



REPORT ON GUEST LECTURER (INDUSTRY)

“BTS, GSM ARCHITECTURE & CALL FLOW IN GSM”

Background:

- + Electronic communications engineering is the utilization of science and math applied to practical problems in the field of communications. Electronic communications engineers engage in research, design, development and testing of the electronic equipment used in various communications systems.
- + It is due to electronics engineers that we enjoy such modern communication devices as cellular telephones, radios and television.
- + These programs prepare students to find employment as technicians engaged in the service and repair of equipment, such as broadcast television, radio and other telecommunication systems.
- + It deals with the electronic devices, circuits, communication equipments like transmitter, receiver, integrated circuits .
- + GSM (Global System for Mobile communication) is a digital mobile telephony system that is widely used in Europe and other parts of the world.
- + GSM uses a variation of time division multiple access (TDMA) and is the most widely used of the three digital wireless telephony technologies (TDMA, GSM, and CDMA).
- + BTS (The Base transceiver system) is a network element which maintains the air interface. It is responsible to manage signaling of air interface, ciphering and also speech processing. Speech processing here refers to the set of functions that BTS performs to guarantee a connection that is error free.
- + The GSM network architecture consists of different elements that all interact together to form the overall GSM system. These include elements like the base-station, controller, MSC, AuC, HLR, VLR, etc.
- + This seminar is organized to learn the role of BTS, GSM .It also explains the architecture & call flow in GSM. Call flow describes the process by which a network routes a call to a mobile device. Even LTE devices still use 3G networks for most voice calls. 3G call flow is different in a GSM network than in a CDMA network.

Date and Venue:

- + The seminar took place on 12th September 2017 at the Seminar Hall of RITE, Bhubaneswar. The training program is organized by RITE in association with M/S: **Ericsson India Private Limited.**
- + The subject of the seminar was **”BTS, GSM architecture & call flow in GSM”** .

Training Team:

- The resource person is **Mr. Amit Mishra, Radio Network Optimizer** explained about different elements that all interact together to form the overall GSM system & the process by which a network routes a call to a mobile device in the seminar.

Agenda:

Time	Events
10.30	Welcoming to Ericsson India Private Limited delegates to RITE.
11.00	Offering Bouquet to delegates.
11.05	Welcoming to Ericsson India Private Limited delegates and RITE management to the dais.
11.10	Welcome address by HOD, Electronic & communications engineering Department.
11.15	Guest Speech
11.30	Training program
12.45	Felicitation to the speaker by Dean-Academics
01.00	Vote of thanks by Asst. Prof. Priyanka Priyadarshini Sahoo, Electronic & communications engineering Department.

Participants:

- Total 80 numbers of participants (7th, 5th& 3rd Semester) of Electronics & Communication Engineering, Electrical Engineering, Computer Science Engineering, Mr. P.C.Das (Dean-Academics) and faculties of Electronic & communications engineering department of RITE participated in the seminar.

Outcomes of the Seminar:

- Students are able to understand basic need of GSM.
- Services provided by GSM.
- History Telecom architecture .
- International roaming is not a large problem.
- Low-cost mobile sets and base stations (BSs).
- Base Stations of cellular radio networks
- transmission and reception of signals
- Different Cellular Architecture .
- GSM Network along with added elements
- GSM network areas.
- Good workmanship practice.

SEMINAR PHOTOGRAPHS



Electronics & Communication Engineering student Pradosmini sutar of 5th semester with Mr. P.C.Das (Dean-Academics) ,Mr. Sangram Sahoo (HOD) & faculties of Electronics & Communication Engineering department present at the main entrance to welcome delegates of Ericsson India Private Limited Mr. Amit Mishra(Radio Network Optimizer).



✚ Mr. Sangram Sahoo, HOD (Electronic & communications engineering Department) welcomes to participants (7th, 5th & 3rd Semester) of Electronics & Communication Engineering, Electrical Engineering, Computer Science Engineering, Mr. P.C. Das (Dean-Academics) and faculties of Electronic & communications engineering and addressing to the delegates of Ericsson India Private Limited of RITE to the dias.



✚ Mr. Amit Mishra (Radio Network Optimizer) speaking about Main components of GSM i.e: The mobile station (MS), BSS Base Station Subsystem (BTS+BSC), MSS Mobile Station Subsystem (MSC/HLR, ...).



✚ Mr. P.C.Das (Dean-Academics) felicitating to the honorable guest.



✚ Miss Priyanka priyadarshini saho (Assistant Professor, Electronic & communications engineering Department) speaking about modern cellular technology & their usage in our daily life.

GUEST LECTURER (INDUSTRY) ORGANIZED BY ECE DEPT., RITE

THANK YOU

