INNOVATIVE TEACHING METHODOLOGY

INTERACTIVE SOFTWARE-BASED LEARNING

Subject Code and Name – 19IT53C - CRYPTOGRAPHY AND NETWORK SECURITY Description of Activity

The concepts of cryptographic techniques were demonstrated using CrypTool software. This simulation-based approach provided a graphical representation of encryption and decryption methods like RSA, AES, and MD5. Students explored the algorithms interactively, which enhanced their understanding of theoretical concepts and practical applications.



Course Handled by: Mrs.M.Malathi Assistant Professor / IT

DEMONSTRATION-BASED CONCEPT DELIVERY Subject Code and Name – 23IT31C - SOFTWARE ENGINEERING Description of Activity

A guest lecture by Mr. Muthu Sundaram on SDLC models was delivered by an industry expert. The session included practical demonstrations of software development lifecycle stages, integrating real-world insights into theoretical learning. Students gained a deeper understanding of software engineering practices.

The content available at: <u>https://drive.google.com/file/d/1F9jFzRL4L05EVyEugG4-</u> <u>TXAV2b80DGW-/view?usp=drive_link</u>



Course Handled by: Mrs.R.Suguna, Assistant Professor / IT Mrs. H. Ummu Sabura, Assistant Professor / IT

JIGSAW METHOD Subject Code and Name – 23IT31C SOFTWARE ENGINEERING Description of Activity

Students participated in a Jigsaw activity, analyzing case studies on the growth of Spotify, innovation of Netflix, and the success of Salesforce. This project-based approach fostered collaborative learning and helped students relate case studies to software development practices.



Course Handled by: Mrs.R.Suguna, Assistant Professor / IT Mrs. H. Ummu Sabura, Assistant Professor / IT

THINK-PAIR-SHARE Subject Code and Name – 19IT02E MACHINE LEARNING Description of Activity

The Think-Pair-Share activity involved students exploring advanced machine learning concepts like Radial Basis Functions (RBF) through simulations. This helped students understand the mathematical properties and applications of RBF in real-world scenarios.



Course Handled by: Ms.V.Anitha, Assistant professor (SG)/IT

CAMPUS NETWORK INFRASTRUCTURE VISIT – ACTIVE EXPERIENTIAL LEARNING Subject Code and Name – 23IT45C COMPUTER NETWORK Description of Activity

A network infrastructure visit provided students with real-world exposure to campus network topology and VLAN configurations. This hands-on activity bridged theoretical knowledge with practical applications, enhancing their understanding of network management.



Course Handled by: Dr.S.Chidambaram Associate Professor/IT

ACTIVITY-BASED LEARNING SYSTEM WITH REALLIFE EXAMPLES: ROLE PLAY Subject Code and Name – 23IT45C COMPUTER NETWORK Description of Activity

A role-play activity was conducted to demonstrate flow control techniques in computer networks. Students actively participated as senders, receivers, and data frames, illustrating protocols like Stop-and-Wait and Sliding Window through dynamic interaction.



Course Handled by: Dr.S.Chidambaram Associate Professor/IT

ONLINE LECTURE DELIVERY VIA YOUTUBE CHANNEL

Subject Code and Name - 19IT33C - Object Oriented Programming using C++

Description of Activity

Delivering online lectures via a faculty YouTube channel is an innovative content delivery method that enhances accessibility and engagement by leveraging the platform's global reach and asynchronous learning capabilities. This approach allows students to access high-quality, multimedia-rich lectures at their convenience, fostering self-paced learning.

Object oriented programming concepts are discussed via youtube channel for students to get more clarity when needed. Learning through online platform enables faculty to use engaging visuals, coding demonstrations, and real-world examples to simplify complex OOP principles like classes, objects, inheritance, and polymorphism.



The content available at

https://www.youtube.com/@NLightenU/videos?view=0&sort=dd&shelf_id=2

Course Handled by: Ms.V.Anitha, Assistant professor (SG)/IT

Subject Code and Name – 19IT44C – COMPUTER NETWORKS **Description of Activity**

Faculty uses visuals, animations, and real-world examples to illustrate complex topics like TCP/IP, routing, and network security, making them easier to grasp. The platform's asynchronous nature allows students to learn at their own pace, revisit key topics, and engage in discussions through the comment section to resolve doubts.



The content available at - <u>https://youtu.be/BOHE2T5R5Ho?si=hSO-jBFJUNAjk8dW</u> Course Handled by:

Dr.S.Chidambaram

Associate Professor/IT

Subject Code and Name – 19IT32C – DATA DTRUCTURES AND ALGORITHMS <u>Description of Activity</u>

Delivering Data Structures lectures through a YouTube channel provides a flexible and engaging way to teach key topics like arrays, linked lists, stacks, queues, trees, and graphs. he asynchronous nature of YouTube enables students to learn at their own pace, revisit challenging topics, and interact through comments to clarify doubts.



The content available at - <u>https://youtube.com/@laneforlearners?si=oZkkw3DrpZAQ_J6S</u>

Course Handled by:

Mrs.N.Gowthami, Assistant Professor /IT