

# **Innovative EEE Final projects list**

- **SET-04.** Construction of Central Control Unit for Irrigation water pumps. Cost effective method to control entire villager's water pumps with user level authentication. Illiterate's friendly system.
- SET-340. MAXIMUM DEMAND CONTROLLER & FAULT ALERTING FOR INUSTRIES.
- **SET-176.** Petrochemical Level Indicator and Controller for Automation of cotton purification process in spinning mills.
- SET-278. AUTONOMOUS ENERGY METER WITH AUTO ANNOUNCEMENT SYSTEM
- **SET-210.** Data logger for energy meter with time and KWH readings. Very useful for historical data logging and analysis
- SET-292. POWER GRID devices monitoring and controlling system using GSM technology
- **SET-296.** Wireless power theft monitoring with automatic circuit breaker system and indication at local substations
- SET-238. Energy Tapping Identifier through Wireless Data Acquisition System
- SET-343. FOOT STEP POWER GENERATION SYSTEM.
- SET-319. Design and construction of Earth fault relay for single phase power system
- SET-240. Machinery access control system for illiterates with image based password with Touch screen
- **SET-346.** Hall-effect sensor based wheel chair movement control using tongue
- **SET-332.** Hall Effect sensor based non-contact Tachometer for electrical motors speed measurement
- SET-323. Frequency Locked Loop (FLL) Motor speed monitoring and control system
- **SET-328.** Electrical Data (voltage, current, frequency, temperature) Logger
- **SET-287.** Energy meter data logging system with Real-time clock and KWH readings. Very useful for historical data logging and analysis
- **SET-119.** A Novel Wireless Self-powered Microcontroller-based Monitoring Circuit for Photovoltaic Panels in Grid-connected Systems
- **SET-126.** Wireless 3 Phase Motor Starter using RF Technology with feedback indicators.
- **SET-125.** Checking & Auto Control Water Level Using Wireless Sensor.
- SET-248. MMC/SD key security system for industrial machinery access
- SET-247. Speech recognition based password enabled industrial devices switching

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- **SET-22.** Wearable Technology based secure access control system with motion based password.
- **SET-220.** GPRS based real time electrical data logger onto live website (www.sooxma.com) with SMS based real time device control
- **SET-66.** GSM based SCADA and 2GB MMC card based data logger with real time monitoring.
- **SET-72.** Industrial appliances monitoring and controlling system using GSM with fencing auto alerts.
- **SET-35.** Touch screen controlled AC motor speed controlling system.
- **SET-344.** Touch screen based industry automation with door controlling
- **SET-342.** Finger print and keypad based industrial security access control system
- **SET-73.** High Power LED based intelligent streetlight controlling system with GSM based Vehicle Counter.
- **SET-80.** Dual GSM Modems based irrigation water pump controller for illiterates.
- **SET-81.** Security Integrated system based on wireless access protocol for industrial applications with SMS alert system using GSM modem
- **SET-307.** 3-phase irrigation water pump controller for illiterates using dual GSM Modems
- **SET-74.** Mobile technology (GSM) based remote monitoring and control of digital Energy Meter.
- **SET-304.** Intelligent irrigation water system controlling system with GSM technology and soil moisture sensor
- SET-273. Self-Monitored Industrial Appliance Monitoring System and remote data acquisition
- **SET-64.** Real-time home/industry automation based on GSM and wireless zigbee.
- **SET-71.** SMS Based DC Motor Speed Controller with password protection.
- **SET-186.** Bluetooth Energy Meter.
- **SET-285.** An On-line Monitoring System of Temperature of Conductors and Fittings Based on GSM SMS and Zigbee
- **SET-23.** Intelligent train security system and auto entrolling.
- **SET-318.** High voltage fuse blown indicator with display on PC with optical isolation between PC and HV bus bars
- SET-281. Method of Measuring Power Quality and Development of Monitor Device
- **SET-212.** RF transceiver (Zigbee/X-Bee) based energy meter monitoring system. (Energy Meter reading on PC over wireless comm.)
- SET-350. USING MOBILE ROBOTS TO HARVEST DATA FROM SENSOR FIELDS

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- **SET-349.** Omni Directional Robot with GSM Connectivity for Remote Access.
- **SET-250.** Call Based industrial automation
- **SET-08.** Head movement based voice enabled wireless device switching for physically challenged
- SET-239. Advanced wireless industrial automation system based on Bluetooth
- SET-241. Wearable Technology based secure access control system with motion based password for industrial automation
- **SET-187.** Google Android Smart phone operated Motor Control System.
- **SET-188.** Android operated Intelligent 230v AC Lamp Dimmer.
- **SET-189.** Smart phone based data logger
- Technologies **SET-184.** Bluetooth based security enabled powered devices control system.
- **SET-345.** Voice activated multi purpose robot
- **SET-218.** Android based real time lamp dimmer over blue tooth.
- SET-165. Gas leakage detector & auto dialing controller system
- SET-279. Resistive Touch screen controlled contact less speed monitoring and controlling of dc motor with speed limit alerts
- SET-220. GPRS based real time electrical data logger onto live website (www.sooxma.com) with SMS based real time device control

#### TOUCH SCREEN BASED PROJECTS

- **SET-25.** Talking Touch Home (TTH).
- **SET-344.** Touch screen based industry automation with door controlling
- **SET-35.** Touch screen controlled AC motor speed controlling system.
- **SET-37.** Touch screen controlled lamp dimmer for next generation apartments.
- **SET-301.** Touch screen based advanced industrial/power grid automation system (wired)
- **SET-303.** Touch screen based advanced industrial/power grid automation system (wireless)
- SET-313. Touch Screen based Industrial digital devices control system. This project is to build a Graphical LCD Touch Screen interface for switching electrical devices. The controlled devices can be of high voltage or low voltage
- SET-315. 4-wired resistive touch screen controlled lamp dimmer for next generation apartments with Optical isolation and zero crossing detectors

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- **SET-325.** Touch screen operated industrial oil dispensing system (OIL SCADA)
- SET-263. Touch screen operated password protected liquid dispensing system
- **SET-38.** Touch screen operated Volumetric Oil Dispenser.
- **SET-39.** Touch screen based temperature monitoring and control system with graphical LCD.
- **SET-305.** Touch Screen based advanced steal industry oven temperature monitoring and control system
- **SET-279.** Resistive Touch screen controlled contact less speed monitoring and controlling of dc motor with speed limit alerts
- **SET-240.** Machinery access control system for illiterates with image based password with Touch screen

# GSM and GPRS TECHNOLOGY BASED PROJECTS gies

- **SET-58.** GPRS based real-time Home/Industrial critical devices status information logger into <a href="https://www.sooxma.com">www.sooxma.com</a>.
- SET-217. GSM based Domestic/Industrial Energy meter billing system
- SET-219. GPRS (Web) based Energy Meter real time Energy Meter monitoring system
- SET-220. GPRS based real time electrical data logger onto live website (www.sooxma.com) with SMS based real time device control
- **SET-69.** GSM based SCADA implementation for industrial applications with IR sensor.
- **SET-73.** High Power LED based intelligent streetlight controlling system with GSM based Vehicle Counter.
- **SET-74.** Mobile technology (GSM) based remote monitoring and control of digital Energy Meter.
- **SET-79.** GSM based SCADA (Supervisory Control and Data Acquisition) implementation.
- **SET-80.** Dual GSM Modems based irrigation water pump controller for illiterates.
- **SET-81.** Security Integrated system based on wireless access protocol for industrial applications with SMS alert system using GSM modem
- SET-307. 3-phase irrigation water pump controller for illiterates using dual GSM Modems
- **SET-63.** A mobile agent based distributed intelligent control system architecture for home automation
- SET-312. Intelligent dam/reservoir water monitoring and control system based on GSM

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- **SET-268.** Monitoring and controlling of temperature at threshold value using GSM technology
- SET-304. Intelligent irrigation water system controlling system with GSM technology and soil moisture sensor
- SET-273. Self-Monitored Industrial Appliance Monitoring System and remote data acquisition
- **SET-64.** Real-time home/industry automation based on GSM and wireless zigbee.
- **SET-66.** GSM based SCADA and 2GB MMC card based data logger with real time monitoring.
- **SET-67.** A Remote Measurement and Control System for Greenhouse Based on GSM-SMS.
- **SET-71.** SMS Based DC Motor Speed Controller with password protection.
- SET-72. Industrial appliances monitoring and controlling system using GSM with fencing auto alerts.

- SET-85. Microcontroller Based Thermometer and SMS based alerts.

  SET-87. 3-phase irrigation motor monitoring and Auto-controlling based on GSM technology.

  SET-88. Prepaid energy meter using CSM.
- SET-88. Prepaid energy meter using GSM.
- **SET-89.** Temperature based Fan Speed Controller and SMS alerts using GSM modem.
- **SET-90.** UPS battery monitoring system over GSM for high availability systems (banking/finance/medical etc).
- **SET-211.** Control powered devices with mobile phone for free of cost. This secure system works only for predefined phone numbers (eg: owner number)
- **SET-289.** Real-time monitoring System of Temperature of Conductors and Fittings Based on GSM SMS and Zigbee
- SET-292. POWER GRID devices monitoring and controlling system using GSM technology
- **SET-306.** Motor speed monitors and control system using GSM modem
- SET-314. Street Light monitoring and control system using GSM based mobile phone
- **SET-333.** GSM based wireless Substation Fuse blown Indicator
- **SET-288.** Energy meter monitoring and control system using SMS technology
- **SET-286.** On-line Monitoring System of Transmission Line Conductor parameters
- SET-276. AUTOMATIC POWER FACTOR CORRECTOR USING CAPACITIVE LOAD BANK.
- **SET-272.** GSM based energy meter monitoring with display on PC and mobile
- **SET-271.** Industrial gas leakage detector & auto dialing controller system

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- SET-266. GSM based industrial device security system based on RFID
- **SET-257.** Industrial security System based on LPG gas, Smoke and Fire Sensors with SMS based alerts
- SET-258. GSM based SCADA (Supervisory Control and Data Acquisition) implementation
- **SET-259.** Dual GSM Modems based irrigation water pump controller for illiterates.
- SET-256. Automatic power meter reading using GSM network
- **SET-246.** Industrial temperature and Electrical data into 2GB MMC with real time monitoring using GSM technology
- **SET-245.** Real-time industrial automation based on GSM and wireless Zigbee
- SET-243. Online data logging of device status and temperature using GPRS
- **SET-244.** A mobile agent based distributed intelligent control system architecture for industrial automation
- **SET-242.** GSM based SCADA implementation for industrial applications with fencing security system
- **SET-291.** Multiple Transformers oil temperature monitoring with automatic circuit breaker operation with SMS based alerts

#### RFID BASED PROJECTS

- **SET-04.** Construction of Central Control Unit for Irrigation water pumps. Cost effective method to control entire villager's water pumps with user level authentication. Illiterate's friendly system.
- **SET-97.** Vehicle count and Speed Display System for High ways and high speed alerts with vehicle number using RFID.
- **SET-105.** RFID based Highway toll collection
- **SET-106.** RFID based Shopping trolley.
- **SET-108.** A smart card based prepaid electricity system.
- **SET-109.** RFID based automatic car parking system.
- **SET-110.** RFID based animal tracking system.
- **SET-111.** RFID based prepaid card for petrol station.
- **SET-112.** RFID based medical information system.
- SET-335. Auto-Credit Energy Metering System using mifare card

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#### WIRELESS TECHNOLOGY BASED PROJECTS

- SET-212. RF transceiver (Zigbee/X-Bee) based energy meter monitoring system. (Energy Meter reading on PC over wireless comm.)
- SET-117. Wireless vibration monitoring system of industrial equipments (Also useful for bridges monitoring).
- **SET-118.** Implementation of wireless sensors network for Wild Fire monitoring system.
- **SET-119.** A Novel Wireless Self-powered Microcontroller-based Monitoring Circuit for Photovoltaic Panels in Grid-connected Systems
- **SET-120.** Wireless Temperature Sensor Integrated Circuits

- SET-120. Wireless Temperature Sensor Integrated Circuits

  SET-122. Development of Zigbee based Street Light

  SET-290. Smart Wireless Temperature Data Logger

  SET-295. Wireless power meter monitoring system with automatic tariff calculation on handheld device. device
- SET-296. Wireless power theft monitoring with automatic circuit breaker system and indication at local substations
- SET-298. Speed and direction control of dual stepper motors using ZIGBEE Technology
- SET-299. Industrial/power grid electrical parameter Data Acquisition system through wireless technology
- SET-302. RF transceiver based wireless Electrical Devices monitoring and controlling system
- **SET-309.** Zigbee based wireless Energy Meter reading and logging system on PC
- **SET-308.** Energy Meter reading system on Graphical LCD using Zigbee based wireless communication
- **SET-311.** Wireless Energy Meter reading on hand-help device based on RF Transceiver
- SET-324. Wireless electrical devices monitoring and controlling system for industrial applications
- **SET-327.** Implementation of wireless sensors network based industrial temperature monitoring
- SET-283. A Wireless Data Acquisition and Transmission System Design
- **SET-284.** SCADA implementation based on wireless RF technology
- **SET-278.** Wireless Energy Meter reading on hand-held device based on RF

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- **SET-123.** Train automation using RF with voice announciator for the stations
- **SET-125.** Checking & Auto Control Water Level Using Wireless Sensor.
- **SET-126.** Wireless 3 Phase Motor Starter using RF Technology with feedback indicators.
- **SET-127.** Accident identification project using RF.
- **SET-129.** Microcontroller based Wireless matchbox with digital lantern.
- **SET-133.** Wireless Stepper Motor Control using RF Communication.

#### ROBOTIC PROJECTS

- SET-05. Voice operated intelligent Lift or Elevator
- SET-350. USING MOBILE ROBOTS TO HARVEST DATA FROM SENSOR FIELDS
- SET-349. Omni Directional Robot with GSM Connectivity for Remote Access.
- SET-224. Smart phone Android Operated Robot
- SET-225. Android phone Accelerometer sensor based Robot Navigator
- **SET-216.** Zigbee controlled Boat with wireless video and voice transmission with night vision capability
- SET-135. Zigbee based remote controlled robot with wireless video camera mounted on it.
- **SET-136.** Designing painting robot using spray gun tool.
- **SET-137.** Designing and construction of Movable robotic arm.
- **SET-138.** Solar Powered Vehicle/Car with ultrasonic sensors (LCD voltage display).
- SET-139. MEMS Accelerometer based Hands Gesture controlled Robot
- **SET-203.** 3 G Mobile phone controlled live human being detection
- **SET-140.** Touch screen based remote controlled robot with video camera.
- **SET-141.** Head-movement controlled robot with voice and with video camera.
- **SET-142.** Fire fighting ROBO.
- **SET-143.** ROBO leg for physically challenged.
- SET-144. Hand Gestures controlled Intelligent Wheelchair.
- SET-145. MEMS controlled robot with wireless video camera mounted on it.
- **SET-146.** DTMF controlled Live Human Being Detection with and video camera mounted on it. www.mycollegeproject.com Ph: +91 9490219339, 040-23731030

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- **SET-147.** Robot Control by PC with Head Lamp and Night Vision.
- **SET-148.** Microcontroller based Visible Light Follower Robot
- **SET-149.** DTMF based human less boat control for ocean research applications.
- **SET-150.** Mobile phone controlled four-legged walking robot with speed and direction control.
- **SET-151.** PC controlled wireless Robot with live human detection.
- SET-152. Micro Electro Mechanical Sensor (MEMS) Accelerometer based self-balancing robot.
- SET-153. Live Human being detection wireless remote controlled Robot. (Useful for detection of terrorists hiding inside buildings)
- SET-154. Radio Frequency based remote controlled robot with wireless video camera mounted on it.
- Technologies SET-155. Autonomous Robot with artificial vision for obstacle detection.
- **SET-156.** DTMF controlled live human being detecting ROBO.
- **SET-233.** Line Follower Robot
- SET-234. Wall Follower Robot
- **SET-235.** Obstacle detection robot with mechanical sensing switches
- **SET-347.** Bomb detecting robot with metal detection sensor.
- **SET-348.** Mine detecting robot with help of proximity sensors.



## Other Embedded projects

- **SET-341.** Automatic LDR based window blind control system.
- **SET-161.** MMC/SD card key security system for machinery access.
- **SET-163.** Solar Tracking Street Light System.
- **SET-164.** Call based industrial Appliance Controller
- **SET-166.** DTMF controlled soil-moisture sensor.
- SET-167. Safety implementation for 3-phase irrigation motor using Soil-moisture sensor and SET-170. Feedback Controlled Devices with Advance Security using Mobile Phones.

  SET-171. Microcontroller based Multiple Device Control Land.

  SET-172. Device Control Land.

- SET-172. Design of Coffee Cup for Alerting (Vibrations & buzzer) Blind People.
- SET-173. Microcontroller based Bank Lockers Safety System using Digital Key Password with Door Access Facility.
- SET-174. Secure Password Protected Bank Locker Controlling using Mobile Technologies.
- **SET-175.** Automatic Active Phase selector for single phase load from three phase supply.
- **SET-177.** Infrared (IR) remote controlled Muscle Stimulator with duration and intensity control.
- **SET-192.** Sooxma's Android phone temperature data logger over blue tooth
- **SET-193.** Smart card based prepaid Energy Meter for short term resident housing
- **SET-195.** CAN protocol enable multi-region monitoring and control system
- **SET-206.** RS485 based SCADA system for longer distance powered devices.
- **SET-215.** Speech recognition system based powered devices control system
- SET-228. Solar data logger into MMC/SD Memory Card
- **SET-236.** Real-time Car battery monitoring and low voltage alert system
- SET-237. Digital RPM Indicator for Electrical Motor with Over speed alarm Indicator
- **SET-251.** Transformer oil temperature monitoring with automatic Circuit Breaker operation

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- **SET-274.** Wireless DC Motor Speed and Direction Control using IR (PWM)
- SET-277. Password enabled pre-paid liquid/milk dispensing system
- **SET-280.** Controlling AC lamp Dimmer through Mobile Phone
- **SET-282.** Mobile phone controlled password protected Industrial Rolling mills Motor speed and direction control system
- **SET-336.** A multi agent multi sensor based security system for intelligent building
- **SET-334.** IR Remote controlled Irrigation water pump controller with single phasing protection
- **SET-331.** Microcontroller based refrigeration control system
- SET-330. Pulse Width Modulation (PWM) based DC Motor Closed loop Speed Controller
- **SET-329.** Solar Tracker with Stepper Motor Control
- **SET-326.** Dual (active and standby) Lithium-ion battery charger for continuous non-interrupted power supply to critical loads
- SET-322. Timer based automatic power cutoff for industrial sealing/packaging machines
- SET-321. Timer based Electrical Oven temperature monitoring and control for Metal Industries
- **SET-320.** DC Motors speed synchronization for rolling mills. (With two motors with display on LCD)
- SET-317. High voltage fuse blown indicator with Voice based announcement system
- SET-316. Hazardous chemical valve control system with stepper motor and RC5 remote control
- **SET-310.** Energy conservation system for corporate computers and lighting systems using PIR
- **SET-300.** Multiple industrial Device Control in industry based on Change in Input Frequency
- **SET-297.** Advanced Substation monitoring and control system
- **SET-294.** Microcontroller based automatic single phasing preventing system for 3-phase industrial Motors
- SET-293. Automatic irrigation water control system with moisture sensor and sprinkler control



### Mat lab projects

- **SMT1.** POWER UPGRADING OF TRANSMISSION LINE BY COMBINING AC-DC TRANSMISSION
- **SMT2.** SIMULINK IMPLEMENTATION OF INDUCTION MACHINE MODEL A MODULAR APPROACH
- SMT3. SENSORLESS SPEED ESTIMATION OF INDUCTION MOTOR IN A DIRECT TORQUE CONTROL SYSTEM
- SMT4. A 24 PULSE AC-DC CONVERTER EMPLOYING A PULSE DOUBLING TECHNIQUE FOR VECTOR CONTROLLED INDUCTION MOTOR DRIVES
- SMT5. SIMULATION OF A SPACE VECTOR PWM CONTROLLER FOR A THREE LEVEL VOLTAGE FED INVERTER MOTOR DRIVE.
- SMT6. POWER FACTOR CORRECTION USING A SERIES ACTIVE FILTER.
- **SMT7.** DIRECT TORQUE CONTROL OF A THREE PHASE INDUCTION MOTOR USING HYBRID PI/FUZZY CONTROLLER.
- **SMT8.** POWER QUALITY ANALYSIS OF TRACTION SUPPLY SYSTEM WITH HIGH SPEED TRAIN.
- SMT9. REDUCED RATING VSC WITH A ZIG-ZAG TRANSFORMER FOR CURRENT COMPENSATION IN A THREE PHASE FOUR WIRE DISTRIBUTED SYSTEM.
- SMT10. A FUZZY LOGIC CONTROLLER FOR SYNCHRONOUS MACHINE.
- **SMT11.** EIGHTEEN-PULSE AC-DC COVERTER FOR HARMONIC MITIGATION IN VECTOR CONTROLLER INDUCTION MOTOR DRIVE.
- SMT12. MATLAB BASED SIMULATION OF TCSC FACTS CONTROLLER.
- **SMT13.** A NOVEL METHOD OF LOAD COMPENSATION UNDER UNBALANCED AND DISTORTED VOLTAGES.
- **SMT14.** MATLAB/SIMULINK IMPLEMENTATION FOR REDUCING THE MOTOR DERATING AND TORQUE PULSATION OF INDUCTION MOTOR USING MATRIX CONVERTER.
- SMT15. HVDC CONTROL SYSTEM BASED ON FUZZIFIED INPUT PERCEPTRON.
- **SMT16.** A NEW CONCEPT OF MULTILEVEL STATCOM BASED ON CASCADE TOPOLOGY.

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**SMT17.** A PARALLEL-CONNECTED SINGLE PHASE POWER FACTOR CORRECTION APPROACH WITH IMPROVED EFFICIENCY.

**SMT18.** DESIGN AND IMPLEMENTATION OF A SHUNT ACTIVE POWER FILTER WITH REDUCED DC LINK VOLTAGE.

**SMT19.** ANALYSIS AND IMPLENTATION OF THYRISTOR-BASED STATCOM.

**SMT20.** A THREE PHASE THREE SWITCH TWO LEVEL PWM RECTIFIERS.

**SMT21.** DESIGN AND ANALYSIS OF UPFC.

