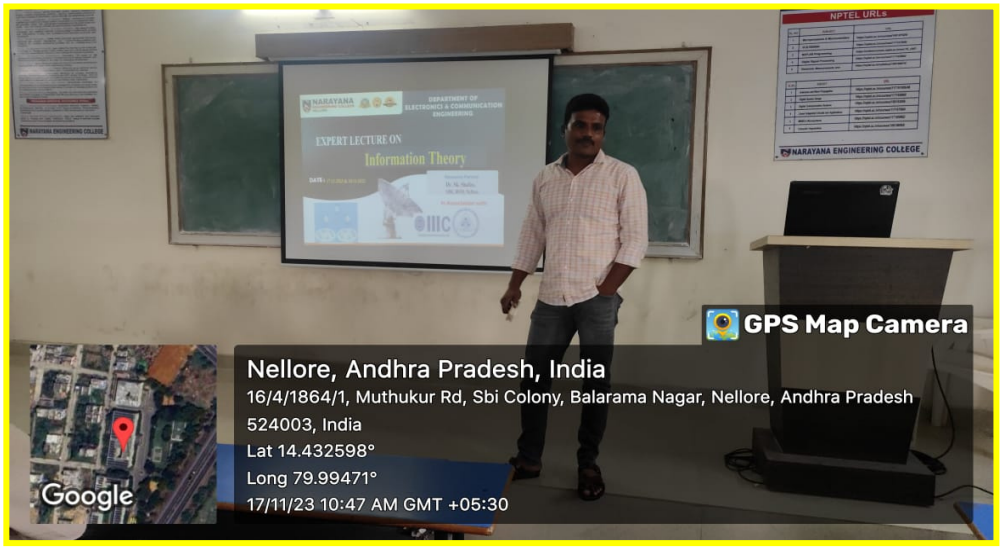
NARAYANA ENGINEERING COLLEGE
NELLORE(AUTONOMOUS)

APPROVED BY AICTE AND PCI NEW DELHI AND AFFILIATED TO JNTUA ANANTAPURAMU
A PART OF NARAYANA GROUPEDUCATIONAL OF INSTITUTIONS, INDIA.

Department of Electronics & Communication Engineering

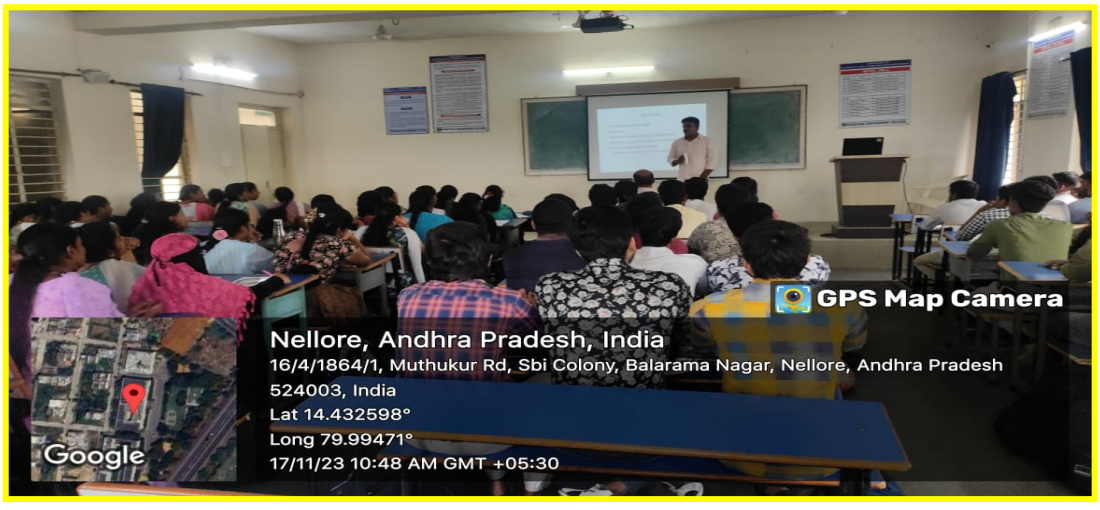
1	Name of the Activity/Event	Expert Lecture on **"ANALOG & DIGITAL COMMUNICATIONS"**		
2	Date of Activity/Event	**17-11-2023 to 18-11-2023**		
3	Organized by	**Department of Electronics And Communication Engineering**		
4	Place of Activity/event	Visvesvaraya Auditorium		
5	Resource persons / guest / organization	**Dr. SHAIK SHAFEE** BSNL, NELORE		
6	Type of activity/Event	Expert Lecture		
7	Activity/Event objectives	1. This course aims at providing an opportunity for students to enrich their knowledge and skill in developing various solutions for solving engineering problems in the society. 2. This program serves as a platform for students to work with recent trends in Electronic simulation related areas.		
8	Participation	Students	Faculty	Total Participation
		204	-	204
9	General remarks	1. Introduction to Information Theory. 2. Study of Channel coding.		
10	Suggested Improvements	-		
11	Enclosures	1. Program report with Snapshots 2. Attendance sheet		
12	Signature of Co-ordinator			

An Expert lecture was conducted by the Department of Electronics and Communication **E**ngineering, NEC Nellore from **17-11-2023** to **18-11-2023.** Subject expert **Dr. Sk. Shafee,** BSNL, Nellore, has taken a lecture on topic **Information Theory (Analog & Digital Communications)** for 3rd B.Tech students in lecture hall. Total of around 204 students and staff participate in this programme.



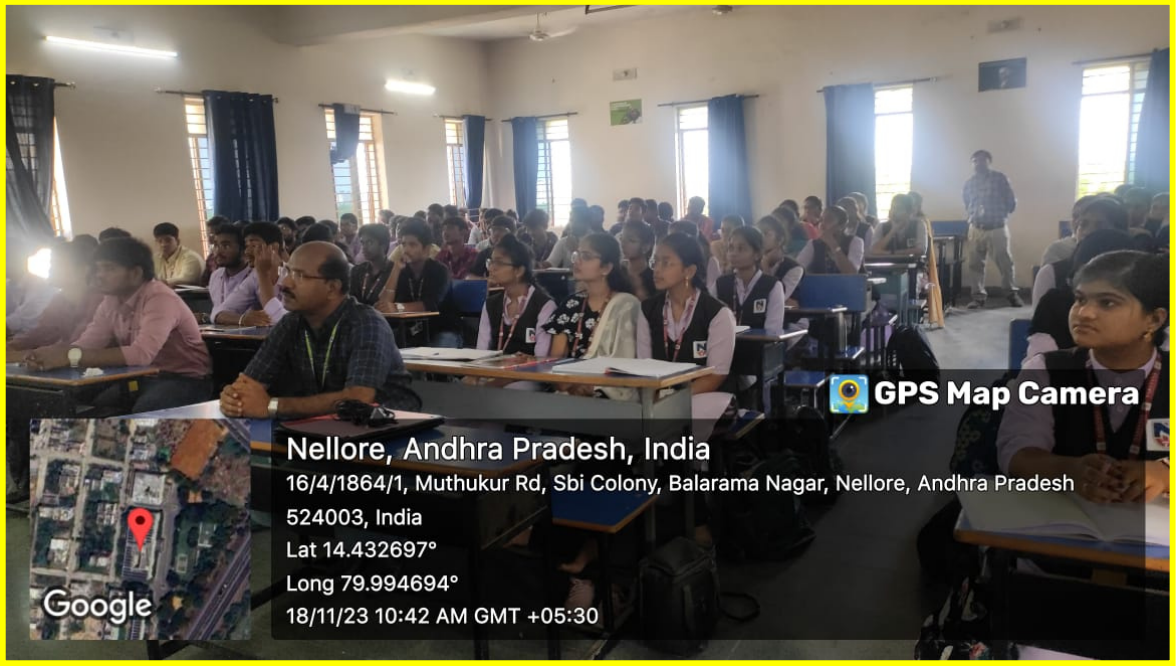
Speaker giving introduction to Information Theory

Speaker explains the Basics of Information Theory: Message, Information, Entropy, Mutual information & its properties, channel capacity, Shannon Hartley theorem discussed in detail. And also discussed about Shannon Fano & Huffman coding and its applications.



Resource person sharing information regarding in this session

In the next session subject expert discussed on the concept channel coding, error detection & correction. Lecture contains Repetition & Parity check codes, Interleaving, code vectors and hamming distance. Speaker explains the FEC and ARQ systems in detail and applications of linear block codes, Convolutional codes and Viterbi decoding.



Students and Staff participated in programme

Resource person discussed with real time examples and the session was made really interactive by providing an opportunity to suggest a solution to real life scenario with the help of images and videos.