Innovative ECE Final projects list

**Technologies:**

1. **GPRS – Mobile internet**
2. **Touch screen.**
3. **Global Positioning System (GPS) technology.**
4. **GSM technology.**
5. **MMC/SD card with FAT-16 & FAT-32 file system**
6. **Wireless technology.**
7. **MEMS accelerometer.**
8. **Heartbeat sensor.**
9. **Bluetooth technology.**
10. **RFID/ Smart/Mifare card.**
11. **ROBOTICS.**
12. **Speech recognition.**
13. **Fingerprint recognition.**
14. **Controller Area Network (CAN) protocol.**
15. **RS-485.**
16. **Google Android mobile OS.**
ECE Final projects list

SET-260. Radar Velocity-measuring System Design and high speed alert intimation through SMS

SET-01. Design and development of Touch screen Mobile phone using Modem, Graphical LCD, Buzzer and Touch Screen based keypad.

SET-02. Design and construction of MEMS based tilt operated touch free mobile phone.

SET-351. Wireless Fingerprint ACCESS CONTROL System Based on ZigBee Technology

SET-03. Construction of Intelligent mobile phone with GPS enabled features.

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-05. Voice operated intelligent Lift or Elevator

SET-06. Automatic geo-positioning and SMS alerts on road traffic density.

SET-342. Finger print and keypad based security access control system.

SET-343. FOOT STEP POWER GENERATION SYSTEM.

SET-346. Wheel chair movement control using tongue

SET-255. GPS-GSM Integration for Enhancing Public Transportation management Services

SET-258. Obstacle Avoidance and Manhole detection Electronic travel aid Robot for blind

SET-07. Graphical LCD and memory stick based tilt operated Textbook reading system

SET-08. Head movement based voice enabled wireless device switching for physically challenged

SET-09. Touch screen and Zigbee based wireless communication assistant for Dumb and illiterates in Airlines

SET-223. Missile detection and auto destroy system

SET-10. Zigbee based wireless Voice to Text translator in Airlines/Hospital assistant system for blind/Illiterates.


SET-191. Voice actuated hospital bed control system and Heart Beat monitoring and alerting system


SET-23. Intelligent train security system and auto controlling.


SET-14. RFID and GSM based intelligent courier mailbox system with automatic delivery notification.

SET-15. Construction of Smart mobile phone with driving mode selection to avoid accidents.

SET-16. Cardiac Sentinel: A smart GSM based embedded solution for continuous remote monitoring of cardiac patients.

SET-17. GPS and GSM based Real-time Human Health Monitoring and Alert System for Cardiac patients.

SET-18. Touch screen based advanced menu display and Ordering System for Restaurants.


SET-21. GPS based vehicle travel location data logger with 2GB MMC/SD Memory card.


SET-158. Voice commands based wheelchair for physically challenged.


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

SET-159. MEMS Accelerometer controlled PC.

SET-184. Bluetooth based security enabled powered devices control system.

SET-22. Wearable Technology based secure access control system with motion based password.

SET-198. Speech recognition based wheelchair operation and wireless home devices control system

www.mycollegeproject.com

Ameerpet: A-8, 2nd floor, Eureka court, beside Image hospital, Ameerpet, HYDERABAD – 73.


Ph: +91 9490219339, 040-23731030
SET-345. Voice activated multi purpose robot

TOUCH SCREEN BASED PROJECTS


SET-27. Touch screen and Smart Card based prepaid Ticket booking system with automatic seat allocation.

SET-194. Microcontroller and Touch screen based wireless library book catalog system

SET-344. Touch screen based home automation with door controlling.

SET-01. Design and development of Touch screen Mobile phone using Modem, Graphical LCD, Buzzer and Touch Screen based keypad.

SET-09. Touch screen and Zigbee based wireless communication assistant for Dumb and illiterates in Airlines

SET-18. Touch screen based advanced menu display and Ordering System for Restaurants.


SET-28. Touch screen and Zigbee based library automation using RFID.

SET-29. Touch screen based wheel chair control system.


SET-31. Touch screen based Nurse/attendant calling system for physically impaired.


SET-33. Touch screen based remote controlled robot with wireless video camera.

SET-34. Zigbee/Bluetooth and Touch screen Controlled PC.


SET-37. Touch screen controlled lamp dimmer for next generation apartments.

SET-38. Touch screen operated Volumetric Oil Dispenser.

SET-39. Touch screen based temperature monitoring and control system with graphical LCD.
GPRS based project

SET-199. Location aware mobile phone signal strength logger into 2GB memory card (MMC/SD/Micro SD)

SET-220. GPRS based real time data logger onto live website (www.sooxma.com) with SMS based real time device control

SET-337. Remote home monitoring through internet and controlling using RF.


SET-243. Online data logging of device status and temperature using GPRS.


SET-44. GPS and GSM based real-time vehicle tracking on Google Earth (with two GSM Modems)

SET-93. Student data logging system into college website based on RFID


SET-60. Student data logging system into college website based on RFID.

SET-61. Online library book catalog with RFID technology.


GPS BASED PROJECTS

SET-185. Voice recognition and voice guidance based GPS turn-by-turn navigator for blind with ultrasonic obstacle avoidance.

SET-03. Construction of Intelligent mobile phone with GPS enabled features.

SET-40. GPS based data logger and real time vehicle tracking with GSM.

SET-338. GPS BASED STATION NAME DISPLAY AND DOOR CONTROL

SET-41. GPS and GSM based office cab monitoring, alerting and logging system.

SET-204. GPS based navigator with location display on Graphical LCD. This provides user to have the location information displayed in any language

SET-205. Advanced GPS based navigator for illiterates

www.mycollegeproject.com  Ph: +91 9490219339, 040-23731030
Ameerpet: A-8, 2nd floor, Eureka court, beside Image hospital, Ameerpet, HYDERABAD – 73.
SET-202. GPS and Graphical display based tourist-guiding system with Touch screen keyboard input for dynamic location recording. This can be used anywhere in the world including Sea and Forest locations.

SET-208. Wireless Bluetooth enabled GPS receiver data logger.

SET-213. GPS Data Logger with Longitude, Latitude, Speed, Time, Number of satellites into fat16/fat32 file system on 2GB memory card.

SET-42. Automatic taxi Trip Sensing and Indicating System through GSM.

SET-43. GPS based train location tracking system with SMS facility.

SET-44. GPS and GSM based real-time vehicle tracking on Google Earth (with two GSM Modems).

SET-45. Military persons training system that monitors the speed at which they move and records the calculated traveled distance with the time.

SET-46. Virtual distance measuring tape with GPS and GLCD. Very useful for roads and buildings department. One man operable and works anywhere on Earth.

SET-47. Microcontroller and GPS based geographical map drawing instrument. Very useful for Civil engineers.

SET-48. Human travel location tracking system by using GPS.


SET-50. GPS based station name announcement and display system for Trains/buses.

SET-51. Implementation of location based advertisement system using GPS and Graphical LCD.

SET-52. GPS based border alert system for fishermen with boat speedometer.

SET-53. Location driven car music player. (Plays devotional songs near temples, shuts at home etc.)

SET-54. Travel assistant for blind with dynamic user input for location based alerts.

SET-55. Automated bus-stop alert for passengers using GPS.

SET-56. GPS based wireless Speedo meter for boat/ship with speed and location limit alerts.

SET-57. GPS based universal clock. Gets the time from satellites and displays on GLCD.
GSM TECHNOLOGY PROJECTS

SET-199. Location aware mobile phone signal strength logger into 2GB memory card (MMC/SD/Micro SD)

SET-81. Smart card and GSM based advanced security system.

SET-337. Remote home monitoring through internet and controlling using RF.


SET-242. GSM based SCADA implementation for industrial applications with fencing security system.

SET-243. Online data logging of device status and temperature using GPRS.


SET-44. GPS and GSM based real-time vehicle tracking on Google Earth (with two GSM Modems)

SET-01. Design and development of Touch screen Mobile phone using Modem, Graphical LCD, Buzzer and Touch Screen based keypad.

SET-02. Design and construction of MEMS based tilt operated touch free mobile phone.

SET-03. Construction of Intelligent mobile phone with GPS enabled features.

SET-14. RFID and GSM based intelligent courier mailbox system with automatic delivery notification.

SET-15. Construction of Smart mobile phone with driving mode selection to avoid accidents.

SET-17. GPS and GSM based Real-time Human Health Monitoring and Alert System for Cardiac patients.

SET-41. GPS and GSM based office cab monitoring, alerting and logging system.

SET-245. Real-time industrial automation based on GSM and wireless Zigbee

SET-246. Industrial temperature and Electrical data into 2GB MMC with real time monitoring using GSM technology


SET-60. Student data logging system into college website based on RFID.

SET-61. Online library book catalog with RFID technology.

SET-62. GSM based school children security system based on RFID.
SET-63. A mobile agent based distributed intelligent control system architecture for home automation

SET-64. Real-time home automation based on GSM and wireless ZigBee.

SET-65. Wireless Google Earth control system at Railway/Bus Stations for tourist’s route map guidance.

SET-66. GSM 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-68. Electronic eye-dial-up.

SET-69. GSM based SCADA implementation for industrial applications with IR sensor.

SET-70. GSM based student data acquisition.

SET-71. SMS Based DC Motor Speed Controller with password protection.

SET-72. Home appliances monitoring and controlling system using GSM with fencing auto alerts.

SET-165. Gas leakage detector & auto dialing controller system

SET-197. GSM based instantaneous vehicle registration details extraction system very useful for Traffic police

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-75. Home security System based on LPG gas, Smoke and Fire Sensors with SMS based alerts

SET-76. GSM based digital Notice board with display on GLCD display.

SET-77. GSM based digital Notice board with display on PC Monitor.

SET-78. GSM based digital Notice board with display on Scrolling LED Display.

SET-79. GSM based SCADA (Supervisory Control and Data Acquisition) implementation.

SET-80. Dual GSM Modems based irrigation water pump controller for illiterates.

SET-82. Voice enable device switching for physically challenged and emergency alerts through SMS.

SET-83. SMS based remote SIM card’s address book access system.

SET-84. GSM and MMC/SD Memory Card based Remote Message Storage Device.
SET-85. Microcontroller Based Thermometer and SMS based alerts.

SET-86. Security Integrated system based on wireless access protocol for industrial applications with SMS alert system using GSM modem.

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

SET-88. GSM based pre-paid Energy Meter with low balance alert..

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)

**RFID 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-261. Smart card based Security Access Control System.


SET-14. RFID and GSM based intelligent courier mailbox system with automatic delivery notification.

SET-91. RFID and GSM based Advanced Vehicle parking slot booking system.

SET-92. RFID and Zigbee based Voice enabled calling bell.

SET-81. Smart card and GSM based advanced security system.

SET-93. Student data logging system into college website based on RFID.


SET-95. GSM based school children security system based on RFID.

SET-96. RFID and 2GB SD/MMC card based patient data monitoring system with PC interface.

SET-97. Vehicle count and Speed Display System for High ways and high speed alerts with vehicle number using RFID.

SET-98. Touch screen and RFID based Ticket booking system.

SET-28. Touch screen and Zigbee based library automation using RFID.
SET-100. Designing of 24 hours digital library and books data logger in to PC.

SET-101. RFID warehouse robot.

SET-102. RFID based bus identification system for blind with voice.

SET-103. RFID Card based security access control systems.

SET-104. RFID based digital library system and alerts.

SET-105. RFID based Highway toll collection

SET-106. RFID based Shopping trolley.

SET-107. RFID based employee login system and identification display on PC.

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

WIRELESS TECHNOLOGY PROJECTS

SET-113. Innovative Congestion Control System for Ambulance Using ZIGBEE

SET-114. Zigbee based wireless Electronic Notice Board with Multi Point Receiver.

SET-115. Zigbee device access control and reliable data transmission in Zigbee based health monitoring system.


SET-229. Wireless Digital Camera Controller. Using this project the digital camera can be controlled remotely using RF Transmitter and Receiver. The controls include taking picture snaps, switching on the flash light, changing camera direction using stepper motor etc

SET-230. Wearable technology for wireless gadgets control

SET-339. Cost Effective Wireless Attendance and Access Control System

SET-337. Remote home monitoring through internet and controlling using RF.
SET-117. Wireless vibration monitoring system of industrial equipments (Also useful for bridges monitoring).


SET-207. Radio Frequency wireless remote controlled digital camera with high power LED based focusing light. The camera direction can be controlled remotely and the video images can be seen live on TV


SET-120. Wireless Temperature Sensor Integrated Circuits

SET-121. Wireless Heartbeat Monitoring and Alert system

SET-122. Development of Zigbee based Street Light

SET-123. Train automation using RF with voice announciator for the stations

SET-124. Employee login and logout details with displayed on PC based on RF

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-128. Finding of missing object based on RF technology.


SET-130. Virtual wireless dancing bells for classical dancers.

SET-131. Child/Blind tracking system & alerts to our hand held device.

SET-132. Home security system Based on wireless RF technology


SET-134. TV Remote Controlled PC and Devices with Password protection

ROBOTIC PROJECTS

SET-350. USING MOBILE ROBOTS TO HARVEST DATA FROM SENSOR FIELDS

SET-349. Omni Directional Robot with GSM Connectivity for Remote Access

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-137. Designing and construction of Movable robotic arm.


SET-139. MEMS Accelerometer based Hands Gesture controlled Robot

SET-203. 3G 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-214. J2ME Java Enabled mobile phone controlled Bluetooth Robot

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.

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-153. Live Human being detection wireless remote controlled Robot. (Useful for detection of terrorists hiding inside buildings)


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.


**MMC/SD card projects**

SET-21. GPS based vehicle travel location data logger with 2GB MMC/SD Memory card.

SET-40. GPS based data logger and real time vehicle tracking with GSM.

SET-41. GPS and GSM based office cab monitoring, alerting and logging system.

SET-213. GPS Data Logger with Longitude, Latitude, Speed, Time, Number of satellites into fat16/fat32 file system on 2GB memory card

SET-45. Military persons training system that monitors the speed at which they move and records the calculated traveled distance with the time.

SET-47. Microcontroller and GPS based geographical map drawing instrument, very useful for Civil engineers.

SET-199. Location aware mobile phone signal strength logger into 2GB memory card (MMC/SD/Micro SD)

SET-66. GSM and 2GB MMC card based data logger with real time monitoring.

SET-84. GSM and MMC/SD Memory Card based Remote Message Storage Device.

SET-96. RFID and 2GB SD/MMC card based patient data monitoring system with PC interface.

SET-161. MMC/SD key security system.

SET-162. Graphical LCD and Memory stick (MMC/SD card) based textbook reading system.

SET-227. Standalone Heartbeat Data Logger (MCU+SD/MMC 1GB Card+ Sensors). (The purpose of this project is to log the heartbeat data into the MMC memory stick. The data for the duration up to One Month can be logged continuously)

SET-228. Solar data logger into MMC/SD Memory Card
MEMS accelerometer projects

SET-08. Head movement based voice enabled wireless device switching for physically challenged


SET-200. MEMS Accelerometer based digital photo frame with automatic position/view adjustment system (similar to digital cameras)

SET-02. Design and construction of MEMS based tilt operated touch free mobile phone.

SET-159. MEMS Accelerometer controlled PC.

SET-22. Wearable Technology based secure access control system with motion based password.

SET-230. Wearable technology for wireless gadgets control

SET-117. Wireless vibration monitoring system of industrial equipments (Also useful for bridges monitoring).

SET-139. MEMS Accelerometer based Hands Gesture controlled Robot

SET-145. MEMS controlled robot with wireless video camera mounted on it.

SET-144. Hand Gestures controlled Intelligent Wheelchair.


SET-200. MEMS Accelerometer based digital photo frame with automatic position/view adjustment system (similar to digital cameras)
Speech recognition system projects

SET-05. Voice operated intelligent Lift or Elevator

SET-191. Voice actuated hospital bed control system. Very useful in operation of selected bed movements and room environment functions associated with a provided multi-function hospital bed

SET-10. Zigbee based wireless Voice to Text translator in Airlines/Hospital assistant system for blind/Illiterates.


SET-158. Voice commands based wheel chair for physically challenged.

SET-198. Speech recognition based wheel chair operation and wireless home devices control system

SET-345. Voice activated multi purpose robot

SET-185. Voice recognition and voice guidance based GPS turn-by-turn navigator for blind with ultrasonic obstacle avoidance.

SET-82. Voice enable device switching for physically challenged and emergency alerts through SMS.

SET-215. Speech recognition system based powered devices control system
Heartbeat sensor projects

SET-16. Cardiac Sentinel: A smart GSM based embedded solution for continuous remote monitoring of cardiac patients.

SET-17. GPS and GSM based Real-time Human Health Monitoring and Alert System for Cardiac patients.

SET-96. RFID and 2GB SD/MMC card based patient data monitoring system with PC interface.

SET-121. Wireless Heartbeat Monitoring and Alert system.

SET-252. HEART BEAT MONITORING WITH DISPLAY ON LCD.

SET-93. Microcontroller based Heartbeat Monitor with Display on pc.

SET-193. Wireless touch screen based heartbeat monitoring of multiple patients

Bluetooth projects


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

SET-209. J2ME Java phone controlled Home Automation

SET-214. J2ME Java Enabled mobile phone controlled Bluetooth Robot
RS-485 projects

SET-206. RS485 based SCADA system for longer distance powered devices.

Controller Area Network (CAN) projects

SET-195. CAN protocol enable multi-region monitoring and control system

Finger print recognition projects

SET-342. Finger print and keypad based security access control system.

Google Android mobile projects

SET-218. Android based real time lamp dimmer over Bluetooth
SET-224. Smart phone Android Operated Robot
SET-225. Android phone Accelerometer sensor based Robot Navigator
SET-192. Sooxma's Android phone temperature data logger over Bluetooth
SET-226. Google Android operated Smart Home

Other embedded projects

SET-336. A multi agent multi sensor based security system for intelligent building
SET-341. Automatic LDR based window blind control system
SET-163. Solar Tracking Street Light System.
SET-164. Call Based Home Appliance Controller
SET-166. DTMF controlled soil-moisture sensor.
SET-167. Safety implementation for 3-phase irrigation motor using Soil-moisture sensor and temperature sensor.

SET-168. PC based Digital Notice Board with Display on LCD Display.

SET-169. PC Controlled Industrial Devices with 8-relay board.


SET-171. Microcontroller based Multiple Device Control based on one Input Switch.

SET-172. Design of Coffee Cup for Alerting (Vibrations & buzzer) Blind People.


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-178. Mobile Phone controlled PC with Devices Control

SET-179. Microcontroller based digital clock with Graphical LCD and Sanskrit font (or Any regional font) Numbers.

SET-180. Real-time Heartbeat Monitoring system with display on Graphical LCD and alerting system.

SET-181. Telugu Tutor with dynamic text and Images identification for elementary school kids.

SET-182. Innovative keyboard construction with only one input pin.

SET-183. Voice enabled devices switching for visually impaired.

SET-190. Human body temperature and Heart rate monitoring on mobile screen over Bluetooth wireless technology.

SET-195. CAN protocol enable multi-region monitoring and control system.

SET-196. Microcontroller based online examination system with dynamic questions.