# **Details of UG Project Supervised in Electrical Engg. Department**

### Academic year 2011-12

Sr	no.	Bachelor degree project supervised
	1.	Energy Auditing of the College
	2.	Traffic Light Control Model
	3.	Water Level detector using Transducer
	4.	Solar Indicator
	5.	Automatic Star-Delta starter
	6.	Digital Code Lock Office Gate
	7.	Temperature Control Fan Regulator
	8.	Cooler Water Level alarm
	9.	Model of 132KV Sub-Station
	10.	Inverter
	11.	AC Drives
	12.	Automatic Street Light

## Academic year 2012-13

Sr. no.	Bachelor degree project supervised
1.	Cell phone Device Control
2.	Liquid Level Alarm using 8051 microcontroller
3.	Speed Checker at Highway
4.	Industrial Timer
5.	H-bridge control of DC motor using PC
6.	Automatic Railway Gate Control with Track Switching
7.	Battery Charger
8.	Energy Audit
9.	Energy Efficient Technologies
10.	Automatic Street Lighting
11.	Solar Indicator
12.	Energy Conservation of College

#### Academic year 2013-14

Sr.	no.	Bachelor degree projects supervised
	1.	Hall Effect Sensor based Non-Contact Tachometer
	2.	Model of Hydro power Plant
	3.	Model of Thermal Power Plant
	4.	Obstacle Avoiding Robot without microcontroller
	5.	Energy Efficient Technologies
	6.	Blind Turn Warning System
	7.	DC to DC Step-down Converter
	8.	DC speed Synchronization
	9.	Auto Traffic Ambulance
	10.	Automatic Irrigation System

#### Academic year 2014-15

Sr. n	10.	Bachelor degree projects supervised
1	1.	Maglev Train
2	2.	Ocean Thermal Energy Conversion
3	3.	Cyclo-Converter for Fundamental, f/2 and f/3 using gate Controlled
		Thyristor
۷	4.	Noise to Electricity Generation
5	5.	Automatic Solar Tracking with Automatic Street Lighting System
6	5.	Industrial Drafting Fan in Space Control using BLDC Motor
7	7.	Solar Power Generation using Auto Tracking System
8	3.	Moving Message Display
ç	Э.	Energy Generation from Pendulum
1	10.	HVDC Transmission
1	11.	Energy Audit of the College
1	12.	Speed Control of 1-phase Induction Motor using Cycloconverter.

#### Academic year 2015-16

Sr. no.	Bachelor degree projects supervised
1.	Bluetooth Robot Control
2.	Automatic Room Light Control
3.	Model of Bipolar HVDC Transmission
4.	Automatic 4-Axis Solar Power panel Tracking
5.	Light Intensity Measurement and Control using LUX meter
6.	Power Theft Detection and Wireless system
7.	Grid-Tied, Off- Grid and Hybrid Solar System
8.	High Temperature Superconductor and its Applications

#### Academic year 2016-17

Sr. no.	Bachelor degree projects supervised
1.	PIR based Energy Conservation using PWM-LDR & Temp. Sensor
2.	Hybrid Power Generation by Solar & Piezoelectric Crystal
3.	IOT based Energy Meter
4.	Automatic Vehicle Accident Detection and Message System
5.	City Waste Co-generation power Plant
6.	Lineman Safety Protection Scheme using Microcontroller with GSM
	Module
7.	Design and Implementation of IOT based Home Automation System
8.	Hybrid Vertical Axis Wind Turbine
9.	Thermo- Electric & Solar Hybrid Power Generation
10.	A Smart Cap (micro sleeps detection & control system at Indian
	railway for Locomotive driver)
11.	Solar Energy Based Home System having Timer and Controlling using
	арр.
12.	Energy Management & Energy Auditing
13.	Underground Fault Distance Converted ever over GSM
14.	Improvement of Voltage Profile of 11KV Distribution Feeder
15.	DC Home
16.	Maintenance of Distribution Transformer
17.	Smart Load Scheduling

#### Academic year 2017-18

Sr. no.	Bachelor degree projects supervised
1.	Over Current Relay with Alarm Indicator
2.	Arduino Based Robotic Arm
3.	Forest Fire Early Alarm System
4.	Visiting Different Sites for Data and Images of Transmission Towers
5.	220KV Sub Station Sirsa Model
6.	Zone Wise Parameter Control
7.	Optimum Energy Management System
8.	Automatic Power Factor Correction
9.	RFID Based Automatic Toll Tax Collection System Using Arduino
10.	Automatic and Manual Water Irrigation System
11.	Magneto Hydro Dynamic (MHD) Generation- A Model
12.	RFID Based Patient Monitoring System
13.	Automatic Defense Security System
14.	Solar Tracking System
15.	Transmission Towers, Conductors, & Insulators, Sag Calculations of
	Transmission Lines between two Towers for different Voltages
16.	Overload-cum-Phase Changeover Relay of Grid Control using PID
	Controller
17.	Energy Efficient Technologies
18.	400kV SubStation Nuhianwali -A model
19.	Bike Start with Helmet & Speed Control messaging
20.	3-phase Faulty Analysis System with Auto reset on temporary fault
	and permanent trip

### Academic year 2018-19

Sr. no.	Bachelor degree projects supervised
1.	Survey of Solar Power Plants in Haryana
2.	Bluetooth Based College Notice Board using Scrolling LED
3.	Speed Control of Brushless DC Motor
4.	Ardunio Based Weather Station
5.	Temperature Entry-Exit Heartbeat Based Power Saving System
6.	Vehicle Maintenance Monitoring System
7.	Over Voltage and Under Voltage Protection
8.	Hybrid Solar and Wind Generation Highway
9.	Railway Track Cleaning Machine
10.	Prepaid Electricity System by Smart Card
11.	Detail Analysis of Power Transmission Towers
12.	2D Robotics Plotter
13.	Advanced Fire and Pollution Control
14.	Sleep Sensing and Alerting System for Drivers
15.	Alcohol Detector
16.	Wi-Fi Automation Control
17.	Model of Advanced Car Parking
18.	New Design of Solar Panel
19.	Regeneration Braking System
20.	Women Safety
21.	Advanced Phase Detector
22.	RADAR System Prototype for Defense

#### Academic year 2019-2020

Sr. no.	Bachelor degree projects supervised
1.	Visual and Sound Indicator of Current Leakage Fault
2.	Design and Implementation of Fault Detection and Location System for An
	Overhead Power Cable Distribution
3.	Electricity Generation By rotation of Wheels of vehicle
4.	Thermal protection of Single Phase Induction Motor using Thermal
	Relay
5.	Weather Station
6.	Pumped Storage Power Plant
7.	Self Balancing Bot
8.	UV based Water Level measurement with energy management
	systems
9.	Solar Tracking System with Weather Sensor
10.	Concentrating Solar Water Heater
11.	Deregulation of Power System
12.	Solar Agriculture Sprayer

#### Academic year 2020-2021

Sr. no.	Bachelor degree projects supervised
1.	Train Collision Aviodance System (TCAS)- An Indigenous ATP
	System at Rail Mechatronics Pvt. Ltd.
2.	Compressed Air Storage System
3.	Scrolling Display Pad System
4.	Study of Type of Transformers
5.	Study of Smart Metering
6.	Study of Overhead Electrification Systems of Railways
7.	Smart Highway System with Waste Heat Utilization
8.	Dark Line Follower Car