About the Institution

Kongunadu College of Engineering and Technology (KNCET) is an Autonomous, self-financing Engineering College established in the year 2007, Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai, Accredited by NBA(CSE, ECE, EEE & Mech), NAAC, Recognized by UGC with 2(f) & 12(B) and Certified by ISO 9001:2015. The College has 9 UG courses(AD ,AE,BME, Civil, CSE, ECE, EEE, IT and Mechanical Engineering) and 2 PG courses such as Applied Electronics and CSE. ECE and Mechanical departments have been recognized as approved research centers by Anna University. A Separate department Campus to Corporate is to train the students in the area of communication, soft skills and aptitude etc., through which obtaining top notch placements with the facilitation of diverse options in IT industries, core industries, ITES and startup firms respectively. The Kongunadu International Cell assists students explore opportunities to work and study in foreign countries. The college has obtained many awards & recognition from various government/private authorities and received research grants from funding agencies for doing projects, establishing MODROBS labs, organizing FDPs, STTPs, National and International Conferences,Seminars and Workshops. MSME Incubation Center and Unnat Bharat Abhiyan (UBA) schemes are approved by the Government of India. The College has signed MOUs with Industries, academics, hospitals and R&D Institutions. Various Professional societies, clubs and cells are supporting students to become industry ready graduates, to do higher studies and to become successful entrepreneurs. The sports teams have won many prizes in various events at National level including Zonal, Inter Zonal and University level Sports Championship. The College attracts outstanding students by virtue of its discipline, modern infrastructure, library and faculty members.

Online Faculty Development Programme on

"Cloud Computing: Opportunities, Challenges, and Emerging Tools and Techniques"

05.12.2022 to 09.12.2022

Organized by

Department of Information Technology

KONGUNADU COLLEGE OF ENGINEERING AND TECHNOLOGY
(Autonomous)
Approved by AICTE, New Delhi,
Affiliated to Anna University, Chennai,
Accredited by NAAC with B++ Grade,
Recognized by UGC with 2(f)&12(B),
Accredited by NBA (CSE,ECE,EEE & MECH),
An ISO 9001:2015 certified Institution.
Namakkal-Trichy Main Road,
Thottiam,Trichy(Dt)-621 215,
Tamilnadu.
Website : www.kongunadu.ac.in

About the Department

The Department of Information Technology (IT) was established in the year 2007, with an intake of 60 students in it for UG course - B.Tech. IT. The Department is supported by a team of well qualified and highly experienced faculty members and technical staff who deliver their skills to the students through effective teaching-learning environment. The faculty members in the department are specialized in various areas like Wireless Networks, Network Security, Data Science, Cyber Security, Artificial Intelligence, Machine Learning, Image Processing, Cloud Computing, Mobile Computing and Software Engineering.

Address for Communication
Mr.J.Sathishkumar Assistant Professor
Coordinator
FDP on
"Cloud Computing: Opportunities, Challenges, and Emerging Tools and Techniques"
Kongunadu College of Engineering and Technology
Namakkal-Trichy Main Road,
Thottiam,Trichy(Dt)-621 215,
Tamilnadu
Mobile: +91-8012505010
E-mail ID: fdpit@kongunadu.ac.in
URL: **www.kongunadu.ac.in**

DEPARTMENT VISION AND MISSION

Vision

To become an Internationally Renowned Institution in Technical Education, Research and Development by Transforming the Students into Competent Professionals with Leadership Skills and Ethical Values.

Mission

- Providing the Best Resources and Infrastructure.
- Creating Learner-Centric Environment and Continuous Learning.
- Promoting Effective Links with Intellectuals and Industries.
- Enriching Employability and Entrepreneurial Skills.
- Adapting to Changes for Sustainable Development.

About the FDP

Cloud computing refers to the delivery of computing services (like servers, storage, databases, networking, software, etc.) over the internet (the cloud) rather than using local servers or personal devices. It enables businesses and individuals to access and use resources on-demand without having to invest in physical infrastructure. Cloud computing reduces the need for heavy capital investment in physical hardware, offering pay-as-you-go models. Users can scale resources up or down based on demand, making it ideal for businesses of all sizes. Cloud services can be accessed from anywhere, promoting collaboration and remote work. Data stored in the cloud is often replicated in multiple locations, providing better reliability and disaster recovery. Cloud environments enable rapid development and deployment of new applications and services. Different jurisdictions may have varying data protection laws, making compliance complicated for global businesses. Switching cloud providers can be difficult due to differences in technology and infrastructure. While cloud services are cost-effective, unpredictable scaling can lead to higher-than-expected costs.

A model where developers can write code without managing servers, allowing for automatic scaling and reduced overhead. Businesses are increasingly adopting hybrid and multi-cloud approaches to improve flexibility, avoid vendor lock-in, and enhance disaster recovery. Technologies like Docker and Kubernetes allow for efficient deployment, scaling, and management of applications in the cloud.

This FDP will provide an excellent opportunity for participants to have an interaction with renowned experts in the area of wireless networks.

FDP Objectives

- Learn the core concepts, service models (IaaS, PaaS, SaaS), and deployment models (public, private, hybrid) of cloud computing.
- Discuss how cloud computing is transforming industries, enabling scalability, cost efficiency, and collaboration, while fostering innovation.
- Understand the potential security, privacy, and compliance issues that come with cloud adoption and learn strategies to mitigate these risks.
- Provide hands-on experience with emerging technologies like serverless computing, edge computing, and containerization, demonstrating their practical applications.
- Look at the future of cloud computing, including advancements in AI, automation, and multi-cloud architectures, and their impact on businesses and industries.
- Encourage faculty to engage in research on cloud computing challenges, innovations, and emerging use cases, fostering industry-academia collaboration.

Course Contents

- Introduction to cloud computing
- Cloud Computing Architecture and Deployment Models
- Introduction to AWS and Cloud Computing
- Cloud Security and Privacy Challenges in Multi-Tenant Environments
- Emerging Cloud-Native Tools for Microservices and Containerization
- Edge Computing for Real-Time Data Processing
- Cloud Integration for Real-Time Data Processing
- AI and Machine Learning in Cloud Platforms: Tools and Techniques for Scalability
- Opportunities in Cloud Computing and Future Trends

Resource Persons:

The resource persons for the program shall include faculty members of the NIT, Host institute, Industry experienced and skilled experts from reputed organizations/industries.

Eligibility:

Faculty members of the AICTE approved institutions, Research scholars, PG Scholars, participants from Government, Industry Bureaucrats/Technicians/ Professionals/School Teachers and staff of host institutions.

Registration Procedure:

Candidates will be informed about their registration status via email and will receive a confirmation email upon successful registration. A digital certificate will be issued to all candidates who achieve a minimum of 80% attendance.