

Final year project details (UG)						
Electrical Engineering Dept. LDCE						
Group no	Sr no	Enrollment	Name	Project title	Guide	Abstract
1	1	170283109028	Rathod Nikhilkumar Ramnikbhai	BLDC motor speed control for electrical vehicle	BGC	The key feature of BLDC motor is high Torque to weight ratio. Brushless direct current (BLDC) motor is widely used in small and medium sized electric vehicles as it exhibit highest specific power and thermal efficiency as compared to the induction motor. Instead PWM signals are used to control the speed of the motor. Such type of motors are used in electric vehicles which are the future of automobile industry. The PWM control strategy is implemented using Arduino uno hardware prototype designed and built and effectiveness of the methods are analyzed. The microcontroller in the arduino performs the necessary logic operations in response to the throttle input given by the user and generates required PWM signal with proper duty for obtaining the optimum voltage for the set speed commanded by the user.
	2	170283109025	Prajapati Jagdish Kumar Devkaranbhai			
	3	170283109034	Shiyani Dharmesh Khimji			
	4	170283109035	Solanki Piyush Vasharambhai			
	5	160280109099	Savaliya Sunny Ashokbhai			
2	6	170283109004	Chandra Harsh Navin	AUTOMATIC WHEELCHAIR FOR DISABLED PEOPLE	BGC	Our Project Automatic wheelchair designed to have self- mobility with the help of the user com-mand. It provides an opportunity for physically impaired persons to move from one place to an-other. In our project, we are using AURDINO UNO microcontroller and direct current motor to movement of wheelchair. User can control this wheelchair with the help of joystick. It will allow the user to interact with the wheelchair at differ-ent level of control.
	7	170283109031	Sathvara Jay Rasikkumar			
	8	170283109021	Pandya Kuldeep Naveenchandra			
	9	170283109010	Darji Anil Dungarbhai			
	10	170283109017	Mahale Dipesh Ravindrabhai			
3	11	160280109022	Darji Rutvij Devangkumar	Smart Energy Meter	BJS	We all know about Electricity energy meters which are installed in everyone's house or offices to measure the electricity consumption. But what if we can monitor our electricity uses from anywhere in the world at anytime. Here we are building an IoT based Project of Energy Meter. In this project we make a Smart Electricity Energy meter using Arduino and ESP8266 (Wi-Fi module) which you can monitor the energy uses anytime and from anywhere in the world. Present system is time consuming and there is probability of human error in meter reading. But here we can say that this system is errorless as human work for reading meter is absent
	12	160280109003	Babudi Mohammad Mahammadsoyab			
	13	160280109053	Mehta Gunjan Ajaybhai			
	14	160280109061	Parmar Darshankumar Maheshbhai			

4	15	160280109082	Patel Vishwa Sandip Kumar	Intelligent Protection system	MRV	Protection system and continuous power supply are important for residential and commercial areas. To ensure enhanced protection, automatically operated intelligent MCB and ELCB is developed using advanced current measurement and fault diagnosis technique. Whenever short circuit or earth fault occurs the system will trip and power supply is if it is temporary fault system will restore power supply using advanced fault diagnosis technique and if it is permanent fault it will remain off. Thus, the aim of this project is to develop an intelligent protection system to overcome problems of electromechanical circuit breakers. The automatic system is able to detect, diagnose, interrupt and reclose the circuit breaker in order to ensure power supply continuity along with safety.
	16	160280109070	Patel Jainishkumar Prakashbhai			
	17	160280109086	Prajapati Jay Rahulbhai			
	18	160280109108	Solanki Mohit Devangbhai			
5	19	160280109051	Macwan Renison Rajesh	Transactive energy : study and analysis of power distribution grid	CDU	This framework which helps to forecast hourly electric load and generation of the user. On the basis of this load generation data of all users in the system, the data model calculates the optimal energy transaction between the individuals in the system. This provides increasing the use of renewable energy as well as it helps in establishing Transactive Control for the system.
	20	160280109025	Dhoriyani Jeet			
6	21	160280109110	Talaviya Kishan Kantilal	PREPAID ELECTRIC VEHICLE CHARGING STATION	CDU	The Project Is About Designing Of a Compact Charging Station which can be placed outside the house/society with which One could easily charge their e-V by simply entering the amount with card swiping machine.Charging will be done as per consumer's requirement.
	22	160280109100	Sengundar Balaji Nadarajan			
	23	160280109112	Taviyad Bhaumikkumar Rumbalabhai			
	24	160280109114	Trivedi Dharmik Amitkumar			
	25	160280109116	Vaghasiya Kamallesh Kantilal			
7	26	160280109046	Katariya Avinash Nathabhai	AUTOMATIC POWER FACTOR CORRECTION	ZBP	In commercial and industrial installation, there are number of small and large electrical loads which are inductive in nature causing lagging power factor which results in high loss and gives heavy penalties to consumer by electricity board. So this project is designed to minimize these penalty charges and reduce the losses and also cost and also save power by increasing power factor by using Automatic Power Factor Correction Technique. To increase power factor capacitor compensation method is used which will provide reactive current to inductive load and equipment will effectively work and chance of damaging equipment will reduce.
	27	160280109071	Patel Jaykumar Mahendrabhai			
	28	160280109034	Gelot Rahulkumar Laxmanbhai			
	29	160280109079	Patel Rimal Deepakbhai			
8	30	160280109040	Kamariya Anirudhdha Tharanbhai	Helmet Coupled Two Wheeler	ZBP	In this project, we proposed the system to when the rider wears the helmet then after only two wheeler will start to go else it won't start. This project developed under the safety precaution for the people to value human being's life. The idea of developing this project comes from the social responsibility to prevent the people's life from the road accidents. This aims the safety and security for the bike rider. The purpose of the project to encourage the people to wearing helmet during driving.
	31	160280109085	Prajapati Harsh Arvindbhai			
	32	160280109117	Vaghela Apurv Mahendrabhai			

9	33	170283109029	Saini Nikita Babulal	SIMULATION AND HARDWARE MODEL DEVELOPMENT OF ELECTRIC SPRING FOR POWER SYSTEM	MIS	Review of theory, application, modelling, and limitations of an electric spring (ES), a custom power device, is provided after going through published literature in this field. An ES controls active as well as reactive power and hence can regulate voltage along with power quality enhancement, in the presence of intermittent and unpredictable renewable energy sources. ES is connected in series with part of the total load and can damp out the oscillations of the grid by providing voltage regulation to the load and acts as a smart load. Presence of numerous ES can be visualized in a distribution feeder, acting simultaneously in unison without having any communication within.
	34	170283109030	Saraiya Preeti Yogesh			
10	35	160280109050	Limbachiya Ravikumar Arvindbhai	Simulation of prototype model of HVDC system	MIS	The project entails simulating a model of a complete HVDC transmission system by involving the design of converter circuitry, gate firing units, gamma detection circuits, rectifier and inverter control systems and passive harmonic filtering circuits. Thus, by implementing the given circuits, it enables to transmit the bulk power over a long distance with the cable. Simulation of complete HVDC transmission system for 2.2kW, 415V, 50Hz System is done in Simulation software package. The gate firing using the Individual Phase Control (IPC) scheme and the Equidistant Pulse Control (EPC) scheme have been simulated to observe the irrelative advantages and disadvantages. By using ARDUINODUE micro-controller, complete HVDC control system and gate firing units are implemented in hardware model. Thus, complete working model of prototype HVDC transmission system is developed using the basic concepts and appropriate circuitry.
	36	160280109035	Gothi Vivekkumar Ashokbhai			
	37	160280109037	Jain Sagar Sunilbhai			
	38	160280109058	Panchal Nayankumar Dineshkumar			
11	39	160280109107	Shaikh Zaid Niyaz Mohammed	Induction Motor Meter	SMP	Our project Induction Motor Meter is a handy device to be used to measure the parameters of a running induction motor. It's a device that can be used as a lab device and will measure and display the basic parameters which will help to study about that motor. It's also encompassed with wifi module that transmits the measured data to the user on a smartphone, easing the monitoring of the parameters.
	40	160280109104	Shah Harshkumar Hiteshkumar			
	41	160280109101	Sengunthar Vignesh Sundararajan			
	42	160280109054	Mehta Prateeksha Bhadrash			
	43	160280109057	Pal Deepakkumar Rajnath			
12	44	160280109027	Doshi Priyank Ashwin	Electrically Controllable Smart Walker	SMP	Our project Electrically controllable smart walker is efficient model which provides several solutions for real world problems and we had developed this project by considering the situation experienced by many folks in our surroundings. The main features of this device is that to help a partially disabled or injured person to climb over a staircase, if escalator or elevator facility is not available by adjusting height of bottom legs of walker with respect to elevation from base and another significant feature is that person can walk over any irregular surface by adjusting the height of walker legs as per requirement.
	45	160280109026	Doshi Kenil Chiragbhai			
	46	160280109032	Gandhi Hir Samirbhai			
	47	160280109039	Jha Raunak Bhavendra			
13	48	160280109087	Prajapati Jaydip Maheshkumar	Measurement, Analysis & Elimination Of Harmonics Generated By PV Solar Cell System	MGP	The objective of our project is to improve the power quality which is distorted due to harmonics caused by non linear loads like SMPS, UPS, variable speed drives & converters. • M Specific odd harmonics can be mitigated by operating the semiconductor switches in H bridge inverters at optimized switching angles of the PWM signals. • odulation index (m) is a significant parameter used to control the amplitude of inverter. By changing the value of m, the Total Harmonic Distortion (THD) also will reduce.
	49	160280109064	Parmar Khyati Prafulkumar			
	50	160280109106	Shah Saurabh Sunilbhai			
	51	160280109103	Shah Darshil Harshad			

14	52	160280109123	Vora Harshit Pareshkumar	CNC Engraving Machine	MGP	CNC is abbreviated as Computerized Numerical Control, it is a subtractive manufacturing process in which we use software to dictate the movement of machining tools, to remove particular material from the workpiece. Engraving process can be carried out on materials (18 X 10 X 3.5 cm³) such as PCB, Wood, Plastic, Thin aluminum sheet. Our main focus is on designing an electrical circuit. We have used software like Proteus & Flatcam to create it. The main objective of our project was to deliver output with the same accuracy and precision as that of expensive machines available in the market.
	53	160280109121	Vaja Shailyajeet Narvirsinh			
	54	160280109122	Vishwadeepsinh Zala			
	55	160280109124	Zala Rajubha Bharatsang			
15	56	160280109090	Prince	Plugtronics	MGP	In the present scenario we face many problems regarding the losses in universal motor like sparking,vibration,commutation failure, noise, etc. Due to above cited problems we are trying to compensate it. It will also give them satisfactory operation due to low operating vibration and noise along with no sparks in the brushes.
	57	160280109102	Senta Vishal Himmatbhai			
16	58	160280109113	Thakor Ajay Anarji	THE PERCENTAGE BIASED DIFFERENTIAL PROTECTION SCHEME FOR 3-PHASE POWER TRANSFORMER	SNS	Our project is protection of 3-phase transformer by using percentage biased differential relay scheme. CTs are provided on both side of transformer it will decide the zone of protection of system.This protection scheme provides safety and protection from inter-turn fault and deterioration of insulation in windings. The percentage differential relay is defined as the relay that operates on the phase difference of two or more similar electrical quantities. It consists of restraining coil which controls the sensitive characteristics of relay.
	59	160280109038	Jay Sodha			
	60	160280109041	Kamol Priyankaben Nathubhai			
	61	160280109043	Kapadvanji Mohasin Hanifbhai			
17	62	160280109081	Patel Tarakkumar Vikrambhai	RADIAL FEEDER PROTECTION	SNS	There are many feeders in power distribution system.It is necessary to clear the fault from the radial feeder to ensure uninterrupted power supply to the consumer.Therefore, we require protection scheme for radial feeder.Through this project,we are making radial feeder protection scheme for protection system laboratory as real substation environment.Through this practical set up,the student,in addition to getting familiar with fundamental of protection,learned how protection scheme is wired and how they operate in real power system.
	63	160280109067	Patel Ankitkumar Govindbhai			
	64	160280109078	Patel Premkumar Atulkumar			
18	65	160280109097	Samtani Kushal Lal	ELECTROSTATIC CLEANING OF SOLAR PANEL	TRP	in plenty with cheap land cost. But cleaning of panels is essential to work at high efficiency. But there is a scarcity of water for cleaning so this project provides solutions for the same by using electrostatic principle.-On the surface of solar panel we placed thin strips of electrodes of the material INDIUM TIN OXIDE (In₂O₅Sn) which is transparent and conducting in the nature. -When a square wave of the high voltage (1200 V) is applied to the parallel electrodes placed on a solar panel, it develops linearly moving static field which ultimately makes the dust particles to move downward and fall off the surface of the solar panel.
	66	160280109096	Saliya Gautam Rasikbhai			
	67	160280109083	Pokhriyal Shashank Anil			
	68	160280109094	Rathod Vishal Vinodbhai			

19	69	160280109118	Vaghela Jaydev Jesingbhai	DYNAMIC VOLTAGE RESTORER	TRP	To improve the technical performance of Industrial loads, quality of supply is demanded by the equipment. voltage sag and swell which are the severe problems for an industrial customer. Today the most popular methods of sag and swell mollification is Dynamic Voltage Restorer (DVR). Dynamic Voltage Restorer is a cascaded connected device; which is based on the principles of power electronics. It is a voltage source converter which is connected to the circuit in cascade with supply through the help of injection transformer where voltage swell or voltage sag takes place. For the compensation of voltage sag and voltage swell in the distribution system, DVR is the most technically advanced, convenient and economical device.
	70	160280109120	Vaghela Mohitkumar Babubhai			
	71	160280109092	Rana Ashishkumar Chetankumar			
	72	160280109044	Karena Sagarkumar Jadavjibhai			
20	73	160280109068	Patel Arpitkumar Lakshnichand	ENERGY THEFT DETECTION	RJP	India, the largest democracy with an estimated population about 1.04 billion, is on a road rapid growth in economy. Energy particularly electricity, is a key input for accelerating economic growth. An electric power system can never be 100% secure from theft in many systems the amount of theft is small in terms of electricity generated. But, the financial loss is high due to large amount of electricity distributed. The financial impact of theft are reduced income from the sale of electricity and the necessity to charge more to consumers. Today there are many technical solutions for power theft detection. It includes electronics tamper detection meter, pre-payment meter, plastic meter encasements, anti theft cables and by using GSM, PLCs etc. The implementation of this systems will save large amount of electricity, there by electricity will be available for more number of consumer then earlier, in highly populated country such as India.
	74	160280109069	Patel Darshil Prahaladbhai			
	75	160280109073	Patel Krushangkumar Jayeshbhai			

21	76	160280109009	Bhagora Ashishkumar Kanubhai	Condition Monitoring of induction motor	RJP	In today's scenario, the induction motor plays a predominant role in the industrial applications. The major superiority in induction motors is rugged and simple in construction. It can operate in any environmental condition and the cost is inexpensive. This project is proposed to IoT (Internet of Things) based remote control and monitoring system of an induction motor in industries for implementation, In order for protected and economic conditions. The components modules and sensors observe the parameters like Temperature, vibrations, external moisture, RPM, induction machine load current and voltage and send to the controller board processing unit. It will inspect and exhibit the parameters. To send information for remote monitoring, the processing unit (controller board) conveys with the gateway (wifi) module to cloud database, here, we've develop an android application for easily access of the data. This system also helps in induction machine start and stop control by both automatic and by manual.
	77	160280109095	Rathva Divyaben Kamleshbhai			
	78	160280109098	Sathawara Vivek Mukeshbhai			
	79	160280109091	Rajatiya Vinay Palabhai			
	80	160280109125	Goken Riba			
22	81	170283109003	Bharadava Dipak Jagdishbhai	Smart Prepaid Energy Meter Using GSM Module.	GPR	In this project we are focusing on automatic billing and metering system. The integration of the GSM and Arduino provide the meter reading system with some automatic functions that are predefined. The energy consumption and electricity bill will be providing through GSM module to the customer and to the concern electricity department. An alert message will be send to the customer and vigilance squad when the consumption unit reading reaches beyond the specific threshold. This project contains energy consumption details in terms of power units and power units will be displayed on the LCD and will be notified to the customer via SMS and customer will also be able to recharge with the help of GSM module.
	82	170283109006	Chavda Pravin Dadubhai			
	83	170283109009	Dabhi Rahul Govindbhai			
	84	170283109020	Padhiyar Bhargavkumar Vasantbhai			
	85	160280109048	Kodiyatar Ajay Nathabhai			
23	86	160280109004	Balsara Jay Shaileshkumar	Load Shedding For Power System	NVS	India is a developing country and there used to be a lot of blackout problems in earlier days. There used to be a power-cut in some or the other part of a place. This problem was caused because of load shedding. Due to increased demand in load, a part of full load was shed in order to maintain the load balance. Similarly, for any industry, when we start a motor with a high load, it draws a huge amount of current in the initial stage. As this motor drawing that huge amount of current, it caused rest of the equipment to stop working. Load shedding for such kind of industries are a system through which we could cut-out the less prior load for a small interval of time till the motor reaches its normal condition and then the equipment which was turned-off earlier would be started. It will be an automatic system which would cut-down the excess of load by checking their priorities through a predefined system.
	87	160280109020	Dalwaniya Siddharth Pravinbhai			
	88	160280109052	Makwana Purva Mahipatkumar			
	89	160280109063	Parmar Keval Prakashkumar			
24	90	170283109011	Darji Dhruvkumar Dhirajlal	DUAL AXIS SOLAR TRACKING SYSTEM	NVS	In our Project we use Dual Axis Solar Tracker.. If We use Single axis solar tracker the efficiency of the solar tracker system is low. So improve the efficiency we Use the Dual axis solar tracking system. By the using of Dual axis we use all the sunlight in all environment conditions.. The sunlight is free.. So we have to use this energy In our project we use 4 LDR sensor.. This sensor is use for light depending.. so where the sunlight is fall in the LDR sensor . it sense the direction of the sunlight and give the output.. In Our project we use 4 DC Servo motor and RPM of this motor is 10. In dc Motor the motor driver is connected..when The command is come from the control circuit It rotates in forward direction either reverse direction In our project we use arduino uno Board it also called a Control circuit. By the use of arduino we control the direction of motor or speed of motor.... when the sunlight is fall on the LDR sensor the sensor sense the intensity of the sunlight and the give the single to the arduino.. and this signal convert into digital signal..In arduino the process will done.. and arduino give another output signal to the motor driver. and motor driver rotates the motor.
	91	170283109014	Gamit Manishkumar Maganbhai			
	92	170283109008	Dabhi Mahendra Kalubhai			
	93	170283109016	Kamol Jigneshkumar Rameshbhai			
	94	170283109024	Patel Shanikumar Rajanikant			

25	95	160280109018	Chikhaliya Bhargav Rasikbhai	NITROGEN INJECTION FIRE PREVENTION SYSTEM FOR OIL FILLED TRANSFORMER	JBM	Fire hazards occurring at power transformers and interconnecting transformer installation are the matter of serious concern. Different types of Transformers are used in power system. Commonly used power transformer is oil filled power transformer. In the oil filled power transformer oil act both as insulating and cooling media. During an internal fault resulting in an arc will cause fire. Fire hazards lead into serious consequences such as fatal or non-fatal accidents and loss of valuable assets. One power transformer costs to 4 Crores approximately. Moreover such types of incidents may cause fatal accidents to human beings or stray animals. The Nitrogen Injection Fire Prevention System (NIFPS) is an effective technique for quenching the fire. In the event of fire hazards, the system actuates and abolishes fire quickly.
	96	160280109024	Dhameliya Dharmikumar Ghanshyambhai			
	97	160280109029	Gagiya Bhikhu Meragbhai			
	98	160280109028	Finaviya Romitkumar Ashokbhai			
26	99	170283109026	Rajput Ashutosh Singh Surendra Singh	AUTOMATIC POWER FACTOR CORRECTION USING PIC MICROCONTROLLER	JKC	In the present technological revolution power is very precious. So we need to find out the causes of power loss and improve the powersystem. Due to industrialization the use of inductive load increases and hence power system losses its efficiency. So we need to improve the power factor with a suitable method. Whenever we are thinking about any programmable devices then the embedded technology comes into fore front. The embedded is now a day very much popular and most the product are developed with Microcontroller based embedded technology. Automatic power factor correction device reads power factor from line voltage and line current by determining the delay in the arrival of the current signal with respect to voltage signal from the function generator with high accuracy by using an internal timer. This time values are then calibrated as phase angle and corresponding power factor. Automatic power factor correction techniques can be applied to the industries, power systems and also house holds to make them stable and due to that the system becomes stable and efficiency of the system as well as the apparatus increases. The use of PIC microcontroller reduces the costs.
	100	170283109039	Rayees Yousuf Bhat			
	101	170283109036	Vanazara Prathmeshkumar Gulabbhai			
	102	170283109027	Rana Mayankkumar Maheshbhai			
27	103	160280109012	Bodana Mahendrasinh Ratuji	EFFICIENCY IMPROVEMENT OF INDUCTION MOTOR	JKC (IDP)	This invention related to increase efficiency of induction motor. This invention helps to all industry which are using induction motor and 90% of industry uses induction motor. This project Improve efficiency with Same dimension as of original motor, also it is Economical and Energy efficient. So it Saves electricity bill and Improve power factor.
	104	160280109010	Bhuva Meet Babubhai			
	105	160280109019	Dabhi Chetanbhai Bharatbhai			
28	106	160280109023	Deshbandhu Dipen Ashokkumar	Anti islanding Detection System for Grid Connected PhotoVoltaics System	MJS	Recently with increasing trend of distribution energy or renewable resources use increased with that new technical challenges also raised or increased. • The use of interconnected power system in which two parallel power station transmits the power to the Load. • Use of interconnected system of renewable resources and Non-renewable sources has been increased gradually. • So Inadvertent islanding effect is also one of those common issues for large as well as small distribution generation systems. • Islanding operation of distribution generation system occurs when power supply from the main grid is interrupted to several reasons but distribution generation energy resource keeps on to supply power into distribution networks or main grid. • The Grid disconnects is usually response to a fault. So ideally a fault should be detected and distribution generation system should be tripped before islanding occurs as well as with the use of switchgear protection scheme system should be isolated as soon as possible.
	107	160280109015	Chauhan Harsh Kiritkumar			
	108	160280109002	Anavadiya Hardikkumar Vasantbhai			
	109	160280109016	Chauhan Vishal Maheshbhai			

29	110	170283109032	SHIR SAGAR RAJUBHAI	EARTH LEAKAGE MONITORING AND PROTRACTION SYSTEM	MJS	Overload circuit breakers are designed to protect the power distribution system while earth leakage devices are only useful for protecting people from electrocution. An overload circuit breaker is designed to interrupt a circuit when the current exceeds a preset limit. In a thermal type breaker, a small overcurrent (due to overloading) can be tolerated for a prolonged period before tripping, although a large over-current (due to a short circuit) will trip fairly quickly. A magnetic type breaker will trip very quickly once its threshold current has been reached. As the current necessary for fatal electrocution is less than a couple of Amps for duration of less than a couple of seconds, an overload breaker offers virtually no protection from electrocution. An Earth leakage protection system are designed to trip for fault currents between 10 and 100 mA and for interrupt times between 40 and 100 milliseconds after a fault current is sensed. Earth leakage devices are based on the principle that the amount of current entering a device should be exactly the same as the amount of current leaving the device. Our prototype will also monitor the status of the relay and how much amount of leakage current is through the device it will give necessary warning and if this current is higher than threshold value than automatically give a tripping signal and show status on lcd
	111	170283109033	Shiroya Dhruvin Kumar Mahendrabhai			
	112	170283109012	Dobariya Dhaval Rajeshbhai			
30	113	160280109014	Chaudhari Parth Chunilal	Arduino based overvoltage and earth leakage protection	ULM	The aim of this project is to develop a high voltage and earth leakage tripping mechanism to protect load from damage. The abnormal overvoltage may be causes due to various reasons such as sudden interruption of heavy load, lighting impulses, switching impulses and arcing ground. Our project mains at protecting the electrical equipment from the overvoltage and earth leakage.
	114	160280109011	Bilwal Rohitkumar Dineshbhai			
	115	160280109031	Gamit Shahilkumar Nanubhai			
	116	170283109037	Vasava Chinubhai Bharatbhai			
	117	170283109038	Vasava Manojkumar Rajubhai			
31	118	160280109005	Bamania Abhishek Manubhai	DATA ACQUISITION SYSTEM	rnal guide M	Our project ENERGY MONITORING SYSTEM is mainly focused on monitoring of operational conditions of electrical equipments in medium & small size industries. The main application of this project is found in preventive maintenance of equipments like Motors, 3-ph drives, electrical loads, Smart electricity billing system etc. By using Schneider EM6430 Power meter, operating parameters can be transferred to PC by Modbus RTU communication protocol. Arduino Mega and Max 485 module acts as data converter which converts the RS485 Data of meter to user readable format. Once the data is stored in computer it can be manipulated in any format as per user wish.
	119	160280109006	Bangar Gaurav Laxminarayan			
	120	160280109007	Barad Ravibhai Kanabhai			
	121	160280109021	Darji Bhaveshkumar Ashokkumar			
32	122	160280109008	Bariya Harshadkumar Maheshbhai	WIRELESS ELECTRIC VEHICLE CHARGING SYSTEM	LKK	This project is a development of a new approach to charging battery for electrical vehicles using the inductive coupling method. The aim of the project is focused on producing suitable power of the receiver coil to charge electrical vehicle's battery. This project is start through designed and circuit testing and then data are collected and analyzed.However , our project is not able to charge the actual battery of electrical vehicle but power produced is able to charge any low voltage electronic device.
	123	160280109013	Chaudhari Harshkumar Pankajbhai			
	124	160280109030	Gamit Jigneshkumar Chetanbhai			
	125	160280109093	Rathava Jaydipkumar Prakashbhai			

33	126	160280109059	Pandya Hansaj Devashish	Smart Home Automation	FAM	Nowadays, usage of technology in our daily life is constantly and exponentially increasing. If we want to keep up with the technological progress, we have to automate our daily life, too. To do this, Smart Home Automation is a necessary solution. The abstract of our project is to provide a system which can run automatically. The system we are trying to apply should ideally be user friendly and cost effective. We are using Arduino Mega in this project to make this system more user friendly. The system we created should also be able to control some appliances by itself, which are kept on even in the absence of the user. This system is very useful for energy conservation and security purpose.
	127	160280109060	Parikh Jay Girishbhai			
	128	160280109062	Parmar Jaysukh Devrajbhai			
	129	160280109042	Kanzariya Umesh Hari			
34	130	160280109055	Modi Hardik Govindbhai	Power quality improvement through harmonic filter	FAM	Due to increasing use of non linear loads power quality problem is increasing day by day. Due to poor power quality many problems occur in system such as malfunction of motor, heating problems, losses etc. that causes huge monetary burden. So to prevent it we are making project of shunt active power filter based on pq instantaneous theory. That mitigate current harmonics, improve power factor and compensate reactive power of line. In coding we are using error optimisation technique in Arduino due and for controlling purpose we are using hysteresis band controller and for DC voltage regulation PI controller based technique. We have achieved 1.36% THD results which was previously 30.91 % without using filter.
	131	160280109017	Chhipa Zakiya Hajimohammad			
	132	160280109049	Lakshmi R			
35	133	170283109015	Jadav Parthbhai Ghanshyambhai	Controlled irrigation in agriculture using IOT technic	HNR	Irrigation is one of the important processes in pressurized irrigation system the dependency of rain is decreased day by day. The pressurized irrigation system is controlled manually by the farmers. Manually operated system requires extra man power for supervising there for it decreases the field efficiency. Sometimes this irrigation leads to over irrigation than the actual plant requirement and under irrigation when plants required more water in their peak periods. Which results slow crop growth rate, late flowering and reduction of the yield are the major concern due to water deficiency. Moreover, excess irrigation in the root zones leads to ill health of the root zones and vegetation, additional cost for farmer, wastage of the time and water. Also salinity of the land can be increased by unbroken stretch supply of more than enough water. On the other hand electricity supply is the major concern in remote areas. Farmers are not getting regular supply of electricity for agriculture operations. Hence this project introduces a new approach for controlled irrigation system using IOT (Internet of things) in agricultural management using soil moisture sensor, and humidity sensor. Based on the sensed data, system automatically decided about the necessary action for irrigation and also notifies the user, the system also focused on the use of solar energy utilization by the sensors during communication.
	134	170283109001	Bakraniya Hemang Haridas			
	135	170283109018	Mehta Abhishek Sanjaybhai			
	136	170283109022	Parmar Niraj Ugabhai			
36	137	160280109077	Patel Pathik Jayeshkumar	Automatic phase selector for 3 phase line with SMS alert	HNR	In three phase equipments if supply voltage is low in any of the one phase and you wish to run all the equipments properly, this equipment will help you to rescue this situation. However proper rating fuse needs to be used. The circuit consists of Relays, Transformers, Comparators etc.
	138	160280109074	Patel Kushkumar Hasamukhbhai			
	139	160280109089	Prajapati Rohitkumar Rameshbhai			
	140	160280109088	Prajapati Jigarkumar Rupabhai			