

# PROJECT IDEAS

## **Electrical Engineering Projects List**

1. Transformer Protection Panel
2. Working Model Of Maglev
3. Maximum Power Point Tracking
4. Motorised Wheel Chair
5. Controller Of Electrical Vehicale
6. Deregulation Of Energy Sector
7. Cathodic Protection
8. Radial Feeder Protection
9. PLC Based System
10. Numerical Relay
11. Measurement Of Electrical Parameters
12. Variable Frequency Drive
13. 3 Phase Analyzer
14. Modeling And Simulation Of Congestion Management In Transmission Sector Of Deregulated Electricity Market.
15. Electrical Bicycle
16. Survey Of Industries In Surat
17. Speed Control Of D.C Shunt Motor Using Four Quadrant Chopper
18. Speed Control Of Separately Excited D.C Motor Using  $\tilde{A}$ ,  $\hat{\mu}$ p
19. Cyclo- Converter I- Phase To I- Phase
20. Digital Filter Design & Itâ„#S Application
21. Computer Aided Power Flow Analysis
22. Microstepping Of Unipolar Stepper Motor
23. Speed Control Of 3 - Phase Induction Motor By V / F Method Using PWM Technique
24. Measurement Of Inrush Current In Transformer
25. Microprocessor Based Power Factor Measurement & Control
26. 8085 Based Protective Relay
27. Microcontroller Based Digital Energy Meter
28. Electronic Power Generator Using Transistor
29. Measurement Of Inrush Current In Transformer
30. Microstepping Of Unipolar Stepper Motor
31. Computer Aided Power Flow Analysis
32. Speed Control Of D.C Shunt Motor Using Four Quadrant Chopper
33. Microprocessor Based Power Factor Measurement & Control
34. Cycloconverter I- Phase To I- Phase
35. 8085 Based Protective Relay
36. Speed Control Of Separately Excited D.C Motor Using  $\tilde{A}$ ,  $\hat{\mu}$ p
37. Microcontroller Based Digital Energy Meter

38. Speed Control Of 3 - Phase Induction Motor By V / F Method Using PWM Technique
39. Digital Filter Design & Its Application
40. Electrical Bicycle
41. Survey Of Industries In Surat
42. Electronic Power Generator Using Transistor
43. Solar Tracking System
44. Working Model Of Solar Power Plant
45. Speed Control Of D.C Motor Using D.C Drives
46. Prepaid Card Energy Meter
47. Vector Controlled AC Drive
48. Reciprocating Motor A. / C Relay
49. Construction & Design Of Three Phase 1 H.P Motor
50. Micro-Controller Based Differential Protection Of Transformer
51. Design Optimization Of Three Phase Squirrel Cage Induction Motor
52. Speed Control Of D.C Motor Using Simulation
53. Micro-Controller Based Control Of Any Electrical Machine
54. Inverter (MOSFET Based)
55. V / F Speed Control Of Three Phase Induction Motor
56. Linear Induction Motor (Design & Performance, Analysis)
57. PLC Based Boiler Control System
58. Microprocessor Based Robot
59. Power Factor Correction Using Microprocessor
60. 3 Phase Squirrel Cage Induction Motor Design
61. 3 Phase Squirrel Cage Induction Motor Design
62. Speed Control Of Dc Shunt Motor
63. Protection Of 3 Phase Induction Motor
64. Speed Control Of Universal Motor Using Microcontroller
65. Computer Aided Design Of Transformer
66. Microprocessor Based Power Meter
67. Microprocessor Based Speed Control Of Induction Motor
68. Data Acquisition System
69. UPS
70. Gsm Controlled Door Latch Opener With Security Dialup With Changeable Telephone Numbers (Based)
71. Power Grid Control Through Pc
72. I.V.R.S. System For Industrial Control
73. Rf Control Of Induction Motors And Other Industrial
74. LOADS
75. Microcontroller Based G.S.M. Controlled Switch With Voice
76. Six Channel Petrochemical Fire Monitoring & Control Station
77. Based Token Number Display With Voice & Security
78. Home/Office Security System (Teleguard)
79. Ibm Pc Hdd,Fdd,Printer Signal Indicator And Fault Locator Cards(Set Of Three Cards)
80. Mini Lcd Scope
81. ELECTRONIC EYE BASED
82. ELECTRONIC EYE BASED WITH EVENT LOGGING ON PC

83. Hotel Power Management Through PC
84.  $\mu$ c Based PT- Temperature Controller
85. Microcontroller Based Code Lock With Security Telephone Dialer
86. Real Time Channel Data Logger
87. Ch Data Logger Through Radio Link
88. Load Shedder
89. Home Automation Through P.C.
90. Inductance , Capacitance And Frequency Meter.
91. Pc To Pc Laser Communication
92. Pc To Pc Fiber- Optic Communication
93. Bilge Oil Water Separator
94. Automatic Toll Tax
95. Automatic Control Of Unmanned Rail Gate
96. Auto-Answering With Security Dial-Up
97. Programmable Logic Controller (Plc)
98. Heart Beat Monitor (Based)
99. Intelligent Sauna Bath Control System
100. Remote Monitoring And Alarm On Pc Using Radio Link
101. Eight Channel Data Logger Cbased
102. Control System For Modern House
103. Pain Monitor
104. Patient Monitoring System
105. R.F. Controlled Intelligent Robot Car With Cordless Video-Cam .Sends Video & Sound On Monitor/Tv Continuously. Can Be Used For Spying Purpose Range Yards Radial . Based On Microcontroller
106. Pwer House Monitoring Through Radio Frequency
107. Dc Motor Speed Control Using Radio Frequency ()Suitable For Robotic Arm (Two Angle)
108. Dc Motor Speed Control From Pc Com Port()Suitable For Robotic Arm (Two Angle)
109. Dc Motor Speed Control Through Push Switches()
110. Telephone Calls Logger ( Logs All Incoming And Outgoing Calls To Pc)
111. Rfid Tx And Rx Kit With Two Ids ( Security Application)
112. Rfid Tx And Rx Kit With Two Ids ( Route Map Application)
113. Rfid Tx And Rx Kit With Two Ids ( Attendance Register)
114. Home Appliances Control Through Pc
115. Safe Landing System
116. Build Your Own // Programmer
117. Build Your Own Embedded Development Board Pc
118. Real-Time Industrial Process Control And Monitoring Using Gsm Phones
119. Line Follower Robot
120. Light Follower Robot
121. Infra Red Control For Pc
122. Driver Alert
123. Contact Less Techo Generator
124. Heart Beat Monitor With Wave On Lcd(Pic Based)
125. Ir Follower Robot
126. Parking Radar
127. Multi Core Cable Tester
128. Kitchen Timer

- 129. Room Thermometer
- 130. Digital Lock
- 131. Photic Phone
- 132. Pic Lcf Meter
- 133. Radio Frequency Remote Control Board (Control Eight Relays)
- 134. Microcontroller Based Security Dial Up With Event Logging To Pc
- 135. Home Automation Using Gsm
- 136. Gsm Ivrs
- 137. Automatic Toll Tax With Voice Using
- 138. Industrial Automation & Monitoring System

## ADVANCE PROJECTS

- 1. Zigbee Based Hospital Automation with online graph and WAP
- 2. Infant Incubator Parameter Sensing & Monitoring through ZIGBEE Wireless
- 3. Eye ball Sensor for automatic wheel chair movement for paralysed patients
- 4. Automated Environmental Friendly Vehicle System
- 5. Home appliances control using voice Dictation
- 6. Pc based Wireless Weather monitoring System
- 7. Embedded System Based Interlocking System For Chemical And Pharmaceutical Industries
- 8. Wireless Roaming Web Cam
- 9. Voice Controlled Wireless Multitasking Rover
- 10. SALVO RTDS Based Data Acquisition System and control with PC Interface
- 11. SUN SAIL - Tracking Elliptical Path Of The Sun
- 12. Home/Industrial Automation using GSM With Voice Feedback.
- 13. Embedded PIC MC based\_Electronic Trivector Meter
- 14. Embedded Pic Microcontroller Based Power Multimeter
- 15. Control of substation equipments thro mobile phone.
- 16. Embedded Pic Microcontroller Based Motor Protection System
- 17. Energy Management System For Pulse Output Meters
- 18. IVRS Based Home Automation With Immediate Voice Feedback
- 19. Voice Controlled Wheel Chair Robot for Physically challenged.
- 20. Micro controller based Antilock Braking System using Proximity Sensors
- 21. PCB Drilling Machine using Cartesian bot
- 22. Programmable Grass Shredding Robot
- 23. Automatic Valet Parking System using conveyors
- 24. Programmable Surface Cleaning Robot using Blowers
- 25. Embedded System Based Automatic Furnace Control For Improvement Of Hardness On Materials
- 26. Interactive Telemarketing Device For Advertisement Agencies With Human Approach
- 27. Single Phase to 3 Phase Converter For Driving 3 Phase Motor using Single Phase
- 28. Temperature And Humidity Measurement System for Agricultural Applications
- 29. Embedded System based Automatic Furnace control for improvement of Hardness on materials.

30. Embedded System controlled Electroplating System
31. Embedded System based Transformer Oil Testing Machine.
32. Blue tooth Enabled Home/Industrial Automation
33. IVRS Based Electronic Tele-voting System
34. IVRS Based Control Of Three Axis Robot With Voice Feed Back
35. Embedded System based Cockpit White box automation
36. Energy Efficient Target Coverage in Wireless Sensor Networks
37. Contact less Measurement Of Emission Of Automobiles
38. Design Of Digital Cryogenic Temperature Controller
39. Automated Vertical Car Parking System
40. Remotely Activated Acoustic Warning System (RAAWS)
41. Biometric Finger Print Identification with PIC Based Access Control System
42. Biometric Finger Print Identification with PIC Based Time Recorder with Weigand Output
43. Biometric Finger Print Identification with PIC Based Bank and Locker Security system
44. Biometric Finger Print Identification with PIC Based Vehicle Access System
45. Biometric Fingerprint Based Guard Alert Monitoring system with PC interface
46. RFID Based Guard patrolling system with Handheld Device
47. IRIS Recognition system in Authenticating Highly Secured Data.
48. IRIS Scanner Using Access control Monitoring system
49. Embedded Micro controller Based Nomad Robots for exploration Application
50. Embedded Micro controller Based Robots for weather forecasting.
51. Vehicle Accessing using Authentication
52. Non-Contact Smart Card Reader Based Campus Management system.
53. Web/wap based system for remote monitoring patients with data mining support.
54. Remote Monitoring and Control using Mobile phones
55. Secured Postal Data Communication using RFID and E-POST
56. Distributed Multi area Power systems load flow monitoring
57. Smart Card based Attendance monitoring with Multi-Door output.
58. Secure Transmission of Sensitive data using Multiple channels
59. Micro controller Based Standalone Temperature Measurement System.
60. Micro controller Based Ultrasonic Pulse Detector.
61. Pc Based Flow Control And Level Measurement In Petrol Bunks.
62. Pc As A Pid Controller.
63. Vector Controlled Device For Energy Saving Air Conditioning System.
64. Fuzzy Logic Based Differential Relay For Power Transformer Protection.
65. Electric Power Generation using Footstep Method.
66. Embedded Micro controller based Grid Synchronization.
67. Energy Management Control System with WAP
68. Home Automation Using X-10 Protocol.
69. Bi Directional VF Control of Single Phase AC Motors.
70. Frequency Actuated Load Shedding with substation monitoring
71. Management of sub-transmission and distribution system in power systems
72. Mobile - Half Bridge Configuration Based High Voltage Generation of 10KVA\_1KHZ
73. Vector Controlled Drive for Energy Saving in Air Conditioning system

74. High Performance AC Supply with Low Harmonic Distortion for multiphase AC Machines.
75. Enhancement of power system performance using STATCOM
76. Management of sub-transmission and distribution system in power systems.
77. Remote data monitoring using WAP Information Gateway
78. Embedded system based highway monitoring system and control
79. Automatic Anesthesia controller with respiratory system using Heart beat Sensor
80. Intelli mobile robot for multispeciality operations
81. prepaid electricity system automation with contact less proximity card & card reader
82. IVRS Based smart home automation with voice feedback.
83. smart solar tracking for optimal power generation
84. Wireless AI Based voice controlled intelli robot for multispeciality operations
85. Network enabled Electronic Digital televoting machine.
86. Speech Recognition based complete Car Security System
87. OFDM Based Wireless Encryption/Decryption of Transfer of Messages.
88. Synchronized DC Defibrillator with PC Interface
89. Stand-alone Synchronized DC Defibrillator with LCD Interface
90. RF Based Wireless Complete Body Scanning System Using WAP
91. RF Based Medi-Kits for Houses with Emergency Dialer.
92. RF Based Wire less Heart Beat Rate Monitoring System
93. Medicare System for Hospital Automation
94. Study and working of Peritoneal Dialysis with Model.
95. IR based human radiation detection online
96. PC based emergency ambulance calling system
97. PC based body temperature measurement and control
98. Automatic anesthesia feeder based on respiratory
99. Automatic anesthesia feeder based on resp temp with temp with model
100. Automatic anesthesia feeder based on HBC with model.
101. Blue tooth Enabled Wireless Communication with Handheld Device.
102. Advanced Sensors Controlled Bank Security System.
103. Home Networking and Security System With Wap
104. Tape less Voice Storage and Retrieval using APR9600.
105. Electro magnetic Proximity Card Reader with Weigand output based Access Control System with Double Level Security.
106. Electro magnetic Proximity Card Reader with Weigand output based Time and Attendance System.
107. Electro magnetic Proximity Card Reader with Weigand output based Security Cards.
108. EMPCR with Weigand output Based Electricity Billing Automation.
109. EMPCR with Weigand output Based Electricity Billing Automation with WAP.
110. Guard Supervisor for Industries.
111. Guard Alert System for Home Security System.
112. Guard Alert System for industries With Patrolling system.
113. Fire Alarming Control panel with Auto dialer to Fire Station.
114. Hardware Design for Pick and Place Robot
115. Fire Fighting Robotics with artificial intelligence
116. Fire Fighting Robotics With AI (Artificial Intelligence) and WAP
117. Cell Phone Controlled Two Axis Robotics with AI.

118. Cell Phone Controlled Three Axis Robotics with AI.
119. Mobile Phone Controlled Alive Human Detector using Robotics
120. Two Axis Stepper Controller / Driver with Opto-Isolation
121. Multi Axis Stepper Controller / Driver with Opto-Isolation
122. Two Axis Robotics With Artificial Intelligence (AI)
123. Three Axis Robotics With Artificial Intelligence (AI)
124. RF Based Wireless Multi Axis Robotics with WAP
125. PLC Uses for bottle filling station with conveyors
126. Automatic Control of Bottle Filling System Using PLC With Conveyor Model.
127. Embedded PIC Micro controller based Safety Road Control With WEB CAM
128. Embedded PIC Micro controller based Controlling of devices through Telephone Lines
129. DAS and Remote Control through Internet
130. Micro controller based system design for Electronics Laboratory
131. Wireless Home Automation System Using Telephone Lines with WAP
132. RF Based Wireless Encryption And Decryption Message Transfer System for Military Applications
133. Encoding and decoding technique for secured data communication
134. On Line Dynamic Code Acquisition For Spread Spectrum Systems
135. Single Photon Quantum Cryptography
136. Pseudo Random Code modulation based Secured Data Communication.
137. Frequency jammer as a life guard
138. Frequency jammer as a life guard with WAP
139. PC based data scanner/ logger for 8 channel
140. PC based data scanner/ logger with field programmable channel
141. Intelligent guided vehicle for collision prevention
142. Fuzzy Logic based Collision Prevention for vehicles.
143. Intelligent Application of Fuzzy Logic in Automatic Train Speed Control System.
144. Fuzzy logic based Traffic Control System - A Replacement strategy
145. Embedded controller for traffic controls
146. Automatic control for unmanned railway gate
147. Automatic control for unmanned railway gate with model
148. Automatic control for unmanned railway gate with WAP
149. Solar power for automatic water heating
150. Solar energy for Electrical Applications
151. Tracking Sun's path for efficient use of Solar Cell with Model
152. Automated car parking system
153. PC based electronic weighing scale with set point
154. Bluetooth Enabled Advanced Data monitoring and control Using Hitech c.
155. Multi-Parameter Measurement System and Control with Graphs
156. WEB-SCADA 157. Multi Channel Voltage Scanner with SCADA
158. Micro controller based Position Control for Stepper Motor
159. Industrial Safety Measures System with Sensors and Web Cam
160. Industrial Safety Measures System with Sensors
161. Industrial Safety Measures System with Sensors with Voice Indication.
162. Attendance Marker System with IRC Reader

163. Attendance Marker System with IRC Reader and Face indicator
164. Categorized Alarm Annunciator using Embedded System
165. Categorized Alarm Annunciator using Embedded System with controls
166. Categorized Alarm Annunciator with Voice using Embedded System with controls
167. Micro controller based Boiler Management System
168. Priority Indicators in Alarm Annunciators
169. PC Based Programmable Temperature Controller for Furnaces
170. PC Based Programmable Temperature Controller for Cement Plant
171. 8 Channel Temp. Measurement System/Control with True Graphs
172. 8 Channel Temp. Measurement System with True Graphs
173. 8 Channel Temp. Measurement System with True Graphs with Voice indication
174. 8 Channel Multiset point Temperature controller with Different Time Period
175. Multichannel Missing Event Detector
176. Multichannel Missing Event Detector with Voice Indication
177. Battery Voltage and Current Monitoring for 8 Batteries
178. Master / Slave Control System for Process Industries
179. Embedded System based POSI-CAST controller for Dc-Dc Buck Converter.
180. Electrical Station Variables Reader/Controller with True Graph and SCADA
181. Electrical Station Variable Reader/Controller with True Graph
182. Remote On/Off Controller for AC Motors with Parameter Monitoring
183. Remote Switching System for home appliances
184. Power Sharing of Transformers with WAP
185. Power Sharing of Transformers with auto protection
186. Computer Keyboard as a dual controller for switching Electrical devices
187. Dual control of Electrical devices through Computer Keyboard and H/W
188. Centralized Powerhouse Automation using WAP.
189. Slip Ring Induction motor Drive with slip Recovery using IGBT
190. DC motor Starter using MOSFET
191. Microcontroller Based Oil Temp/IND/CON
192. 3 Phase AC Motor using IGBT
193. Two / Four Quadrant chopper in Indian Military.
194. Ultrasonic Range Finder
195. AC Power line Monitoring motor generator application
196. Speed Control of AC Motor
197. Speed Control of DC Motor with Field and Armature Control
198. DC Drive using IGBT
199. AC Drive using IGBT
200. Maximum Demand Indicator / Controller for Industries
201. Power Factor Correction Using Multiple Capacitor Banks
202. Electricity Billing Automation
203. Prepaid Electricity Billing Automation
204. Digital Tri Vector Meter
205. Multiple starter with overload protection
206. Multiple starter with overload protection with AI



207. Multiple starter with overload protection with WAP
208. Digital Timer with Thumbwheel setting with On and Off delay type
209. Digital Counter using Proximity Sensor
210. Digital Energy meter using Embedded Controller
211. Digital Energy meter with voice annunciation
212. DC Driver using SCR
213. Digital RPM Indicator using Proximity or Magnetic Pick up
214. Digital Frequency indicator
215. Digital Voltmeter using Embedded System
216. Digital Ammeter using Embedded System
217. Cyclic Timer using Embedded system
218. Remote Digital RPM Indicator using Proximity or Magnetic Pick up with SCADA
219. Remote Frequency indicator with SCADA
220. Length counter using Embedded system
221. Micro controller based access control system
222. Pc based data scanner/ logger for 8 à€œ channel
223. Pc based data scanner/ logger with field programmable channel
224. Embedded controller for traffic controls
225. High Pressure hose Test Rig for Brake line Manufacturing Industries
226. Embedded PIC Micro controller based Petrol Bunk Automation
227. Speed Control of an Electrical DC Vehicle
228. Fault Tolerant Neuro Controlled Level Processing panel
229. Embedded controller for non linear partially interacting process (NLPIP)
230. Power Distribution Management System using WAP
231. Virtual instrumentation for temperature controlled loop 232. Pc based attendance [censored] visitor management system
233. Multi Channel Voltage Scanner with SCADA
234. Micro controller based Position Control for Stepper Motor
235. PC Based Programmable Temperature Controller for Furnaces
236. PC Based Programmable Temperature Controller for Cement Plant.
237. Micro controller Based Multichannel PID Controller for temperature
238. Micro controller based Dedicated PID Controller for Temperature
239. PC Based Pollution Tester For Vehicles with WEB CAM Interface
240. PC Based Pollution Tester For Vehicles with CO Analyzer

