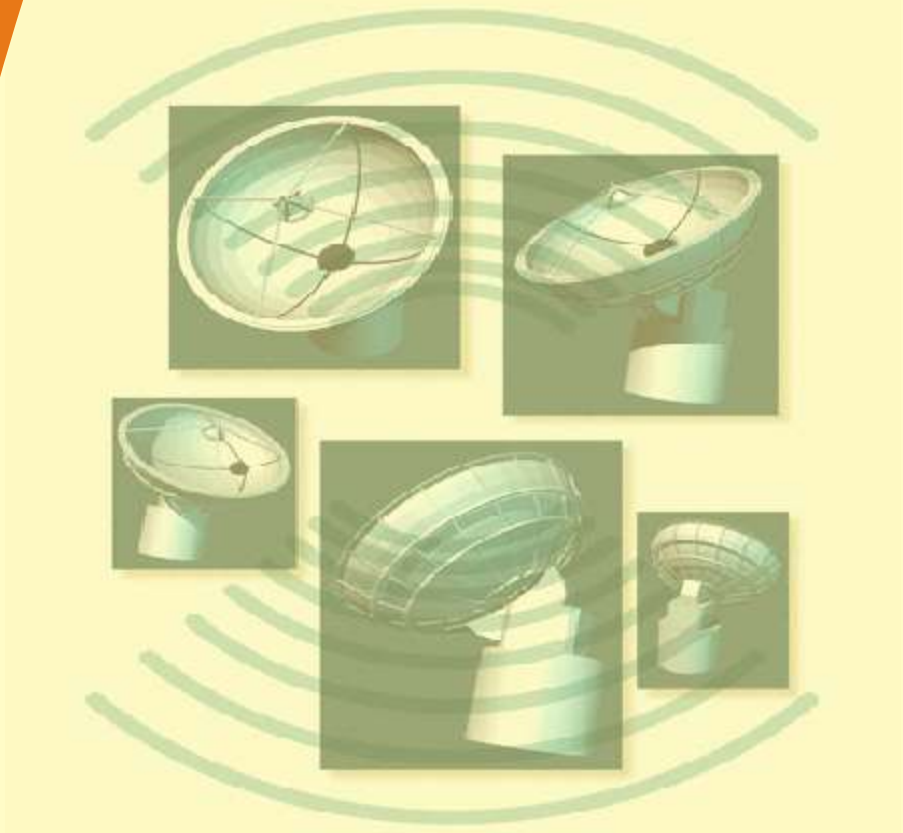
A UTL GROUP COMPANY

Mobile Communication



UTL TECHNOLOGIES LTD

BRIDGING ACADEMICS TO INDUSTRY

Telecom Embedded VLSI Wireless Web-Solutions

A UTL GROUP COMPANY

About Us

UTL Technologies Ltd. a UTL Group company is one of INDIA's highly appreciated and widely recognized prominent high-end training organization is providing the world's most sought after professional Courses in INDIA.

Backed with over 2 decades of technical know-how, we are providing the best-equipped comprehensive courses in cutting edge technologies with an aim of leveraging your careers to great heights. The courses are designed by experts from UTL's R&D division, considering today's industry requirements and keeping in mind that only DEGREE doesn't guarantee a great job. UTL has track record of placing more than 85% of the students in various companies.

UTL Technologies Ltd. Is known as a trailblazer in emerging technologies training. No other Institute offers such a comprehensive and innovative training on a vibrant spectrum of new technologies. In keeping with our established ethos, we work only in niche areas like **EMBEDDED SYSTEM, VLSI DESIGN, MOBILE COMMUNICATION and NETWORKING.**

Overview

Mobile Communication implies freedom of communication on the move. It facilitates communication seamlessly anytime, anywhere resulting in better time management and efficiency both at the workplace and in social life. An efficient communication system has become a necessity for any developing nation like India or a developed country, as these communication channels have shrunk the international boundaries, effectively converting the entire world in to a global village.

Today it is not surprising that there are more mobile phones than fixed ones in India. With greater usage, mobile communication will become affordable by the masses.

To improve this infrastructure for mobile communication further to achieve greater productivity and efficiency, there is a great surge in demand for people with expertise in this field. With this demand, the opportunities in the mobile communication domain have multiplied in the recent past necessitating thrust on grooming industry ready professionals. There are tremendous opportunities to work and to grow in the field of mobile communications.

Objectives of the course.

- The main objective of the course is to provide a comprehensive and state of the art knowledge in the area of mobile communication.
- The course emphasis is on the structure and function of the complete system. A detailed study of the subsystems that comprises the overall system is carried out.
- The technical knowledge provided in the course on different aspects of the system will help the participant in understanding the functioning of the system. This will further help in providing the necessary expertise required by the industry.

The exposure to the emerging technologies in mobile communication will be value addition to the knowledge.

Course Highlights

- Most Comprehensive Course designed by the experts with 24 years of experience and expertise of UTL Group.
- The course is part of revolution in communication technology.
- Focus on both conceptual understanding and Industry needs.
- Highest record of placements. (95% are placed in Mobile Communication domain)
- Training on soft skills
- Students Placed in Samsung, LG, ZTE, Motorola, Nokia, Infosys, Philips, Sony, Texas, Wipro, Xius, Axes Tech.Siemens, Honeywell, Global Edge, Hughes, Patni, Tata Elxsi, Delphi Satyam, Sasken, Mphasis, etc.

Our Credentials

- 6000+ students trained
- 3000+ strong Alumni
- 100+ corporate batches
- 45 In-house technical team
- 9 operating locations
- 4500+ placed in top notch IT Companies
- 100+ companies employing our students
- 70 External Technical consultants
- 14 group companies supporting us
- 6 years of rich experience

Course Content

Module 1

Telecom Essentials:

Introduction to Communication Systems, Wired, Wireless comparisons, requirements of communication systems, Modulation & types, digital communication system, Multiplexing, Demultiplexing, Transmission media and types of media, twisted pair, STP, UTP, coaxial pair, fiber optics, microwave, propagation and types of propagation, path loss and the factors effecting path loss, transmission lines and parameters, linear vs. logarithmic relations, Antenna theory, characteristics of antennas, types of antennas, noise, types of noise, SNR, noise figure, digital modulation techniques, D/A conversion methods, ASK, FSK, PSK, QPSK, OSI reference model, TCP/IP, circuit switching, packet switching, x.26, frame relay, ATM, ISDN, synchronous, asynchronous transmission, error detection and correction methods.

Module 2

GSM & SS7

Multiple Access Methods, FDMA, TDMA, CDMA. Wireless Generations, Frequency concepts, Cellular System Architecture, Cell, Types of Cells, Cell splitting, Sectorization, Cluster, interference and types, GSM Architecture, MS, BSS NSS, OSS, Interfaces between different network elements. Authentication, Handovers & types, Roaming & types, Channels on Air interface, Broadcast channels, Common control Channels, Dedicated channels, Traffic channels, TDMA frame concept, Burst, types of Bursts, GSM services, battery life, TA, DTX, DRX, multi path fading, GSM basic call sequence in different cases, MO, MT calls. Call flow during different types of hand over, GSM transmission process, GSM traffic cases, Subscriber related, equipment related, location related identities, GSM protocol stack, Protocols at different interfaces, traffic engineering, GOS, QOS, Speech coding and methods, SS7 basic concepts, Elements of SS7 architecture, SS7 links, Ss7 protocol stack. Ss7 signaling units, ISUP, TCAP basic call setup example.

Module 3

CDMA & Advanced Topics

Features of CDMA, Capacity of CDMA, DSSS, FHSS, THSS, Types of Correlation, Diversity and types of diversity, Orthogonal Codes, PN codes, Walsh codes, IS-95 CDMA Architecture, Forward Link and Reverse Link Channels, Hand offs and types of Hand offs in CDMA, Power control in CDMA and types of power control methods, CDMA call processing states, Mobile originated call, Mobile terminated call, Call processing during hand off, Securtiy and Identification, Authentication Procedure, Speech Coding, Evolution of CDMA IS-95 to CDMA 2000, Network structure, Channels in CDMA 2000.

Advanced Concepts: GPRS, EDGE, WCDMA, UMTS overview, Basics of Wi-Fi and Wi-Max.

Module 4

Introduction to C, Concepts of Constants, Variables, keywords, Concepts of different instructions, Various operators , Basic programming concepts, Control instructions, Functions, Arrays, Structures/Unions, Storage classes, Macros, File operations, Data Structures (Linked Lists, Stacks, Queues).

Project Work

Project work on the technical concept that are learnt in Module 2 & 3 using a c programing the same is tested on a simulation

Eligibility

BE / B.Tech (E & TC Electronics / Instrumentations / CS / EEE / IT) Final year students can apply.

Placements

We at UTL Technologies will try to make every student reach a platform from where the individual can be a part of the growing semi-conductor industry.

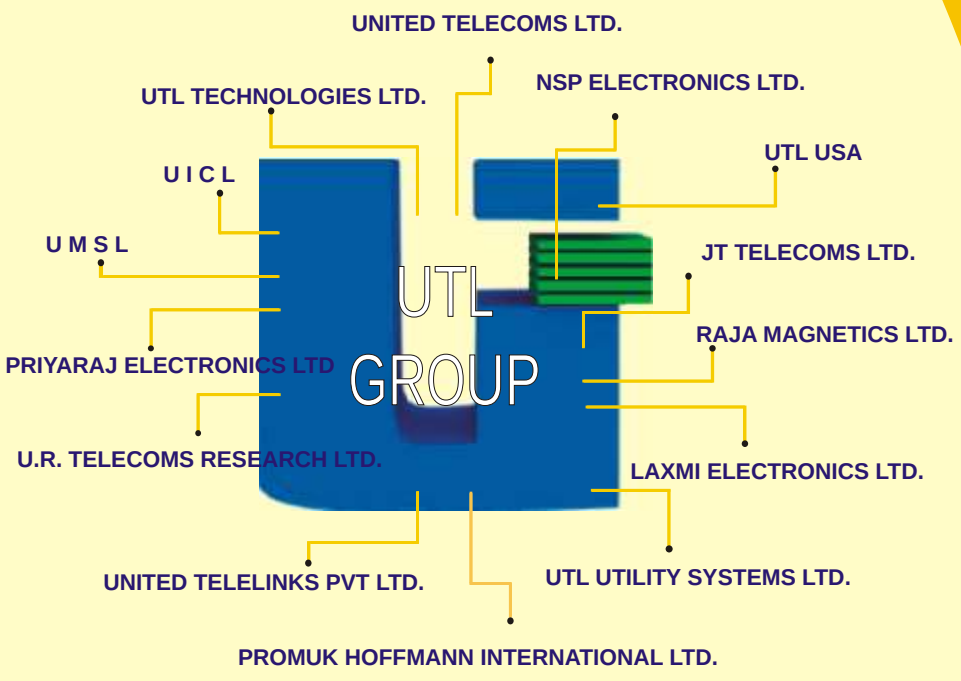
Previous students of UTL Technologies are placed with: Synopsis, ZTE, Idea, Samsung, LG, Motorola, Nokia, Hutch, Reliance, Philips, Sony, Axes Tech.,Siemens, Wipro, Texas Satyam, Robert Bosch,IBM, Intel, Sasken, Acheiva, Actel, CG Core EL, E- Infochip, Convergys, Mphasis, VSNL,Aerospace Systems Pvt. Ltd, United Telecom Ltd., Integra, Micro Systems, Global Edge, KPIT Cummins, Midas communications, Etc..

UTL Technologies Ltd

UTL Group Head Office

- Mission -

"To be a Premier Institute with continuous improvement and achieve excellent customer satisfaction in providing high end skilled training and development on emerging technologies by Bridging the Gap between Academics and Industry in the fields of Information Technology and Communication ..."



www.utltraining.com

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