

Innovative EEE mini-projects list

- SEM-133.** Checking and auto control of water level using wireless sensor.
- SEM-140.** Wireless 3-phase motor starter using RF technology.
- SEM-185.** Designing of Haptic Keypad with magnetic door lock system for industrial security.
- SEM-182.** Electronic Touch home.
- SEM-181.** Hand gestured based industrial automation
- SEM-188.** Gestured controlled lamp dimmer (Useful for power conservation)
- SEM-143.** Smart zone based Vehicle speed control system based on RF
- SEM-172.** I-Button and keypad based digital doorlock system
- SEM-23.** Micro Electro Mechanical Sensor (MEMS) Accelerometer/Gyroscope based self-balancing robot
- SEM-189.** Motion based password for device switching
- SEM-191.** Hand movement based Fan speed controlling
- SEM-39.** Mobile phone controlled Street Light monitoring and control system with automatic day/night switchover.
- SEM-134.** Power management system in shopping malls with bidirectional visitor counter
- SEM-64.** Password protected GSM based Device control.
- SEM-81.** PIR and GSM based Home security system.
- SEM-84.** DTMF Based Remote appliance Control System using Mobile Phone
- SEM-05.** Image based password authentication for Illiterates with resistive Touch screen.
- SEM-186.** Industrial appliances controlling using resistive touchscreen
- SEM-150.** Controlling of powered devices using Tongue motion.
- SEM-152.** Tongue controlled wheel chair.
- SEM-173.** Magnetic door security system based on I-Button.
- SEM-02.** GSM based Irrigation Water Pump Controller for Illiterates (No SMS knowledge required).
- SEM-04.** Microcontroller based Wireless matchbox with digital lantern
- SEM-36.** Mobile phone controlled intelligent Robot.
- SEM-98.** Mobile phone DTMF technology controlled irrigation/ agricultural motor control system
- SEM-135.** RF based industrial security system.
- SEM-144.** Mobile phone based secure password door controlling system.

- SEM-165.** Industrial device switching through RF technology.
- SEM-178.** DTMF controlled soil-moisture sensor.
- SEM-180.** Feedback Controlled Devices with Advance Security using Mobile Phones
- SEM-62.** PC Controlled Industrial Devices.
- SEM-17.** RFID based security access control systems
- SEM-110.** Industrial and Home Security System based on smoke and Fire sensors
- SEM-111.** Construction of Cooking gas leakage sensor and alarming system
- SEM-115.** Micro controller based bank lockers safety system using digital key password with door access facility
- SEM-117.** Automatic Door opening and Room Illumination Control system using IR and LDR sensors
- SEM-118.** Object counter for Bottle filling industries with Alpha Numeric LCD display
- SEM-121.** Highly sensitive LDR based power saver for street light control system
- SEM-122.** Microcontroller based automatic active Phase selector for single phase load from three phase supply
- SEM-126.** H-Bridge and PWM based DC Motor direction and speed control system
- SEM-127.** Real time Car battery monitoring and low voltage alert system
- SEM-125.** Interfacing High voltage device to Microcontroller using optical isolation technology
- SEM-128.** Triac and zero crossing detector based lamp dimmer
- SEM-154.** Maximum demand controller and fault alerting for industries
- SEM-156.** Solar Powered industrial boiler with temperature display
- SEM-155.** Automatic Braking comfort using Ultrasonic sensors
- SEM-176.** A multi agent multi sensor based security system for intelligent building
- SEM-177.** Automatic LDR based window blind control system
- SEM-103.** Real-time clock based automatic street light controlling system with LDR based backup control system
- SEM-78.** Micro controller based Multiple Device Control based on Change in Input Frequency
- SEM-79.** Single phasing preventer for protection of three phase (3-ph) loads
- SEM-93.** Temperature sensor driven automatic DC motor based fan speed controlling system
- SEM-70.** Microcontroller based Solar Tracker with Stepper Motor Control
- SEM-71.** Automatic Room Illumination Control

- SEM-72.** Automatic Temperature Measurement and Control
- SEM-67.** Digital Tachometer (Non-contact)
- SEM-59.** Frequency Locked Loop DC Motor speed monitoring and control system
- SEM-53.** Talking Energy meter. Alerts the user with voice messages in case of over power utilization.
- SEM-55.** Design and construction of Earth fault relay for single phase power system
- SEM-45.** Hall-effect sensor based non-contact AC motor speed monitoring and display system with high and low speed alerts
- SEM-46.** Liquid dispensing system with adjustable quantity for industrial use
- SEM-56.** Transformer oil temperature monitoring with automatic Circuit Breaker operation
- SEM-42.** Soil Moisture sensor based intelligent irrigation water pump controlling system
- SEM-37.** Automatic Intelligent Plant Watering System
- SEM-40.** UPS battery monitoring system with automatic battery changeover
- SEM-31.** PIR based energy conservation system for corporate Computers and lighting system
- SEM-01.** High power LED based intelligent streetlight controlling system with automatic brightness and vehicle counter using vehicle presence sensor.

TOUCH SCREEN BASED PROJECTS

- SEM-185.** Designing of Haptic Keypad with magnetic door lock system
- SEM-182.** Electronic Touch home.
- SEM-05.** Image based password authentication for Illiterates with Touch screen.
- SEM-08.** Touchscreen based temperature monitoring and control system.
- SEM-186.** Home appliances controlling using resistive touchscreen
- SEM-187.** Bank locker accessing using touchscreen
- SEM-18.** Touchscreen operated liquid dispensing system
- SEM-29.** Touchscreen controlled motor speed and direction controlling system.
- SEM-41.** Touchscreen controlled lamp dimmer for next generation apartments.

MEMS accelerometer projects

- SEM-23.** Micro Electro Mechanical Sensor (MEMS) Accelerometer/Gyroscope based self-balancing robot
- SEM-181.** Hand gestured based industrial automation.
- SEM-188.** Gestured controlled lamp dimmer (Useful for power conservation)
- SEM-161.** Controlling of powered devices through gestures.
- SEM-189.** Motion based password for device switching.
- SEM-190.** Intelligent gestured controlled PC.
- SEM-191.** Hand movement based Fan speed controlling.

WIRELESS TECHNOLOGY PROJECTS

- SEM-02.** GSM based Irrigation Water Pump Controller for Illiterates (No SMS knowledge required).
- SEM-04.** Microcontroller based Wireless matchbox with digital lantern
- SEM-19.** Infrared (IR) remote controlled Muscle Stimulator with duration and intensity control
- SEM-38.** DC Motor Speed and direction controller using mobile phone.
- SEM-39.** Mobile phone controlled Street Light monitoring and control system with automatic day/night switchover.
- SEM-43.** DTMF mobile phone controlled dam water gates controlling system with high-level protection.
- SEM-44.** Motor Speed and direction control system using Infrared Light sensor.
- SEM-54.** RF transceiver based energy meter monitoring system. (Energy Meter reading on PC over wireless comm.).
- SEM-63.** DS1307 and Microcontroller based TV remote controlled Digital Clock.
- SEM-64.** Password protected GSM based Device control.

- SEM-65.** Wireless TV Remote controlled password protected dual Stepper Motors Controlling system
- SEM-66.** RC5 IR Based Remote Device Switching for Industrial purpose.
- SEM-68.** Wireless Digital Frequency Meter with display on PC.
- SEM-73.** RF Control of Induction/DC/Stepper Motor & Other Industrial Loads.
- SEM-84.** DTMF Based Remote appliance Control System using Mobile Phone
- SEM-98.** Mobile phone DTMF technology controlled irrigation/ agricultural motor control system
- SEM-133.** Checking and auto control of water level using wireless sensor.
- SEM-135.** RF based home security system.
- SEM-140.** Wireless 3-phase motor starter using RF technology.
- SEM-143.** Smart zone based Vehicle speed control system based on RF
- SEM-144.** Mobile phone based secure password door controlling system.
- SEM-162.** IR TV remote based device switching
- SEM-164.** Toll gate operating system using RF technology.
- SEM-165.** Industrial device switching through RF technology.
- SEM-166.** Wireless speed and direction control of DC motor through RF technology
- SEM-170.** Industrial device switching through RF technology.
- SEM-171.** RF technology based digital locker system
- SEM-178.** DTMF controlled soil-moisture sensor.
- SEM-180.** Feedback Controlled Devices with Advance Security using Mobile Phones

I-Button Projects

SEM-172. I-Button and keypad based digital doorlock system

SEM-173. Magnetic door security system based on I-Button.

SEM-174. Bank locker security system using I-Button.

SEM-175. Vehicle access control system based on I-Button

ROBOTIC PROJECTS

SEM-152. Tongue controlled wheel chair.

SEM-28. MEMS Accelerometer controller Wheel chair

SEM-23. Micro Electro Mechanical Sensor (MEMS) Accelerometer/Gyroscope based self-balancing robot

SEM-89. PC controlled wired robot

SEM-163. AUTONOMOUS SURVEILLANCE ROBOT

SEM-149. DTMF operated live human being detecting Robot.

SEM-143. Smart zone based Vehicle speed control system based on RF

SEM-101. IR TV remote Controlled robot.

SEM-92. RF Remote controlled Land Rover

SEM-91. 4-wire resistive Touchscreen controlled Robot.

SEM-90. PC Controlled Wireless robot.

SEM-36. Mobile phone controlled intelligent Robot.

SEM-102. Automatic Metal Detection and alerting Robot

SEM-26. Live Human being detection wireless remote controlled Robot. (Useful for detection of terrorists hiding inside buildings).

SEM-12. Mobile phone controlled four-legged walking robot with speed and direction control.

SEM-27. Autonomous Robot with artificial vision for obstacle detection.

Non-Micro controller based projects

- SEM-04.** Construction of wireless match box for digital lantern using RF technology.
- SEM-111.** Construction of Cooking gas leakage sensor and alarming system
- SEM-110.** Industrial and Home Security System based on smoke and Fire sensors
- SEM-114.** Real-time burglar alarm system using PIR Sensor (Passive Infrared Sensor)
- SEM-130.** Solar cell based mobile phone battery charger
- SEM-141.** PIR based intrusion detection system with letter box information
- SEM-176.** A multi agent multi sensor based security system for intelligent building
- SEM-80.** PIR Sensor based Intrusion Detection System
- SEM-71.** Automatic Room Illumination Control
- SEM-42.** Soil Moisture sensor based intelligent irrigation water pump controlling system
- SEM-35.** Ultrasonic Sensor based travel assistant for blind people
- SEM-37.** Automatic Intelligent Plant Watering System
- SEM-31.** PIR based energy conservation system for corporate Computers and lighting system
- SEM-06.** Speaker assisted system for deaf and dumb.

Other embedded projects

- SEM-14.** Digital vehicle speedometer with speed limit setting.
- SEM-15.** Microcontroller based digital clock with LCD
- SEM-48.** Energy Meter monitoring system with automatic tariff calculation.
- SEM-49.** Energy meter per-day average, Max and Min Load display on LCD
- SEM-50.** High voltage fuse blown indicator with Voice based announcement system
- SEM-57.** Timer based Electrical Oven temperature monitoring and control for Metal Industries
- SEM-58.** Timer based automatic power cutoff for industrial sealing/packaging machines
- SEM-61.** Microcontroller based refrigeration control system.
- SEM-69.** Construction of Digital Voltage and Current meter with High and low level alerts
- SEM-76.** Micro controller based Wireless Temperature Measurement
- SEM-77.** Micro controller based Closed Loop Temperature Control

- SEM-94.** Pulse steel method AC motor speed control using Triac and optically isolated diac
- SEM-96.** Industrial High Voltage Transformer protection against overheating of transformer oil
- SEM-99.** Construction of Prepaid Energy (KWH) Meter
- SEM-107.** LDR based automatic lamp illumination controller with High Power/Intensity LED lighting (PWM control)
- SEM-109.** Automatic washing machine motor control system
- SEM-112.** Microcontroller based temperature driven automatic 230V Fan speed controlling system
- SEM-118.** Object counter for Bottle filling industries with Alpha Numeric LCD display
- SEM-119.** AC 230V over and under Voltage Protection for High Voltage Electrical Appliances
- SEM-124.** Microcontroller based Three Phase Load safety implementation with phase fault detector
- SEM-126.** H-Bridge and PWM based DC Motor direction and speed control system
- SEM-129.** Infrared sensor based intelligent Hand dryer with hot air blower
- SEM-136.** Microcontroller based vehicles speed and count for Highways
- SEM-138.** Microcontroller based multiple devices controlling using one switch
- SEM-139.** Microcontroller based Thermometer
- SEM-141.** PIR based intrusion detection system with letter box information
- SEM-142.** Real Time Clock based automatic college bell ringing system along with temperature display
- SEM-145.** Microcontroller based locker security system with auto alerting and punishing system
- SEM-146.** Microcontroller based Robot controlled through PC with head lamp vision
- SEM-147.** Industrial vehicle counter and automatic gate opening system