# **EMBEDDED**

## **ROBOTICS**

**TECHNOLOGY: EMBEDDED** 

**DOMAIN: ROBOTICS** 

| S.NO | P.CODE | TITLE  |
|------|--------|--|
| 1    | PROB01 | Hazardous Gas Detecting Method Applied in Coal Mine Detection        |
|      |        | Robot  |
| 2    | PROB02 | Head motion controlled power wheelchair                              |
| 3    | PROB03 | Automated Voice based Home Navigation System for the Elderly and     |
|      |        | the Physically Challenged  |
| 4    | PROB04 | Gsm And Dtmf Based Robot For Parameter Monitoring In Gas             |
|      |        | Industries.  |
| 5    | PROB05 | Rf Based Robot Control Using Pir Sensor For Defense Force.           |
| 6    | PROB06 | Automatic Unwanted Polythene Bags And Pet Bottles Collecting         |
|      |        | Robot  |
| 7    | PROB07 | Identification of cracks in tunnel using tunnel robot                |
| 8    | PROB08 | Garden robot for the Water Spray in the lawn                         |
| 9    | PROB09 | Wireless communication based spy robot                               |
| 10   | PROB10 | Automatic navigation robot for industrial applications based on RFID |
|      |        | technology   |
| 11   | PROB11 | DTMF based mobile operated industrial spy robot                      |
| 12   | PROB12 | MATLAB based intruder detection and shooting robot.                  |
| 13   | PROB13 | Crack detector Robot for Railway track inspection.                   |
| 14   | PROB14 | Live Human detecting Robot for Earthquake Risk operation             |
| 15   | PROB15 | Seed Sprayer Robot for Agricultural Farms                            |
| 16   | PROB16 | Microcontroller based weather forecasting robot using Gsm            |
| 17   | PROB17 | Wireless Image Communication System For Fire –Fighting Robot         |
| 18   | PROB18 | Voice Based Wheel Chair Robot  |
| 19   | PROB19 | DTMF Based PICK And PLACE Robot                                      |
| 20   | PROB20 | Wireless Based Boarder Security Robot.                               |
| 21   | PROB21 | DTMF Based Humanless Robotic Boat .                                  |
| 22   | PROB22 | Wheel Chair Robot For Physically Challenged Persons Using Voice      |
|      |        | Control.   |
| 23   | PROB23 | Efficient Irrigation System Using Wireless Water Feeding Robot       |

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| 24 | PROB24 | PROB24 An Intelligent Two-Axis Fire Detection And Fire Fighting Robotic |  |
|----|--------|---|--|
|    |        | Vehicle For Textile Industry.   |  |
| 25 | PROB25 | Automatic Brake Comfort Using Ultrasonic Sensor.                        |  |
| 26 | PROB26 | An Intelligent Disaster Management Robot                                |  |
| 27 | PROB27 | Power Plant Data Monitoring Robot And Alert Intimation Through          |  |
|    |        | Sms.  |  |
| 28 | PROB28 | Wireless Land Mine Detecting Robot                                      |  |

## **AUTOMATION**

TECHNOLOGY: EMBEDDED DOMAIN: AUTOMATION

| S.NO | P.CODE | TITLE  |
|------|--------|--|
| 1    | PAM01  | Driver fatigue monitoring and warning system                       |
| 2    | PAM02  | Automatic Toll Payment Of Vehicles Using Capacitive Sensor         |
| 3    | PAM03  | Embedded Based Car Reversing And Warning System                    |
| 4    | PAM04  | Automatic Railway Gate Control With Voice Announcement             |
| 5    | PAM05  | Automatic Irrigation Water Supply Monitoring And Control System    |
| 6    | PAM06  | Automatic Vehicle Starter System Based Alcohol Breath Analyzer     |
| 7    | PAM07  | Petrol Bunk Automation Using Smartcard                             |
| 8    | PAM08  | Ticket vending machine based on coin sensor.                       |
| 9    | PAM09  | Automatic earthquake identification with voice announcement        |
| 10   | PAM10  | Apartment automation monitoring and management system.             |
| 11   | PAM11  | Vehicle Anti collision Using IR Signals                            |
| 12   | PAM12  | Automatic room light control with visitor counter                  |
| 13   | PAM13  | Automatic Human Tracking Fan System                                |
| 14   | PAM14  | Bluetooth Based Device Control For Industries.                     |
| 15   | PAM15  | Prepaid Gas Supply System For Apartment Automation.                |
| 16   | PAM16  | RFID Based Automating Voting Meachine .                            |
| 17   | PAM17  | The Blind Audio Guidance System Using RFID                         |
| 18   | PAM18  | Microcontroller Based Pipe Line Oil Flow Rate Monitoring System In |
|      |        | Industries   |
| 19   | PAM19  | Industrial Safety Measures System With Voice Indication            |
| 20   | PAM20  | Complete voice enabled residential security system                 |

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## **WIRELESS**

**TECHNOLOGY: EMBEDDED** 

**DOMAIN: WIRELESS** 

| S.NO | P.CODE | TITLE  |
|------|--------|--|
| 1    | PRF01  | More Efficient Home Energy Management System Based on Zigbee   |
|      |        | Communication and Infrared Remote Controls   |
| 2    | PRF02  | Real Time Paddy Crop Field Monitoring Using RF   |
| 3    | PRF03  | Forest Fire Monitoring System Based On RF  |
| 4    | PRF04  | Wireless sensor based forest fire monitoring system  |
| 5    | PRF05  | A Remote Home Security System Based on Wireless Sensor Network and GSM Technology                    |
| 6    | PRF06  | Avoiding vehicle parking in no parking area using RF   |
| 7    | PRF07  | Smart zone based Vehicle speed control system based on RF  |
| 8    | PRF08  | Microcontroller Based Railways Accident Avoiding System  |
| 9    | PRF09  | Border security system using RF  |
| 10   | PRF10  | Vehicle detection in no parking area using RF and magnetic sensor                                    |
| 11   | PRF11  | Anti theft alert and auto arresting system for museums and jewelry shops.                            |
| 12   | PRF12  | Traffic Priority for Ambulance using RF  |
| 13   | PRF13  | Railway Track Pedestrian Crossing Without Using Staircase  |
| 14   | PRF14  | Wireless Sensor Networks For Dust And Gas Surveillance Application In Coalmine.                      |
| 15   | PRF15  | Passenger Guidance System In Train Using RF  |
| 16   | PRF16  | Home Security With IR, Temperature Sensor Using RF Technology  |
| 17   | PRF17  | Microcontroller Based Fire Monitoring System In Petrochemical  |
| 17   | TKI 17 | Industries Using RF Communication  |
| 18   | PRF18  | RF Technology Based Incoming/Outgoing Vehicle Alert From Main Gate                                   |
| 19   | PRF19  | Dangerous Gas Detection System for Coalmine Industries   |
| 20   | PRF20  | Wireless Vehicular Identification and Authentication System in secured areas.                        |
| 21   | PRF21  | An efficient way of Highway Lights switching and power saving application.                           |
| 22   | PRF22  | An intelligent traffic signal controlling system for emergency vehicle using wireless communication. |
| 23   | PRF23  | Voice Based Bus Recognition System for Visually Challenged Persons.                                  |
| 24   | PRF24  | RF based Automatic meter reading.  |
| 25   | PRF25  | Automotive Speed Control of Vehicles in Pedestrian Crossing Zones.                                   |

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## **GSM & GPS**

**TECHNOLOGY: EMBEDDED** 

**DOMAIN: GSM & GPS** 

| S.NO | P.CODE | TITLE  |
|------|--------|--|
| 1    | PGSP01 | Smart Parking Reservation System Using Short Message Service           |
| 2    | PGSP02 | Pipeline Damage Locating Based On Gps                                  |
| 3    | PGSP03 | Identifying Objects Using Rf Transmitters And Receivers And            |
|      |        | Retrieving   |
|      |        | Data Using Gsm   |
| 4    | PGSP04 | Vehicle Accident Intimation And Location Finder Using Gsm And          |
|      |        | Gps  |
| 5    | PGSP05 | Gsm And Gps Based Vehicle Tracking And Locating System                 |
| 6    | PGSP06 | Transformer Oil and Temperature Checking and Intimating To the Eb.     |
| 7    | PGSP07 | Automatic Charge Intimation for Traffic Police Using Gsm.              |
| 8    | PGSP08 | Atm Stealing Protection and Intimation Using Gsm.                      |
| 9    | PGSP09 | Intelligent Home Security and Management System through Gsm            |
| 10   | PGSP10 | Railway Bridge Damage Notification With Alarm Systems.                 |
| 11   | PGSP11 | GPS Based Border Alert System for Fisherman                            |
| 12   | PGSP12 | Gsm based Irrigation System  |
| 13   | PGSP13 | Voting machine through GSM modem                                       |
| 14   | PGSP14 | Gsm based wireless Starter for Induction Motor                         |
| 15   | PGSP15 | GSM based instantaneous vehicle registration details extraction system |
|      |        | very useful for Traffic police   |
| 16   | PGSP16 | GSM security alert system for Fire and LPG Gas leakage                 |
| 17   | PGSP17 | Vehicle Theft Alert And Avoidance System Using GSM                     |
| 18   | PGSP18 | Bus Location And Seat Availability Tracking System Using GSM And       |
|      |        | GPS  |
| 19   | PGSP19 | Vehicle Gas Detection With Automatic Safety Warning Using GSM          |
| 20   | PGSP20 | Digital Energy Meter With Overload Indication Through Gsm              |
| 21   | PGSP21 | GSM and Inter Integrated Circuit based secured locker system in        |
|      |        | banks  |
| 22   | PGSP22 | Efficient Speed Control of DC motor through GSM                        |
| 23   | PGSP23 | Design and Implementation of power plant Monitoring System             |
|      |        | Based on GSM   |

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## **CONSUMER ELECTRONICS**

**TECHNOLOGY: EMBEDDED** 

**DOMAIN: CONSUMER ELECTRONICS** 

| S.NO | P.CODE | TITLE  |
|------|--------|--|
| 1    | PCE01  | Design a Sensor Module Of Active And Intelligent Energy Saving   |
|      |        | System   |
| 2    | PCE02  | Real time atomization of agricultural environment for Indian     |
|      |        | agricultural system.   |
| 3    | PCE03  | Boarding school students monitoring using RFID                   |
| 4    | PCE04  | PIR and GSM based Home security system.                          |
| 5    | PCE05  | Over speed and drunk and drive indicator                         |
| 6    | PCE06  | Automatic code changing mechanism for Locker Security            |
| 7    | PCE07  | Anti Sleep Alarm for Students Based on RTC                       |
| 8    | PCE08  | Intelligent Instant password controlled Home Security System     |
| 9    | PCE09  | Bidirectional visitor Counter and Display System with maximum    |
|      |        | Capacity Alarm   |
| 10   | PCE10  | Mobile Detector In Restricted Area                               |
| 11   | PCE11  | Unmanned Petrol Bunk System Using RFID                           |
| 12   | PCE12  | ATM Security System Based On Random Password Generation And      |
|      |        | Intimation Via GSM   |
| 13   | PCE13  | Automatic Milk Collection System Using RFID                      |
| 14   | PCE14  | Image Processing Based Automatic Money Depositior.               |
| 15   | PCE15  | Automated Paid Car Parking In Shopping Complex Using Coin        |
|      |        | Vending Sensor.  |
| 16   | PCE16  | Finger Print Based Driver Authentication System for Vehicles     |
| 17   | PCE17  | Unmanned Toll Tax Collector Using RFID                           |
| 18   | PCE18  | Green House Environment Monitor and Control system.              |
| 19   | PCE19  | Microcontroller based intelligent car parking monitoring system. |

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## **WEB BASED**

**TECHNOLOGY: EMBEDDED** 

**DOMAIN: WEB BASED** 

| S.NO | P.CODE | TITLE   |
|------|--------|---|
| 1    | PPC01  | GSM based instantaneous vehicle registration details extraction       |
|      |        | system  |
| 2    | PPC02  | Bluetooth based talking energy meter                                  |
| 3    | PPC03  | Collecting the student's progress information (E-Progress Card) using |
|      |        | GSM.  |
| 4    | PPC04  | Banking Password And Authentication Process Using SMS                 |
| 5    | PPC05  | Encryption And Decryption Based Secured Communication For             |
|      |        | Military Applications.  |
| 6    | PPC06  | Web Based Industrial Automation And Control.                          |
| 7    | PPC07  | Talking Energy (KWH) Meter  |
| 8    | PPC08  | Multichannel Temperature Monitoring In Fabrication Industries.        |
| 9    | PPC09  | Industrial Parameters monitoring and data logger using internet       |

### **ELECTRICAL**

**TECHNOLOGY: EMBEDDED** 

**DOMAIN: ELECTRICAL** 

| S.NO | P.CODE | TITLE  |
|------|--------|--|
| 1    | PSPE01 | Supervisory Predictive Control Of Standalone Wind/Solar Energy         |
|      |        | Generation System  |
| 2    | PSPE02 | Real Time Control Of DC Motor Drive Using Speech Recognition           |
| 3    | PSPE03 | 360 Deg Sun Tracking System For Solar PV Modules                       |
| 4    | PSPE04 | Novel Technique For Preventing Current Method Electricity Stealing     |
| 5    | PSPE05 | Transformer industrial parameters fault identification and intimate to |
|      |        | EB Section   |
| 6    | PSPE06 | Power plant monitoring and auto control with voice indication          |
| 7    | PSPE07 | Power management system using PIR and LDR                              |
| 8    | PSPE08 | Stepper Motor Control based on Solar Tracking system                   |
| 9    | PSPE09 | Energy meter monitoring and control system using SMS technology        |
| 10   | PSPE10 | Automatic energy cost calculation and billing system to EB department  |
| 11   | PSPE11 | Transformer real time temperature monitoring and thermal Overload      |

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|    |        | Protection  |
|----|--------|---|
| 12 | PSPE12 | Power Sharing Of Transformer With Over Load Protection.             |
| 13 | PSPE13 | Automatic Active Phase Selector For Uninterrupted Load Run In Rural |
|    |        | Areas.  |
| 14 | PSPE14 | Bluetooth Based Remote Metering System In Industries.               |
| 15 | PSPE15 | Over And Under Voltage Protection Of Electrical Appliances.         |
| 16 | PSPE16 | Prepaid Energy Meter Using Rfid Technology.                         |
| 17 | PSPE17 | Automatic Switching Gear System For Avoiding Fluctuations In        |
|    |        | Power Plant.  |
| 18 | PSPE18 | Energy-Saving Room Architecture based on RF Communication           |
| 19 | PSPE19 | Transmission line multi fault detector and Indication to substation |
|    |        | using RF  |
| 20 | PSPE20 | Advanced method of controlling the DC motor in industries through   |
|    |        | internet  |
| 21 | PSPE21 | Speed Control of Induction Motor using DTMF signal.                 |
| 22 | PSPE22 | Auto shut down based on voltage (V) and current (I) fluctuations.   |

# **BIOMEDICAL**

TECHNOLOGY: EMBEDDED

**DOMAIN: BIOMEDICAL** 

| S.NO | P.CODE | TITLE  |
|------|--------|--|
| 1    | PBIO01 | Design Of Wireless Sensor System For Neonatal Monitoring                               |
| 2    | PBIO02 | Secure Remote Patient Monitoring System  |
| 3    | PBIO03 | Bluetooth Based Home Patient Surveillance  |
| 4    | PBIO04 | Intelligent Blood Collection System Using Rfid   |
| 5    | PBIO05 | Brain activity detection system based on eeg sensor                                    |
| 6    | PBIO06 | GSM based Human Health Monitoring and alert system                                     |
| 7    | PBIO07 | Medicine Identification In Pharmacy And Expiry Identification                          |
| 8    | PBIO08 | Patient Health Monitering Of Cough And Heart Beat Rate Using GSM                       |
| 9    | PBIO09 | Epilepsy (Fits) Sensing And Sending Message To The Emergency<br>Centre                 |
| 10   | PBIO10 | Health Monitering Of ICU And Alert System  |
| 11   | PBIO11 | Advanced Diagnostic Tool For Respiration Rate And Cough<br>Indication Through Landline |
| 12   | PBIO12 | Monitoring ECG Level for Heart Patient with LCD Display                                |
| 13   | PBIO13 | Infant Monitoring System In Hospitals To Avoid Sid                                     |

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| 14 | PBIO14 | Fracture Detection Using Bone Crack Sensor                    |
|----|--------|---|
| 15 | PBIO15 | Blood Glucose Level Identification and Abnormality Intimation |

# **POWER ELECTRONICS**

**TECHNOLOGY: POWER ELECTRONICS** 

**DOMAIN:** 

| S.NO | CODE  | PROJECT TITLE   |
|------|-------|---|
| 1    | PPE01 | Soft-Switched CCM Boost Converters With High Voltage Gain for High-<br>Power Applications   |
| 2    | PPE02 | Battery Discharge Regulator for Space Applications based on the Boost<br>Converter  |
| 3    | PPE03 | A DC – DC multilevel boost converter  |
| 4    | PPE04 | Three-level zero-voltage switching pulse-width modulation DC – DC boost converter with active clamping  |
| 5    | PPE05 | An Interleaved Totem-Pole Boost Bridgeless Rectifier With Reduced Reverse-Recovery Problems For Power Factor Correction   |
| 6    | PPE06 | Design of a Plug-In Repetitive Control Scheme f or Eliminating Supply-<br>Side Current Harmonics of Three-Phase PWM Boost Rectifiers Under<br>Generalized Supply Voltage Conditions |
| 7    | PPE07 | Space Vector Modulation for Two-Level Unidirectional PWM Rectifiers   |
| 8    | PPE08 | A High-Dynamic Range Current Source Gate Driver for Switching-Loss<br>Reduction of High-Side Switch in Buck Converter   |
| 9    | PPE09 | Exploration of Bifurcation and Chaos in Buck Converter Supplied From a Rectifier  |
| 10   | PPE10 | Four Switch Buck-Boost Converter for Telecom DC-DC Power Supply Applications  |
| 11   | PPE11 | A Compensation Technique for Smooth Transitions in a No inverting Buck–Boost Converter  |
| 12   | PPE12 | Low-Ripple and Dual-Phase Charge Pump Circuit Regulated by Switched-Capacitor-Based Band gap Reference  |

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| 13 | PPE13 | A Novel Peak and Deep Current Mode Control for Two Switches Buck-<br>Boost Converter   |
|----|-------|--|
| 14 | PPE14 | Simulation and Hardware Implementation of Incremental Conductance<br>MPPT with Direct Control Method Using Cuk Converter                 |
| 15 | PPE15 | A Hybrid Wind-Solar Energy System: A New Rectifier Stage Topology  |
| 16 | PPE16 | Research on Maximum Power Point Tracker Based on Solar Cells<br>Simulator  |
| 17 | PPE17 | A High Efficiency Fly back Converter With New Active Clamp Technique   |
| 18 | PPE18 | A Novel Symmetrical Rectifier Configuration With Low Voltage Stress and Ultra low Output-Current Ripple                                  |
| 19 | PPE19 | Analysis and Design of a High-Efficiency Full-Bridge Single-Stage<br>Converter With Reduced Auxiliary Components                         |
| 20 | PPE20 | Design of a 28 V-to-300 V/12 kW Multicell Interleaved Fly back<br>Converter Using Intercell Transformers                                 |
| 21 | PPE21 | Experimental Comparison of Traditional Phase-Shift, Dual-Phase-Shift, and Model-Based Control of Isolated Bidirectional DC–DC Converters |
| 22 | PPE22 | Isolated Bidirectional Full-Bridge DC–DC Converter With a Fly back Snubber   |
| 23 | PPE23 | Modeling and Control of Three-Port DC/DC Converter Interface for Satellite Applications  |
| 24 | PPE24 | Steady-State Stability of Current Mode Active-Clamp ZVS DC–DC Converters   |
| 25 | PPE25 | Modeling and Control of Three-Port DC/DC Converter Interface for Satellite Applications  |
| 26 | PPE26 | Modeling and Small-Signal Analysis of a Switch-Mode Rectifier With Single-Loop Current Sensor less Control                               |
| 27 | PPE27 | Space-Vector- Based Hybrid Pulse width Modulation Techniques f or Reduced Harmonic Distortion and Switching Loss                         |
| 28 | PPE28 | Ripple Current Reduction of a Fuel Cell for a Single-Phase Isolated Converter Using a DC Active Filter With a Center Tap                 |
| 29 | PPE29 | The AC Line Current Regulation Strategy for the Grid-Connected PV System   |

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| 30 | PPE30 | Design and Analysis of a Grid-Connected Photovoltaic Power System                                   |
|----|-------|---|
| 31 | PPE31 | A Three-Phase High-Frequency Semi controlled Rectifier for PM WECS                                  |
| 32 | PPE32 | A Digitally Controlled Unity Power Factor Compensator f or Pulse-Burst-<br>Modulated Loads          |
| 33 | PPE33 | A High-Efficiency AC/DC Converter With Quasi-Active Power Factor Correction                         |
| 34 | PPE34 | Design and Analysis of Single-Stage Power Factor Correction Converter<br>With a Feedback Winding    |
| 35 | PPE35 | A Modified SEPIC Converter for High-Power-Factor Rectifier and Universal Input Voltage Applications |
| 36 | PPE36 | Non-isolated High Step-up Boost Converter Integrated with Sepic Converter                           |
| 37 | PPE37 | A High-Power-Factor Single-Stage Single-Switch Electronic Ballast for Compact Fluorescent Lamps     |

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