



# LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING (Autonomous)

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Affiliated to JNTUK, Kakinada & Approved by AICTE New Delhi  
NAAC Accredited with "A" grade, Accredited by NBA,  
New Delhi & Certified by ISO 9001:2008, <http://www.lbrce.ac.in>

## DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

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### Real Time Applications Projects A.Y:2016-17

S.No.	Project Title
1	Smart Room using Raspberry Pi
2	Solar Powered Auto Irrigation System
3	Bidirectional Single stage Grid connected Inverter
4	Flywheel Energy Storage system for fault ride through support of Grid connected VSC-HVDC based offshore wind farms
5	Power system stability Enhancement using static synchronous series compensator
6	Power system Load flow Analysis on cloud
7	Restaurant Assistant Robot(Order Taking)
8	An improved MPPT for photovoltaic grid connected inverted based on VOC
9	Improved active power filter performance for renewable generation system
10	Robust adaptive back stepping controller design for DC-DC buck converters with external disturbances
11	Renewable energy fed switched reluctance motor for PV pump Applications
12	A unified control strategy for 3-phase inverter in distributed generation
13	Model reduction of linear interval systems using kharitonov's polynomials
14	Grid interconnection of renewable energy systems at distribution level with power quality improvement features
15	GUI based Home Automation system using Arduino and MATLAB-Hardware

16	A STATCOM control scheme for Grid Connected wind energy system for power quality improvement
17	A high gain input-parallel output series DC/DC Converter with dual coupled inductors.
18	Dual axis solar tracker-Hardware
19	Modeling of Single phase grid connected photo voltaic system using MATLAB
20	Power system simulation and contingency ranking using load bus voltage index
21	Non inverting Buck-Boost derived Hybrid converter
22	Design and implementation of a socket with zero standby power using a photo voltaic array -Hardware
23	Speed control of universal motor using IGBT-Hardware
24	Modelling of PV module using MATLAB/SIMULINK
25	Voice Controlled Robot -Hardware
26	Modelling and simulation of PWM controlled Cyclo converter split phase induction motor
27	Control of Power converter for power quality improvement in a grid connected PV system
28	Double frequency Buck converter
29	A Solar MPPT converter with high tracking efficiency
30	Load compensation for Diesel Generator based isolated generation system employing DSTATCOM
31	Home automation using internet of things-Hardware
32	Modeling and simulation of PV/Battery Hybrid energyusing 5-Level inverter

33	Cascaded control of buck converter in CCM
34	Optimal Allocation of distribution generation unit in network system
35	Minimization of steady state error of a PV system
36	A solar power generation system with a 7-level inverter
37	Improved active power filter performance for renewable power generation systems
38	An improved PWM technique for chopper cell based modular multilevel converter
39	Hybrid wind and solar energy generation system -Hardware
40	Double deck buck-boost converter with soft switching operation
41	Development of multi carrier PWM technique for multi level inverter
42	MSPWM and MPPWM techniques for asymmetric H-bridge multi level inverter
43	Performance analysis of Z-source inverter fed induction motor drive
44	7-level, 3-phase cascaded H-bridge inverter with a single DC source
45	Predetermination test of transformer and induction motor using cloud computing
46	Novel fast maximum power tracking using P&O,PSO

## Advanced Projects

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1	Smart Room using Raspberry Pi
2	Solar Powered Auto Irrigation System
3	Power system Load flow Analysis on cloud
4	Restaurant Assistant Robot(Order Taking)
5	GUI based Home Automation system using Arduino and MATLAB
6	Dual axis solar tracker-Hardware
7	Voice Controlled Robot -Hardware
8	Home automation using internet of things
9	Hybrid wind and solar energy generation system

## Prototype Projects

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1	Smart Room using Raspberry Pi
2	Solar Powered Auto Irrigation System
3	Restaurant Assistant Robot(Order Taking)
4	GUI based Home Automation system using Arduino and MATLAB
5	Dual axis solar tracker-Hardware
6	Voice Controlled Robot -Hardware

7	Home automation using internet of things
8	Hybrid wind and solar energy generation system

### Societal Projects

S.No.	Project Title
1	Smart Room using Raspberry Pi
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3	Restaurant Assistant Robot(Order Taking)
4	GUI based Home Automation system using Arduino and MATLAB
5	Voice Controlled Robot
6	Home automation using internet of things