colleges Staff & Students.

Organized 3rd International Conference on Computer Vision, High Performance Computing, Smart Devices and Networks (CHSN-2022) jointly with CHSN Research Foundation, Institute of Bioinformatics and Computational Biology and BioAxis DNA Research Centre (P) Ltd. during 28-29, December 2022.



Cyber Security Awareness Programme
on
“Countering Cyber Attacks & Cyber Frauds on Women”
4th February 2023
(10:30 A.M to 12:30 P.M)

As a part of Azadi ka Amrit Mahotsav, Directorate of Empowerment of Women & Grievances in association with Digital Monitoring Cell, JNTUK Kakinada is organizing a Cyber Security Awareness Programme on “Countering Cyber Attacks & Cyber Frauds on Women” on 03rd February 2023 for all the Girl Students & Women Staff members of JNTUK and other institutes.

Coordinated an Infosys-Faculty Enablement Program (FEP) on *MEAN Full Stack Development* during 01st to 07th March 2023 for all the Staff members of JNTUK and other institutes.

Faculty Enablement Program (FEP)
on
“MEAN Full Stack Development”
01st March 2023
to
07th March 2023

JNTUK Digital Monitoring Cell (DMC) Website (www.jntukdmc.in)

In order to place all the Apps/Tools in one place DMC developed this portal.



JNTUK –eTicket (<https://jntuketicket.in/index.php>)

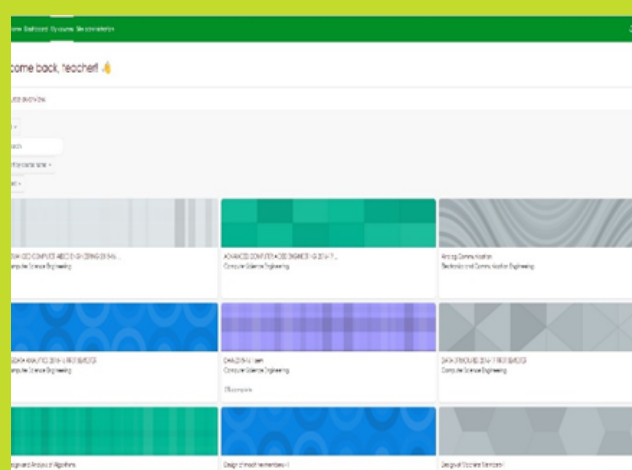
- JNTUK-eTicket is a ticketing tool for receiving and monitoring daily Digital Monitoring Cell (DMC) and Web Development Cell (WDC) service requests (tickets) from all university offices.
- Whenever an officer/staff raises an issue related to the system/network/an IT related issue, they can login to the e-ticketing site and create the ticket. Special Officer-DMC who is the administrator for this, assigns the tasks based on the nature of the problem and also assigns the priority. Once the issue is resolved, the technician will close the ticket and message will go to the admin.

- The triggered ticket/service request can be viewed by all technicians in the DMC/WDC. In an emergency, the technician responsible can assign the ticket to himself and attend the issue.
- For user's convenience, all system/network/web related issues and sub-issues are listed as a drop-down menu in the tool. You can also upload the picture or describe the problem in your own words. A daily report is prepared for internal quality and testing.

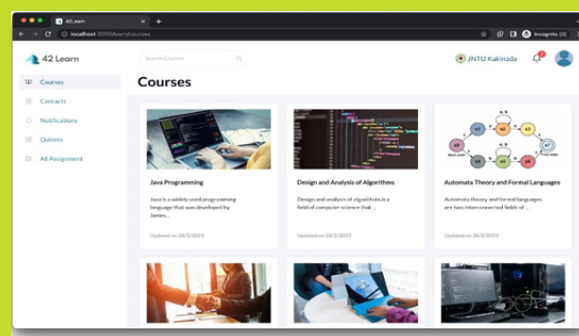
JNTUK E-learn & e-Medha (<https://jntukelearn.in/emedha/>)

- With an aim of promoting advanced learning and making students industry ready, JNTUK started offering Massive Open Online Courses (MOOCs) since 2015. Since 2016, total 20 MOOCs delivered by experts from USA, IITs and industry. Our Students progress is taken care by college level internal mentors. MOOCs faculty and internal mentors meet online to decide parameters of the course. Around 28406 students joined in MOOCs in just five semesters.





- DMC has Developed “**JNTUK e-Medha**”-University
- Learning Management System (LMS) capable of hosting and running courses - containing course content - may be integrated into a mobile app in the future. Access to this LMS will be given to all the Colleges.
- With the Collaboration with 42 students 900 hours of Content was uploaded and given free access for all the constituent and affiliated colleges.



DMC Future Plans/Activities

- **JNTUK- eWaste:-** Collecting all condemned System/Printers/UPS etc. Gathering/Separating working/reusable components and disposal of remaining components.
 - Printer Cartridges are generally refilled and not disposed. Wherever refilling is not possible, the cartridge is returned to the manufacturer
 - Paper waste is sold off to vendors who send it for recycling.
 - Computers in satisfactory working condition, but are obsolete for the system, are usually used for teaching – learning purposes of Computer Architecture and Hardware courses. Similarly, computer parts and peripherals are reused in other systems.
 - All damaged or non-functional electronic materials (e-waste) is returned to the manufacturer.
 - UPS batteries are exchanged for a nominal cost (buy back offers) with the vendor of the new batteries
 - The management has evolved a procedure for e – waste wherein the individual departments in the college store the waste and once in six months it is collected by a designated person from the management. It is later sent for recycling units.



- **JNTUK-eDharshini:** *Video Conferencing Tool* for the University
- **JNTUK- Virtual Tour** -University 3600/ Virtual Campus Tour - **JNTUKVerse**
- **JNTUK-EMap-** University Map in 3D- with QR code to be kept at several locations-
 - Directions boards at ground and 1st floor of the University building along with QR code showing the directorate direction or location, Director photo with name.
- **JNTUK- eAudit:** – Locating& Listing of all devices in the University-- Systems, Printers, Bio-Metric Devices, Access Points, Modems, Switches etc.
 - **e- Stock books along with RFID tags to all equipment and Furniture.**
- **VC conferencing room PA system- with ip phone facility.** Hon'ble VC can talk to any one of the affiliated college during any meetings or emergency
- **Senate Hall Video & High end PA system-** updating the Senate hall with online streaming facility.
- Servers up gradation using them for different applications and storage.
- **JNTUK-Hackathons** – Conducting Hackthons on Cyber Security, Mobile Apps, Web Apps, IOT etc.
- **JNTUK-Computer Clinic:** Training the students in various aspects like System / Network Trouble Shooting, Testing and Repair.
- **JNTUK-eShare-** For all the Offices Connecting the printers with the desktops and laptops. Work with shared folders.
- **JNTUK- eTV**
 - Steaming of Live class in e-learning portal/website and Youtube
- **LED Displays** at Main gate & Canteen Junction. To reduce the plastic banners usage LED displays will be used to display all the University related information.
- **JNTUK- eLab** – Establishing an E-learning Lab with 100 systems. This lab may be useful for giving ICT Training for all the Teachers on Conferencing Tools, Animating, Clouds, Surveying, Class Room Teaching, Moodle/LMS, Audio/Video Editing, Screen Recorders, Google Plugins, Quiz Tools, Mobile Apps, Art Generation through AI.
- **JNTUK VR / Augmented Lab:** Establishing VR / Augmented Lab with the latest equipment and providing training for all the faculty members to use AR/VR content in Teaching



- **JNTUK Web3 lab:** Establishing Web3 lab to deal with Metaverse, NFT, Games and Blockchain.
- **JNTUK- LSF -** Lab on Security and forensics and offer consultancies for nearby Government offices.
 - The same lab may be used for Research, conduction of certification, Diploma and M.Tech. Programmes and used as Skill development Centre.
 - Short Term Certificate Programmes for Faculty members
 - Certification Courses/Diploma Courses to generate revenue [online or offline]
 - Cyber Security Certifications
 - IOT Training
 - Block Chain etc.
- Providing training for Teaching/ Non-Teaching in **Computer Literacy & Cyber Security**.
- Workshop & Boot Camp by Swecha on Open Source Tools for students, Faculty and Research Scholars.
- To Conduct **Cyber Security Awareness Programmes** to School/College students and Government Employees (as a part of social responsibility)with the help of
 - CDAC-Hyderabad, Thiruvananthapuram
 - CERT-In (Computer Emergency Team-India), Delhi
 - IDBRT (Institute for Development and Research in Banking Technology), Hyderabad
 - TCS, Hyderabad
 - Data Security Council of India
- To continue the JNTUK **Remote Centre of IIT-Bombay and provide Spoken Tutorial Programme for all the Colleges**.
- Conducting a Machine Learning Tools workshop for students, Faculty and Research Scholars.
- Conducting a **Digital Marketing** workshop for all the students and faculty members.
- Conducting **Technical Quizzes and competitions, Summer Training Programmes** in Computer Literacy for Government School Children/ Children of JNTUK Employee School Students as a part of social responsibility (CSR).



Reach Us



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