

**GSM Projects aims to transmit voice and data services.**

Global System for mobile communication is an open, digital cellular technology. GSM receivers are widely available- mobile phones and GSM modems. GSM Projects aims at high data transfer rate. It is cost effective.

We assist research Scholars in implementing **GSM Projects** with best Customer Support. For more details contact us: +91 9790238391.

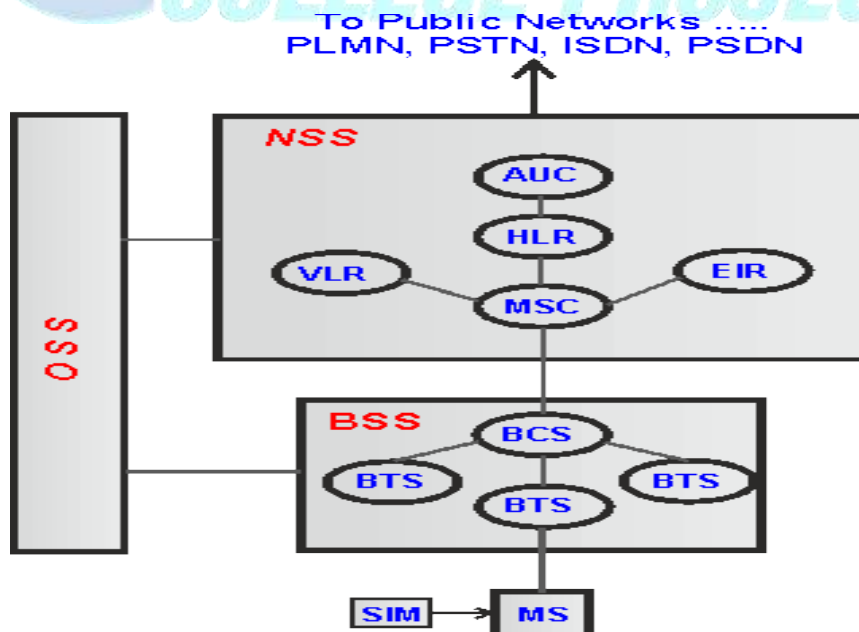
**GSM Architecture :**

MS - mobile station.

OSS- operation and support subsystem.

BSS - base station subsystem.

NSS - network and switching subsystem.



### Specification :

- Frequency- 1,850 to 1,990 MHz.
- Duplex distance – 80Mhz, distance between uplink and downlink frequencies.
- Channel separation —the separation between adjacent carrier frequencies. In GSM, this is 200 kHz.
- Transmission rate-270kbps.
- Access method-TDMA concept.
- Speech coder-using LPC (linear predictive coding).

### Points :

- Uses digital technology and TDMA in which divides each 200khz into eight 25GHz timeslot
- Packet data transport via GPRS(General Packet Radio Services) and EDGE(Enhanced Data rates for GSM Evolution or EGPRS)
- GSM standard originally described a digital, circuit-switched network optimized for full duplex voice telephony.

### Uses of GSM Projects:

- GSM used in Remote monitoring system.
- GSM control every electrical devices.
- Motors.
- Air-conditioner.
- Roller doors.
- Electric gates.
- Lights.

### Sample IEEE GSM Projects Topics.

SI	IEEE GSM Projects Titles.
1	GSM to UMTS Network Handover Vulnerability Testing Using Software-Defined Radio.
2	SDR-Based Network Impersonation Attack in GSM-Compatible Networks.
3	Ultra Wideband PIFA Antenna with Supporting GSM and WiMAX for Mobile Phone Applications.
4	Comparative analysis of GSM coverage prediction with measurement results for urban areas using statistical nonparametric mapping.
5	GSM based interactive voice response system for wireless load control and monitoring.
6	SAR values comparison between GSM and 3G.
7	Implementation of a modem which transmits digital data on GSM voice channel.
8	UAV-based GSM network for public safety communications.
9	Photosensitive security system for theft detection and control using GSM technology.
10	GSM-based positioning for public transportation commuters.
11	An Effective Method of Controlling the Greenhouse and Crop Monitoring Using GSM.
12	Secure end-to-end SMS communication over GSM networks.
13	Identification of GSM and LTE signals using their second-order cyclostationarity.
14	Development of ARM processor based electricity theft control system using GSM network.
15	Receiver diversity impact on GSM Passive Coherent Location systems.
16	A GSM, WSN and embedded web server architecture for Internet based kitchen monitoring system.
17	Assessment of spectral efficiency about 900 MHz using GSM and CDMA technologies for mobile cognitive radio.
18	Analysis and design of a reconfigurable antenna for ISM and GSM bands for cognitive radio applications.
19	Access system in restricted areas based on programmable logic controller and GSM modem.
20	Design of multiband monopole triangular fractal antenna for GSM , Bluetooth and Wi-Fi.
21	Design and implementation of water environment monitoring system using GSM technology.
22	Design and development of printed Sierpinski Carpet, Sierpinski Gasket and Koch Snowflake fractal antennas for GSM and WLAN applications.
23	Spatial-Temporal Analysis of Erlang Measurement in Large-Scale GSM Cellular Networks.
24	An extended approach for securing the Short Messaging Services of GSM using multi-threading elliptical curve cryptography.
25	Generalized Spatial Modulation in Large-Scale Multiuser MIMO Systems.

26	Green deployment strategy of different generation mobile networks based on spectrum analysis.
27	Linear Precoding Design for Mutual Information Maximization in Generalized Spatial Modulation with Finite Alphabet Inputs.
28	A Low-Complexity Detection Scheme for Generalized Spatial Modulation Aided Single Carrier Systems.
29	Study of low cost mobile phone tracking system.
30	A low cost M2M architecture for intelligent public transit.
31	Temporal analysis and remote monitoring of ECG signal.
32	High efficient and intelligent lighting and security remote control system using a Zigbee network.
33	Measurement of Spectral efficiency of mobile OFDM-WiMAX technology at 2600 MHz band in green field area.
34	Visual surveillance using absolute difference motion detection.
35	Novel, low cost remotely operated smart irrigation system.
36	Vehicle to vehicle safety device - an ease for safe driving.
37	Real Time AMR & Control of Household Energy Meter with Zigbee Communication.
38	Implementing Intelligent Traffic Control System for Congestion Control, Ambulance Clearance, and Stolen Vehicle Detection.
39	An Improved Ordered-Block MMSE Detector for Generalized Spatial Modulation.
40	Design and implementation of automated blood bank using embedded systems.
41	Web-based online embedded door access control and home security system based on face recognition.
42	Smart home for elderly care, based on Wireless Sensor Network.
43	Anomalous Dispersion Characteristics of Periodic Substrate Integrated Waveguides From Microwave to Terahertz.
44	A survey of positioning techniques and location based services in wireless networks.
45	Electrothermal Effects on Performance of GaAs HBT Power Amplifier During Power Versus Time (PVT) Variation at GSM/DCS Bands.
46	High-resolution multi-band spectrum occupancy measurements and evaluations at 900MHz downlink band for Istanbul metropolitan.
47	Energy Efficient Automation System with Smart Task Scheduling.
48	Applying a geospatial visualization based on USSD messages to real time identification of epidemiological risk areas in developing countries.
49	Measurement of Electromagnetic Field Attenuation by Building Walls in the Mobile Phone and Satellite Navigation Frequency Bands.
50	Aspects of remote monitoring and recording system of non-ionizing electromagnetic radiation.