

TECHNOLOGY LEARNING CENTER

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B.Tech MINI MATLAB

S.No	Project Title
1	A Comparison of Symmetrical and Asymmetrical Three-Phase H-Bridge Multilevel Inverter for DTC Induction Motor Drives
2	11-level Cascaded H-bridge Grid-tied Inverter Interface with Solar Panels
3	A Low-Cost Inverter for Domestic Fuel Cell Applications
4	A Low-Cost Digital Control Scheme for Brushless DC Motor Drives in Domestic Applications
5	A Novel Loaded-Resonant Converter for the Application of DC-to-DC Energy Conversions
6	A Novel Switching Signals Generation Method for Hybrid Multilevel Inverters
7	A Novel Three-Phase Three-Leg AC/AC Converter Using Nine IGBTs
8	A Novel Three-Phase to Five-Phase Transformation Using a Special Transformer Connection
9	A Variable-Speed, Sensorless, Induction Motor Drive Using DC Link Measurements
10	A Versatile Control Scheme for a Dynamic Voltage Restorer for Power-Quality Improvement
11	A Voltage Controlled Adjustable Speed PMBLDCM Drive using A Single-Stage PFC Half-Bridge Converter
12	An Inrush Mitigation Technique of Load Transformers for the Series Voltage Sag



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	Compensator
13	Application of Static Compensator to improve the Power Quality of Grid Connected Induction Generator Based Wind Farm
14	Controller Design for an Induction Generator Driven by a Variable-Speed Wind Turbine
15	Design and analysis of dynamic voltage restorer for deep voltage sag and harmonic compensation
16	Design of a Mode Decoupling STATCOM for Voltage Control of Wind-Driven Induction Generator Systems
17	DIGITAL SIMULATION OF MULTICARRIER PWM STRATEGY FOR MULTI-LEVEL INVERTER
18	MODELING AND SIMULATION FOR VOLTAGE SAGS/SWELLS MITIGATION USING DYNAMIC VOLTAGE RESTORER (DVR)
19	Enhancement of Power Quality in Distribution System Using D-STATCOM
20	Flexible D-STATCOM Performance as a Flexible Distributed Generation in Mitigating Faults
21	Harmonic Elimination in Single Phase Systems by Means of a Hybrid Series Active Filter (HSAF)
22	High-Efficiency Voltage Regulator for Rural Networks
23	Impacts of AC Generators and DSTATCOM Devices on the Dynamic Performance of Distribution Systems
24	Implementation and Control of a Hybrid Multilevel Converter With Floating DC Links for Current Waveform Improvement



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25	Multiconverter Unified Power-Quality Conditioning System: MC-UPQC
26	Multilevel Multiphase Feedforward Space-Vector Modulation Technique
27	A New Proposal for Power Quality and Custom Power Improvement: OPEN UPQC
28	Optimal Placement of Shunt Connected Facts Device in a Series Compensated Long Transmission Line
29	Power Quality Improved PMBLDCM Drive for Adjustable Speed Application with Reduced Sensor Buck-Boost PFC Converter
30	Power Upgrading of Transmission Line by Combining AC–DC Transmission
31	Ripple Current Reduction of a Fuel Cell for a Single-Phase Isolated Converter Using a DC Active Filter With a Center Tap
32	Sensorless Predictive DTC for the PM Synchronous Machine
33	Seven-Level Shunt Active Power Filter for High-Power Drive Systems
34	Simulation Single Phase Shunt Active Filter Based on p-q technique using MATLAB/Simulink Development Tools Environment
35	Single-Phase to Three-Phase Drive System Using Two Parallel Single-Phase Rectifiers
36	A STATCOM-Control Scheme for Grid Connected Wind Energy System for Power Quality Improvement
37	Study on a Novel Hybrid Active Power Filter Applied to a High-Voltage Grid
38	Supercapacitors and Battery power management for Hybrid Vehicle Applications Using multi boost and full bridge Converters



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39	Wind Farm to Weak-Grid Connection using UPQC Custom Power Device
40	Z – Source Inverter Based Permanent Magnet Brushless DC Motor Drive
41	Control and Performance of a Cascaded Shunt Active Power Filter for Aircraft Electric Power System
42	Power System Stability Enhancement Using Static Synchronous Series Compensator (SSSC)
43	Analysis and Design of an LCL Filter for the Three-level Grid-connected Inverter
44	Application of Static Compensator to improve the Power Quality of Grid Connected Induction Generator Based Wind Farm
45	Harmonic Elimination in Single Phase Systems by Means of a Hybrid Series Active Filter (HSAF)
46	Dynamic modeling, design and simulation of a wind/fuel cell/ultra-capacitor-based hybrid power generation system
47	Power-Management Strategies for a Grid-Connected PV-FC Hybrid System
48	A Voltage Controlled Adjustable Speed PMBLDCM Drive using A Single-Stage PFC Half-Bridge Converter
49	Analysis and Design of an LCL Filter for the Three-level Grid-connected Inverter
50	Single-Phase ACIAC Converter based on Quasi-Z Source Topology
51	Torque Ripple Reduction in Direct Torque Control of Induction Machines by Use of all Voltage Vectors of Matrix Converters
52	A FACTS Device: Distributed Power-Flow Controller (DPFC)



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53	Modeling and Simulation of a Distribution STATCOM (D STATCOM) for Power Quality Problems-Voltage Sag and Swell Based on Sinusoidal Pulse Width Modulation (SPWM)
54	Harmonic Mitigation in AC-DC Converters for Vector Controlled Induction Motor Drives
55	A Modified SEPIC Converter for High-Power-Factor Rectifier and Universal Input Voltage Applications
56	Bridgeless SEPIC Rectifier With Unity Power Factor and Reduced Conduction Losses
57	Study on a Novel Hybrid Active Power Filter Applied to a High-Voltage Grid
58	Isolated Wind-Hydro Hybrid System Using Cage Generators and Battery Storage
59	Digital Average Current-Mode Control of PWM DC-DC Converters Without Current Sensors
60	A NEW CONCEPT OF MULTILEVEL STATCOM BASED ON CASCADE TOPOLOGY
61	Power Factor Correction of Linear and Non-linear Loads Employing a Single Phase Active Power Filter Based on a Full-Bridge Current Source Inverter Controlled Through the Sensor of the AC Mains Current
62	Two Area Load Frequency Control with Fuzzy Gain Scheduling of PI Controller
63	Transformer less Single-Phase Multilevel-Based Photovoltaic Inverter
64	Unity-Power-Factor Operation of Three-Phase AC-DC Soft Switched Converter Based On Boost Active Clamp Topology in Modular Approach
65	Dead-Time Elimination for Voltage Source Inverters
66	Hybrid Cascaded Multilevel Inverter with PWM Control Method



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67	Bidirectional Switch Commutation for a Matrix Converter Supplying a Series Resonant Load
68	Transient Fault Response of Grid Connected Wind Electric Generators
69	A Double-Ended ZVS Half-Bridge Zeta Converter
70	Multilevel Multiphase Feed forward Space-Vector Modulation Technique
71	A Comparative Study of Control Algorithms for DSTATCOM for Load Compensation
72	Vector Control Drive of Permanent Magnet Synchronous Motor Using Resolver Sensor
73	ANN based SVC switching at distribution level for minimal injected harmonics
74	SIMULATION AND COMPARISON OF SPWM AND SVPWM CONTROL FOR THREE PHASE INVERTER
75	DC-AC Cascaded H-Bridge Multilevel Boost Inverter With No Inductors for Electric/Hybrid Electric Vehicle Applications
76	Enhancement of Voltage Quality in Isolated Power Systems
77	Direct Torque Control of a Three Phase Induction Motor using a Hybrid PI/Fuzzy Controller
78	DTC-SVM Scheme for Induction Motors Fed with a Three-level Inverter
79	DIRECT TORQUE CONTROL FOR INDUCTION MOTOR USING INTELLIGENT TECHNIQUES
80	Modeling, Design & Simulation of an Adaptive Neuro-Fuzzy Inference System (ANFIS) for Speed Control of Induction Motor
81	A Control Methodology and Characterization of Dynamics for a Photovoltaic (PV) System Interfaced With a Distribution Network



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82	Seven-Level Shunt Active Power Filter for High-Power Drive Systems
83	Multilevel Multiphase Feed forward Space-Vector Modulation Technique
84	Modeling and Simulation of BLDC Motor Using Soft Computing Techniques
85	An LLCL Power Filter for Single-Phase Grid-Tied Inverter
86	Isolated Bidirectional Full-Bridge DC-DC Converter With a Flyback Snubber
87	Grid Interconnection of Renewable Energy Sources at the Distribution Level With Power-Quality Improvement Features
88	Direct Torque and Indirect Flux Control of Brushless DC Motor
89	Buck-Boost-Type Unity Power Factor Rectifier With Extended Voltage Conversion Ratio
90	A Novel Switching Signals Generation Method for Hybrid Multilevel Inverters
91	New Resonant Pole Inverter for Battery Fed Brushless DC Motor Drive
92	Modeling and simulation research on closed loop servo system
93	VAR compensation with VSC using VOC and VFDPC strategies
94	A novel three-phase to five-phase transformation using a special transformer connection
95	Super capacitors and battery power management for hybrid vehicle applications using multi boost and full bridge converters
96	Direct Torque Control for Doubly Fed Induction Machine-Based Wind Turbines Under Voltage Dips and Without Crowbar Protection
97	Implementation and Control of an Hybrid Multilevel Converter with Floating DC-links for Current Waveform Improvement



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98	A FACTS Device: Distributed Power-Flow Controller (DPFC)
99	Ripple Current Reduction of a Fuel Cell for a Single-Phase Isolated Converter Using a DC Active Filter With a Center Tap
100	Enhancement of Power Quality in Distribution System Using D-STATCOM
101	Power-Management Strategies for a Grid-Connected PV-FC Hybrid System
102	Wind Farm to Weak-Grid Connection using UPQC Custom Power Device
103	Single-Phase to Three-Phase Drive System Using Two Parallel Single-Phase Rectifiers
104	Enhancement of Micro turbine-Generator Output Voltage Quality through Application of Matrix Converter Interface
105	Novel on line fuzzy controller of VAR compensation for an effective reactive power control of transmission line
106	An Inrush Mitigation Technique of Load Transformers for the Series Voltage Sag Compensator
107	Modeling and Real-Time Simulation of Non-Grid-Connected Wind Energy Conversion System
108	A Voltage Controlled Adjustable Speed PMBLDCM Drive using A Single-Stage PFC Half-Bridge Converter
109	A STATCOM-Control Scheme for Grid Connected Wind Energy System for Power Quality Improvement
110	A New 84-pulse VSC Configuration Using Multi-Level DC Voltage Reinjection for Especial Applications
111	Design of a Hybrid PID Plus Fuzzy Controller for Speed Control of Induction Motors
112	A New Combined Model for Simulation of Mutual Effects between LFC and AVR Loops



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113	A novel three phase three leg AC/AC converter using nine IGBTs
114	Bidirectional switch commutation for a matrix converter supplying a series resonant load
115	A single-phase voltage-controlled grid-connected photovoltaic system with power quality conditioner functionality
116	A fast-acting dc-link voltage controller for three-phase dstatcom to compensate ac and dc loads
117	Multi converter unified power-quality conditioning system: MC-UPQC
118	Dynamic modeling and simulation of hybrid power systems based on renewable energy
119	Voltage flicker compensation using statcom
120	A versatile control scheme for a dynamic voltage restorer for power-quality improvement
121	Soft computing techniques for the control of an active power filter
122	A Variable-Speed, Sensor less, Induction Motor Drive Using DC Link Measurements
123	Reduced rating vsc with a zigzag transformer for current compensation in a three-phase four-wire distribution system
124	Design and analysis of dynamic voltage restorer for deep voltage sag and harmonic compensation
125	Sensor less Current Control of Three-Phase Inverter-Based Distributed Generation
126	A Modular Fuel Cell, Modular DC-DC Converter Concept for High Performance and Enhanced Reliability



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127	A novel approach of dc voltage control for cascaded h-bridge converter using statcom
128	Modeling of facts device based on spwm vses
129	upqc signal detection algorithm based on pso fuzzy
130	seven level shunt active power filter for high power drive system
131	Zero voltage transition current fed full bridge
132	Switching losses and harmonic investigations in multi level inverter
133	Implementation of Shunt Active Power Filter Using Source Voltage and Source Current Detection
134	Control strategies for distribution static compensator for power quality improvement
135	fuzzy logic based control of variable speed induction machine wind generation system
136	Study of HVDC Light for Its Enhancement of AC/DC Interconnected Transmission Systems
137	Control of a double fed induction wind generator under unbalanced grid voltage conditions
138	Interline Unified Power Quality Conditioner
139	Analysis, Design, Modeling, Simulation and Development of Single-Switch AC-DC Converters for Power Factor and Efficiency Improvement
140	The Effective Role of AVR and PSS in Power Systems: Frequency Response Analysis
141	Modeling and Simulation of Electromagnetic Conducted Emission Due to Power Electronics Converters

