Dear Sir/Madam,

We introduce ourselves as one of the leading project consultants for Engineering disciplines like ECE, EEE, E&I, I&CE, EST, CS, BMI, VLSI, PED, PS, AE, Robotics, Automobile, Mechanical and Mechatronics.

With our good enough infrastructure, experienced Engineers and Technicians to provide basic to updated technological training to the students, which will be very much useful to the students to do their project successfully.

Students can use our latest data books and software packages to develop their projects along with the help of our engineering background.

We assure you we can develop your students to make 100% working models of the project. We look forward to permit to your students to do their project in our concern.

Thanking you,

For MS ELEKTRONIK INDUSTRIES,

FACILITIES AVAILABLE WITH US

✓ EXTREAM R&D TEAM
✓ STRONG ENGINEERING BACKGROUND
✓ EXPERIENCED TECHNICIANS
✓ DESIGN ENGINEERING CLASSES FOR ALL
✓ 100% PRACTICAL TRAINING
✓ PROGRAMMING & ASSEMBLING TRAINING
✓ INDUSTRIAL TRAINING
✓ PROJECT PRESENTATION CLASS
Projects available here..

- Embedded System Technology, Communication System
- Power Electronics
- VLSI
- Digital Image Processing
- Robotics, Mechatronics
- Mechanical, Automobile
- Instrumentation and Control Engineering
- Electronics and communication Engineering
- Electrical and Electronics Engineering
- Electronics and Instrumentation Engineering
- Bio-Medical Instrumentation

Projects in the following Concept

- Embedded System
- RTOS (Real Time Operating System)
- Artificial Intelligence
- Biometric Processing System
- Industrial Automation
- Control System
- Bio-Medical Instrumentation
- DSP Based System Design
- GPS, GSM & Space Applications
- Voice Processing System
- Digital Image Processing
- Network Based Automation
- Wireless Communication
- Automobile Electronics
- Robotics and automation
- Agricultural & Consumer Electronics

*And Everything Is Possible*
TECHNOLOGIES

EMBEDDED SYSTEM

- ARM - ARM7, ARM9
- Microchip - PIC10x, PIC12x, PIC16x, PIC18x, PIC24x, PIC32x
- Texas Instruments
- NXP
- Freescale
- Atmel – 8051, AVR

DSP

- Microchip – dsPIC33x, dsPIC30x
- Texas Instruments - MSC1210xx, MSP430xx
- Analog Devices - ADSP, Blackfin

VLSI

- Xilinx - FPGAs & CPLDs
- Altera - FPGAs & CPLDs
INNOVATIVE PROJECT TITLES

IP1. Advanced RF sensing based mobile tracking system for vehicle
IP2. Automatic shooting robot for highly secured places
IP3. GPS based Advanced Boarder alerting system for fisher man
IP4. Automatic Tool plaza collection system
IP5. Automatic Gully pot level indicator and service Indication system
IP6. Sensing of school hospitals zone to control the speed &horn of the vehicle
IP7. Advanced Line Following Robot for serve foods in hotels
IP8. GPS based Automatic Ambulance rescue system
IP9. Finger print based vehicle license verification system
IP10. Automatic wheel chair for physically disabled persons
IP11. Two factor authentication system for ATM
IP12. OCR based speech synthesizer
IP13. Automatic detection and sprying of pestsides
IP14. Automatic public Garden maintenance system
IP15. Automatic AMF panel control system for Cell phone towers
IP16. Hairpin bend signal indicator
IP17. Pick and place robot for industrial application
IP18. Wireless overload usage Identification System
IP19. Drunken Driving Avoiding System with Helmet sensing
IP20. Automatic rain operated viper for four wheeler
IP21. Moisture sensing based automatic agriculture pump control
IP22. RFID based unmanned fuel distribution system
IP23. GSM based campus security system with continuous video monitoring
IP24. Automatic Temperature control by switching and speed control the fan and window shade
IP25. Advanced embedded power saver for reduce electric power wastage
IP26. Multisensor Strategies to Assist Blind People A Clear-Path Indicator
IP27. Load Sharing System for Electrical Machines
IP28. Density based traffic light control system for effective traffic management system
IP29. Embedded based wireless Electrical appliance controller
IP30. Multiple Control and Starting of Induction Motor
IP31. Unmanned Signaling with Gate Control for Railways
IP32. Energy saver based Solar UPS system
IP33. GPS Based Enhanced Vehicle Tracking with Accident Rescue System Using GSM Technologies
IP34. Unmanned fuel distribution in petrol / diesel bunks
IP35. Finger print based voting machine
IP36. Stereo to binaural converter for latest Music system
IP37. Automatic traffic control system based on velocity and status indication
IP38. RTC based advanced energy saver
IP39. RFID Based Automatic Ration Selling System
IP40. Enhanced Vehicle Accident Prevention With Safe Drive System
IP41. Robot doctor for precision agriculture
IP42. Automatic detection and warning of driver from sleeping based on eye tracking method
IP43. Auto tracking system of vehicle headlights
IP44. Human following Robot
IP45. Multiple Control and Starting of Induction Motor
IP46. Enhanced Vehicle Tracking System using GPS with GSM
IP47. Automatic fire fighting robot
IP48. Automatic bomb detection and destroy robot
IP49. MPPT based solar charging controller
IP50. Wireless health monitoring and indication system
IP51. GSM based industrial automation and controlling system
IP52. Remote controller based home appliance control system
IP53. Wireless Power Theft Identification System
IP54. Sensing of Human Trapped in Collapsed Building
IP55. Automatic gas leakage detection and alarm system
IP56. Automatic fire sensing and warning system
IP57. Automatic alcohol and helmet sensing system
IP58. Finger print based security system
IP59. Unmanned Signaling with Gate Control for Railways
IP60. Advanced Industrial Accident Preventing System
IP61. Advanced Wireless EB Automation System
IP62. Multi-Purpose Starter for AC Machines
IP63. Zigbee based industrial automation and monitoring system
IP64. Zigbee based street light control and monitoring system
IP65. Zigbee based health monitoring system
IP66. Automatic ambulance rescue system for heart attack people
IP67. Advanced robot for spray pesticide
IP68. GSM based ration selling system with auto updating
IP69. EB Transmission line fault monitoring system
IP70. Auto taping of transformer based upon load increasing
IP71. Stand by power reduction in TV, Fridge, Washing machine
IP72. Advanced security system using GSM
IP73. Wireless Network For Measurement Of Whole-Body Vibration
IP74. WSN based tele healthcare Monitoring System
IP75. GSM based power plant monitoring system
IP76. Solar Based Drip Irrigation System With Auto Tracking
IP77. Agricultural Field Inspection Robot
IP78. WIFI based home automation system
EMBEDDED SYSTEM

ES2. Enhancing vibration analysis by embedded sensor data validation technologies
ES3. Eye tracking and head movement detection: a state-of-art survey
ES4. Hybrid Modulated Extended Secondary Universal Current-fed ZVS Converter for Wide Voltage Range: Analysis, Design, and Experimental Results
ES5. Output Tracking Error Constrained Robust Positioning Control for a Non-smooth Nonlinear Dynamic System
ES6. Introduction to Industrial Control Networks
ES7. Accessible display design to control home area networks
ES8. Bi-Velocity Discrete Particle Swarm Optimization and Its Application to Multicast Routing Problem in Communication Networks
ES9. Dynamic Traffic Control with Fairness and Throughput Optimization Using Vehicular Communications
ES11. Distributed Control to Ensure Proportional Load Sharing and Improve Voltage Regulation in Low-Voltage DC Microgrids
ES12. Design and development Of PIC microcontroller based vehicle monitoring system using Controller Area Network (CAN) protocol
ES13. Energy saving adaptive robust control of a hydraulic manipulator using five cartridge valves with an accumulator
ES15. Discrete Event Shop-Floor Monitoring System in RFID-Enabled Manufacturing
ES16. Data-Driven Control and Process Monitoring for Industrial Applications
ES17. Analysis and Suppression of the Suspended Rotor Displacement Fluctuation Influence for Motor System
ES18. Position Control of Electric Clutch Actuator Using a Triple-Step Nonlinear Method
ES20. Second Harmonic Current Reduction and Dynamic Performance Improvement in the Two-Stage Inverters: An Output Impedance Perspective

ES21. Wall-Following Control of a Hexapod Robot Using a Data-driven Fuzzy Controller Learned Through Differential Evolution

ES22. Design and Optimization of Multi-clocked Embedded Systems using Formal Techniques

ES23. Medium Voltage Drive for Induction Machine with Multilevel Dodecagonal Voltage Space Vectors with Symmetric triangles

ES24. Locking and unlocking of theft vehicles using CAN (Theft Control System)


ES26. The design and implementation of wireless sensor network monitoring and control system based on modbus/tcp

ES27. The application and research of the liquid level control technology used in mineral flotation process which based on the Zigbee communication protocol

ES28. An Embedded Remote Temperature Measurement System

ES29. A smarter toll gate based on Web of Things

ES30. Design and development Of PIC microcontroller based vehicle monitoring system using Controller Area Network (CAN) protocol

ES31. Virtual Instrumentation Based Noiseless Networking For Industrial Automation
GPS & GSM BASED PROJECTS

GS1. GPS based health monitoring system
GS2. An efficient mobile GPS navigator, tracker and altimeter system for location based services
GS3. GPS based automatic accident identification system
GS4. Advanced Boarder alerting system using GPS
GS5. Application of a Wireless Sensor Network Technology Based on GPS for Structural Health Monitoring
GS6. GPS based automatic ambulance rescue system
GS7. GPS aided inter-vehicular wireless networking
GS8. Intelligent vehicle monitoring system using wireless communication
GS9. Locking and unlocking of theft vehicles using CAN (Theft Control System)
GS10. Passenger BUS alert system for easy navigation of blind
GS11. Accident detection and reporting system using GPS, GPRS and GSM technology
GS12. A system for mobile assisted living
GS13. Autonomous navigation of Unmanned Aerial Vehicles based on multi-sensor data fusion
GS14. Study on active steering control of vehicle for safe driving in highway with GPS information
GS15. A GPS/compass based train integrated positioning method for high-speed railways
GS16. GPS based vehicle theft identification system
GS17. GPS based automatic guided vehicle
GS18. Remote monitoring system of ECG and body temperature signals
GS19. A virtual password scheme to protect passwords
GS20. Mobile based emergency healthcare system
GS21. GSM based power plant monitoring system
GS22. GSM based industrial safety system for machines
GS23. GSM based automatic energy meter reading system with instant billing
GS24. A GSM based traffic light pre-emption control system for emergency vehicles
GS25. Locking and unlocking of theft vehicles using CAN (Theft Control System)
GS26. GSM based industrial automation and monitoring system
GS27. GSM based agriculture Motor starter
GS28. Intelligent vehicle monitoring system using wireless communication
GS29. Design of accident detection and alert system for motor cycles
GS30. An Embedded Interface for GSM Based Car Security System
GS31. Advanced distribution transformer load monitoring
GS32. Implementation of a home automation system through a central controller and GSM
GS33. A system for mobile assisted living
GS34. Remote energy monitoring, profiling and control through GSM network
GS35. A Wireless Vending Machine System Based On GSM
GS36. Advanced Real time Remote LED scrolling notice board using GSM with SMS
GS37. Automatic geo-positioning and SMS alerts on road traffic density
GS38. 3-phase irrigation motor monitoring and Auto-controlling based on GSM technology
GS39. GSM based automatic ration selling system
GS40. GSM based home appliance controller
GS41. Two factor authentication system for ATM with GSM
GS42. Multipurpose security system using GSM
GS43. GSM based Gas leakage detection system
GS44. Password protected GSM based Device control
GS45. PIR + GSM based Home Security System
GS46. GSM based campus security system with continuous video monitoring
GS47. Railway Level Crossing Gate Control through SMS by the Station Master or the Driver
GS48. SMS based AC Motor speed control system with optically isolated Triac and zero crossing detector
GS49. Vehicular traffic monitoring using GSM
GS50. A new personalized agriculture advisory system
WIRELESS TECHNOLOGY

WT1. Dedicated Radio Utilization for Spectrum Handoff and Efficiency in Cognitive Radio Networks

WT2. Cooperative Positive Orthogonal Code-based Forwarding for Multi-hop Vehicular Networks

WT3. Pragmatic Analog Network Coding with Relay Selection for OFDM-Based Multi-Relay Networks

WT4. Dynamic Adaptive Anti-Jamming via Controlled Mobility

WT5. Limited Feedback Beamforming Systems in Dual-Polarized MIMO Channel

WT6. On the Capacity of Downlink Multi-hop Heterogeneous Cellular Networks

WT7. Challenges and conditions for wireless machine-to-machine communications in industrial environments


WT9. A wireless sensor network in port security

WT10. Intelligent vehicle monitoring system using wireless communication

WT11. Advanced distribution Transformer Load Monitoring

WT12. ZigBee profile specification for mobile robotics

WT13. Home healthcare self-monitoring system for chronic diseases

WT14. Enabling Mobile Devices for Home Automation Using ZigBee

WT15. Remote-Control System of High Efficiency and Intelligent Street Lighting Using a ZigBee Network of Devices and Sensors

WT16. Advanced Navigational And Information System For Automobile Applications

WT17. Unmanned monitoring system of rivers and lakes based on WSN

WT18. Water environment monitoring system based on ZigBee wireless sensor network

WT19. Centralized heart rate monitoring telemetry system using ZigBee wireless sensor network

WT20. Centralized heart rate monitoring telemetry system using GSM wireless sensor network

WT21. Real time Automation of agricultural environment for social modernization of Indian agricultural system
WT22. The study of ZigBee networking with wireless sensor
WT23. A design of the node system of Wireless Sensor Net for ancient building fire prevention
WT24. Remote control with switches on fingertips
WT25. Wireless Network for Remote Monitoring and Detection of Landslides
WT26. Wireless remote monitor and control system based on Zigbee
WT27. ZigBee based energy efficient outdoor lighting control system
WT29. Automatic Street Light Control Using Zigbee
WT30. A Zigbee-Based Wearable Physiological Parameters Monitoring System
WT31. Metro overhead tanks monitoring system using ZigBee based WSN
WT32. Automatic speed and torque monitoring in induction motors using SMS
WT33. Controlling and monitoring process in industrial automation using GSM
WT34. Performance analysis of ZigBee based Load Control and power monitoring system
WT35. RF Based Information And Warning System For Drivers
WT36. Remote monitoring system of ECG and temperature signals using GSM
WT37. Vehicular traffic monitoring using GSM
WT38. Power management system based on ZigBee
WT39. Intelligent Traffic Light Control System
WT40. Research of Fire Detecting System Based on ZigBee Wireless Network
WT41. Wireless Network Design for Transmission Line Monitoring in Smart Grid
WT42. WIFI based home automation system
WT43. Zigbee based wireless transformer tapping control and monitoring system
WT44. Zigbee Enabled Remote Temperature Monitor System for High-Voltage Substations
WT45. Wireless DC Motor Speed and Direction Control using zigbee
WT46. Wireless Electrical Appliance Control System using RF communication
WT47. Wireless tsunami detection and remote alert system with 60dB siren
WT49. A wireless solution for greenhouse monitoring and control system based on zigbee technology
WT50. Water Environment Monitoring System Based on Zigbee Technology
BIOMETRICS / RFID

FR2. The research and design of intellectual parking system based on RFID
FR3. RFID based tool plaza automation system
FR4. Design and implementation of low cost intelligent wheelchair
FR5. An arrayed MEMS accelerometer with a wide range of detection
FR6. Robust Mobile Device Integration of a Fingerprint Biometric Remote Authentication Scheme
FR7. Real time voice recognition based smart home application
FR8. Automatic Fuel Station Using Smartcards
FR9. Biometric Finger Print Based Attendance Management System
FR10. RFID Based Vehicle Management And Theft Identification System
FR11. Fingerprint Based Vehicle Management And Theft Identification System
FR12. Electronic voting machine — A review
FR13. RFID based automatic ration selling system
FR14. RFID based supermarket system
FR15. RFID based unmanned fuel distribution system
FR16. Finger print based license verification system
FR17. Finger print based vehicle security system
FR18. Finger print based ATM authentication system
FR19. Biometric Finger Print Recognition Based Time And Attendance System Abstract
FR20. RFID Security Access Control System
FR21. RFID based students attendance system
FR22. RFID based Library Automation System
FR23. Finger print recognition based digital locker security system
FR24. Finger print based electronic voting machine
FR25. Fingerprint based industrial security system
ROBOTICS

RT1. Sensor based autonomous color line follower robot with obstacle avoidance
RT2. Distance controlled rescue and security mobile robot
RT3. Experimental Study on Long-Range Navigation Behavior of Agricultural Robots
RT4. Development of a robotic-arm controller by using hand gesture recognition
RT5. Design of cell phone operated robot using DTMF for object research
RT6. Kinect-based Powered Wheelchair Control System
RT7. Autonomous line-follower with fuzzy control
RT8. Design and implementation autonomous car for navigation in unknown environments
RT9. Design and development of Unmanned Ground Vehicle (UGV)
RT10. Agriculture robot for pest control
RT11. Automatic mineral finding and spraying robot
RT14. Optimal Path Following for Differentially Flat Robotic Systems Through a Geometric Problem Formulation
RT15. An Information Potential Approach to Integrated Sensor Path Planning and Control
RT17. A Real Time Path Tracking Approach for a Wheeled Mobile Robot
RT18. Live Human Detecting Robot For Earthquake Rescue Operation
RT19. Multiple Sensor Fusion for Unmanned Autonomous Vehicle
RT20. Versatile Intelligent Multi Axis Robotic Arm with Object Detection and Sorting
RT22. The Design and Implement of Embedded Remote Control System in Industrial Robot
RT23. Missing weapons logging using low cost passive RFID and self navigating vehicle platform.
RT24. Autonomous robotic arm using low power servo motors with on board programmable controller.
RT25. Human following robot
POWER ELECTRONICS

PE1. A Sliding-Mode Control Scheme for LLC Resonant DC/DC Converter with Fast Transient Response
PE2. Novel High Step-Up DC–DC Converter for Distributed Generation System
PE3. Boost converter for dc drives based on coupled inductor by using pid
PE4. Step up dc to dc power conversion with quasi z source network
PE5. Grid-Connected Boost-Half-Bridge Photovoltaic Microinverter System Using Repetitive Current Control and Maximum Power Point Tracking
PE6. High Voltage-Boosting Converters Based on Bootstrap Capacitors and Boost Inductors
PE7. Dual Half-Bridge DC–DC Converter With Wide-Range ZVS and Zero Circulating Current
PE8. Soft-Switching DC/DC Converter With a Full ZVS Range and Reduced Output Filter for High-Voltage Applications
PE9. Single-Controllable-Switch-Based Switched Reluctance Motor Drive for Low Cost, Variable-Speed Applications
PE10. A Boost Converter with Capacitor Multiplier and Coupled Inductor for AC Module Applications
PE11. Torque Ripple Reduction in BLDC Torque Motor with Nonideal Back EMF
PE12. Bridgeless SEPIC Converter with a Ripple-Free Input Current
PE13. A High-Efficiency Solar Array Simulator Implemented by an LLC Resonant DC–DC Converter
PE15. Speed Control of BLDC Motor Using DSP
PE16. A New ZVS DC/DC Converter With Three APWM Circuits
PE17. Untrained Artificial Neuron-Based Speed Control of Interior Permanent-Magnet Motor Drives Over Extended Operating Speed Range
PE18. Analysis and Suppression of Leakage Current in Cascaded-Multilevel-Inverter-Based PV Systems
PE20. Center-Cell Concentration Structure of a Cell-to-Cell Balancing Circuit With a Reduced Number of Switches
PE21. On the Voltage Ripple Reduction Control of the Linear Switched Reluctance Generator for Wave Energy Utilization

PE22. Predictive Control of a Three-Level Boost Converter and an NPC Inverter for High-Power PMSG-Based Medium Voltage Wind Energy Conversion Systems

PE23. Unified Synthesis of Tapped-Inductor DC-to-DC Converters

PE24. Inductor Current Zero-Crossing Detector and CCM/DCM Boundary Detector for Integrated High-Current Switched-Mode DC–DC Converters

PE25. A Novel Direct Torque and Flux Control Method of Matrix Converter-Fed PMSM Drives

PE26. Inductor Geometry With Improved Energy Density

PE27. Influence of Inner Skin- and Proximity Effects on Conduction in Litz Wires


PE29. Low Complexity Model Predictive Control—Single Vector-Based Approach

PE30. Automeasurement of the Inverter Output Voltage Delay Curve to Compensate for Inverter Nonlinearity in Sensorless Motor Drives

PE31. Miniaturized Bridgeless High-Frequency Resonant AC-DC Step-Up/Step-Down Converters

PE32. A High Efficiency DC-DC Boost Converter for a Miniaturized Microbial Fuel Cell

PE33. Sensorless Control for High-speed Brushless DC Motor Based on the line-to-line back-EMF

PE34. Flexible-Voltage DC-Bus Operation for Reduction of Switching Losses in All-electric Ship Power Systems

PE35. Investigation of Multiple Decoupled Coil Primary Pad Topologies in Lumped IPT Systems for Interoperable Electric Vehicle Charging

PE36. Voltage Regulator Buck Converter with Tapped-Inductor for Fast Transient Response Application

PE37. Fluctuating Current Control Method for a PMSM along Constant Torque Contours

PE38. A Modular Multilevel DC/DC Converter with Fault Blocking Capability for HVDC Interconnects

PE39. Bandwidth Expansion Method for Circulating Current Control in Parallel Three-phase PWM Converter Connection System
PE40. A New Resonant Modular Multilevel Step-Down DC-DC Converter with Inherent-Balancing

PE41. Three-Port DC-DC Converter for Stand-Alone Photovoltaic Systems

PE42. A Distributed Approach to Maximum Power Point Tracking for Photovoltaic Sub-Module Differential Power Processing

PE43. A High-Frequency Model for PCM Buck Converter

PE44. Generalized Technique of Compensating Low-Frequency Component of Load Current with Parallel Bidirectional DC/DC Converter

PE45. A Nonisolated Multi-Input Multi-Output DC-DC Boost Converter for Electric Vehicle Applications

PE46. Universal Integrated Synchronization and Control for Single Phase DC/AC Converters

PE47. One dimensional spectral analysis of complex PWM waveforms using superposition

PE48. Symmetric and Asymmetric Design and Implementation of New Cascaded Multilevel Inverter Topology

PE49. Double Input Bidirectional DC/DC Converter Using Cell Voltage Equalizing with Flyback Transformer

PE50. A Dual-Channel Current Source Driver for Complementary Switches

PE51. Fast Sorting Method for Balancing Capacitor Voltages in Modular Multilevel Converters

PE52. Model Predictive Direct Current Control of Modular Multilevel Converters: Modelling, Analysis and Experimental Evaluation

PE53. Investigation and Suppression of Harmonics Interaction in High-Power PWM Current-Source Motor Drives

PE54. Modified Three-Phase Three-Level DC/DC Converter With Zero-Voltage-Switching Characteristic-Adopting Asymmetrical Duty Cycle Control

PE55. Robust Sliding-Mode Control Design for a Voltage Regulated Quadratic Boost Converter

PE56. Multisource and Battery-free Energy Harvesting Architecture for Aeronautics Applications

PE57. Effects of Leakage Inductances on Magnetically-Coupled Y-Source Network

PE59. A Near-State Three-Dimensional Space Vector Modulation for a Three-Phase Four-Leg Voltage Source Inverter

PE60. A Pseudo Cross-Coupled Switch-Capacitor based DC-DC Boost Converter for High Efficiency and High Power-Density

PE61. Predictive-Control-Based Direct Power Control With an Adaptive Parameter Identification Technique for Improved AFE Performance

PE62. Optimized Control Strategy Based on Dynamic Redundancy for Modular Multilevel Converter

PE63. Switch Short-Circuit Fault Diagnosis and Remedial Strategy for Full-Bridge DC-DC Converters

PE64. A Family of Soft-Switching DC-DC Converters Based on Phase-Shift-Controlled Active Boost Rectifier

PE65. A High Efficiency Resonant Switched Capacitor Converter with Continuous Conversion Ratio


PE67. Double Phase High Efficiency, Wide Load Range High Voltage/Low Voltage LLC DC/DC Converter for Electric/Hybrid Vehicles

PE68. Design and Implementation of a Transformerless Single-Stage Single-Switch Double-Buck Converter with Low DC-link Voltage, High Step-down and Constant Input Power Factor Features

PE69. A DC-DC Multiport Module for Integrating Plug-In Electric Vehicles in a Parking lot: Topology and Operation

PE70. Robust Control for PWM-Based DC-DC Buck Power Converters with Uncertainty via Sampled-Data Output Feedback

PE71. A Bidirectional Modular Multilevel DC-DC Converter of Triangular Structure

PE72. A Nonlinear Disturbance Observer Based DC Bus Voltage Control for a Hybrid AC/DC Microgrid

PE73. An Interface Circuit for Low-Voltage Low-Current Energy Harvesting Systems

PE74. Improved Stator Flux Estimator for Speed Sensorless Induction Motor Drives

PE75. DC/DC Buck Power Converter as a Smooth Starter for a DC Motor based on a Hierarchical Control

PE76. A 20MHz 1.8W DC-DC Converter with Parallel Microinductors and Improved Light-Load Efficiency
PE77. A step-up bidirectional series resonant DC/DC converter using a continuous current mode

PE78. A Family of Multi-Port Buck-Boost Converters Based on DC-Link-Inductors (DLIs)

PE79. Transient Response Improvement at Startup of a Three-Phase AC/DC Converter for DC Distribution System in Commercial facilities


PE81. A Boost-Inverter Based Battery-Supported Fuel-Cell Sourced Three-Phase Stand-Alone Power Supply

PE82. Experimental Comparison of Model Predictive Control and Cascaded Control of the Modular Multilevel Converter

PE83. Maximum Power Extracting Control for High Sustainability Magnetic Power Monitoring and Harvesting System

PE84. A Scheme for the Power Control in a DFIG Connected to a DC-Bus via a Diode Rectifier

PE85. High Performance Fault Diagnosis in PWM Voltage-Source Inverters for Vector Controlled Induction

PE86. Three-phase Multilevel PFC Rectifier Based on Multi-State Switching Cells

PE87. Hybrid Multilevel Converter With Cascaded H-bridge Cells for HVDC Applications: Operating Principle and Scalability

PE88. Predictive Control Method with Future Zero-Sequence Voltage to Reduce Switching Losses in Three-Phase Voltage Source Inverters

PE89. Hybrid Transformer ZVS/ZCS DC-DC Converter with Optimized Magnetics and Improved Power Devices Utilization for Photovoltaic Module Applications

PE90. AC-AC Converter With Controllable Phase and Amplitude

PE91. Techniques of Dual-Path Error Amplifier and Capacitor Multiplier for On-Chip Compensation and Soft-Start Function

PE92. A High Gain Input-Parallel Output-Series DC/DC Converter with Dual Coupled-Inductors

PE93. On-line Inertia Identification Algorithm for PI Parameters Optimization in Speed Loop

PE94. A Single Stage Solid State Transformer for PWM AC Drive with Source based Commutation of Leakage Energy
PE95. Power Loss Prediction and Precise Modeling of Magnetic Powder Components in DC-DC Power Converter Application

PE96. A Dimming Method for Hot Cathode Fluorescent Lamp Using a Resonant Inverter Operating at Fixed Switching Frequency

PE97. Modular DC-DC Converters on Graphs: Cooperative Control

PE98. A High Step-Up DC to DC Converter under APS Control for Fuel Cell Power System

PE99. Modular Multi-level DC/DC Converters with Phase Shift Control Scheme for High Voltage DC-Based Systems

PE100. Suitable Single-phase to Three-phase AC-DC-AC Power Conversion System


PE102. PFC Cuk Converter Fed BLDC Motor Drive

PE103. Transmission line faults detection, classification, and location using Discrete Wavelet Transform

PE104. Space-Vector PWM Control Synthesis for an H-Bridge Drive in Electric Vehicles

PE105. Design and Analysis of an MPPT Technique for Small-Scale Wind Energy Conversion Systems
POWER SYSTEM

PS1. Analysis of Information and Power Transfer in Wireless Communications
PS2. Wireless Network Design for Transmission Line Monitoring in Smart Grid
PS3. Design and implementation of an intelligent energy saving system based on standby power reduction for a future zero-energy home environment
PS4. On-line short-circuit current analysis and preventive control to extend equipment life
PS5. Transmission line faults detection, classification, and location using Discrete Wavelet Transform
PS6. A Multi-Sensor Energy Theft Detection Framework for Advanced Metering Infrastructures
PS7. Wireless sensor network and stochastic models for household power management
PS8. GSM based automatic energy meter reading system with instant billing
PS9. Extended smart meters-based remote detection method for illegal electricity usage
PS10. A smart prepaid energy metering system to control electricity theft
PS11. Remote-Control System of High Efficiency and Intelligent Street Lighting Using a ZigBee Network of Devices and Sensors
PS12. Household power outlet overload protection and monitoring using cost effective embedded solution
PS13. Optimization of standalone street light system with consideration of lighting control
PS15. Reprogrammable Energy Meters for Prevention of Energy abuse in Public Functions
PS16. Automatic AMF panel control system for Cell phone towers
PS17. Wireless Network Design for Transmission Line Monitoring in Smart Grid
PS18. Performance analysis of ZigBee based Load Control and power monitoring system
PS19. Zigbee based transformer tapping control and monitoring system
PS20. Advanced distribution Transformer Load Monitoring
INDUSTRIAL AUTOMATION

IA1. Study Of The Asymmetrical Half Bridge Flyback Converter As An Effective Line Fed Solid State Lamp Driver
IA2. Soft-Switching ac-Link three-phase ac-ac Buck-Boost Converter
IA3. Sensorless Predictive Current Controlled DC-DC Converter with a Self-correction Differential Current Observer
IA5. System Reliability Calculation Based on the Run-time Analysis of Ladder Program
IA6. A Novel Bearingless Switched Reluctance Motor with Biased Permanent Magnet
IA7. Data-driven Predictive Gearshift Control for Dual-clutch Transmissions and FPGA Implementation
IA8. Vector Control Methods for Brushless Doubly-Fed Reluctance Machines
IA9. LVRT Capability Enhancement of DFIG with Switch Type Fault Current Limiter
IA10. Evaluation of acceptable charging current of power Li-ion batteries based on polarization characteristics
IA11. Generalized Design Considerations and Analysis of Class-E Amplifier for Sinusoidal and Square Input Voltage Waveform
IA12. Analysis and Verification of the Doubly Salient Brushless DC Generator for Automobile Auxiliary Power Unit Application
IA14. New Hexagonal Three-Phase Voltage-Source-Converter Topology for High-Power Applications
IA15. Predictive Control for Low Voltage Ride-Through Enhancement of Three-Level Boost and NPC Converter based PMSG Wind Turbine
IA16. High-Frequency-Link (HFL) Inverter Using Combined Synchronous Rectifiers
IA17. A Step-Up Switched-Capacitor Multilevel Inverter with Self Voltage Balancing
IA18. Design and Analysis of Multi-Loop Controllers With DC Suppression Loop for Paralleled UPS Inverter System
IA19. Autonomous Droop Scheme with Reduced Generation Cost
IA20. Nonactive Power Losses Minimization in a Bidirectional Isolated DC-DC Converter for Distributed Power System
IA21. An Encoderless Predictive Torque Control for an Induction Machine with a Revised Prediction Model and EFOSMO
IA22. SKM: Scalable Key Management for Advanced Metering Infrastructure in Smart Grids
IA23. A Power Smoothing System Based on Supercapacitors for Renewable Distributed Generation
IA24. Drive System Dynamics Compensator for a Mechanical System Emulator
IA25. Application of Piezoelectric Transformer-Based Resonant Circuits for AC LED Lighting-Driven Systems with Frequency-Tracking Techniques
IA26. Heterogeneous Feature Models and Feature Selection Applied to Bearing Fault Diagnosis
IA27. Inductive Power Transfer Systems for PT-based Ozone-Driven Circuit with Flexible Capacity Operation and Frequency-Tracking Mechanism
IA29. Transformerless Hybrid Power Filter Based on a Six-Switch Two-Leg Inverter for Improved Harmonic Compensation Performance
IA30. Composite Hierarchical Antidisturbance Control for Magnetic Bearing System Subject to Multiple External Disturbances
IA31. Bidirectional Current Fed Resonant Inverter for Contactless Energy Transfer Systems
IA32. Performance Improvement of a Line-Start Permanent-Magnet Synchronous Motor
IA33. A Novel Soft Sensor for Real-time Monitoring of Die Melt Temperature Profile in Polymer Extrusion
IA34. Online Serial Manipulator Calibration based on Multi-sensory Process via Extended Kalman and Particle Filters
IA35. Performance Analysis, Mapping and Multi-Objective Optimization of a Hybrid Robotic Machine Tool
IA36. An Open-Switch Fault Detection Method and Tolerance Controls Based on SVM in a Grid-Connected T-Type Rectifier with Unity Power Factor
IA39. Modulation Techniques to Reduce Leakage Current in Three-Phase Transformerless H7 Photovoltaic Inverter
IA40. Voltage Balancing Method for a Flying Capacitor Multilevel Converter Using Phase Disposition PWM
IA41. An Improved Hybrid DSTATCOM Topology to Compensate Reactive and Nonlinear Loads
IA42. Design Technique for Harmonic-Tuned RF Power Oscillators for High-Efficiency Operation
IA43. Issues in Modeling Amorphous Silicon Photovoltaic Modules by Single-diode Equivalent Circuit
IA44. A Fault-Tolerant Two-Motor Drive with FCS-MP based Flux and Torque Control
IA45. A New Method for Multiple Finite Element Models in Co-simulation with Electrical Circuit Using Machine Multi-loop Modeling Scheme
IA46. Sampling Period On-line Adjusting based Hysteresis Current Control without Band with Constant Switching Frequency
IA48. Interpolated DFT-based Fast and Accurate Frequency Estimation for the Control of Power
IA49. Enabling Health Monitoring Approach Based on Vibration Data for Accurate Prognostics
IA50. Convergence Analysis and Digital Implementation of A Discrete-Time Neural Network for Model Predictive Control
NOTE

For the convenience of the students the project ideas in the above list are sorted in different categories to help the students choose the IEEE project titles or topics easily. These titles are gives only idea about the Project. Students are also welcome their own project ideas for our reference. All can be done by us if possible.

EMBEDDED SYSTEM PROJECTS

- MICROCONTROLLER PROJECTS
- VLSI PROJECTS
- DSP PROJECTS
- MATLAB PROJECTS
- BIO MEDICAL PROJECTS
- POWER SYSTEM PROJECTS
- POWER ELECTRONICS PROJECTS
- ELECTRICAL PROJECTS
- TELE COMMUNICATION PROJECTS
- BIO METRICS PROJECTS
- MOTORS, DRIVES & CONTROL PROJECTS
- COMMUNICATION PROJECTS
- INSTRUMENTATION PROJECTS
- MECHANICAL PROJECTS
- MEMS / MECHATRONICS PROJECTS
- THERMAL ENGINEERING PROJECTS
- AUTOMOBILE / AUTOMOTIVE PROJECTS
- CONTROL ENGINEERING PROJECTS
- APPLIED ELECTRONICS PROJECTS