

Department of Electrical Engineering
 EE-401 Final Year Design Project
Project List



F/SOP FYDP/02/00

Batch 2019

Semester Fall 2022

S.no.	Project title	Student name	Supervisor/co-supervisor	Industry
1	Design of a network jitter regulator for advance tele-robotic systems.	1 19094 Syed waleed ahmed 2 19093 Kazim rizvi 3 19095 Syed hussain raza zaidi 4 19117 S m amanullah	Dr. Riaz uddin	Humayun khan
2	Dynamic wireless electric vehicle charging	1 19205 Abdul mohi khan 2 19204 Taimoor hayder 3 19202 Junaid saeed 4 19200 Muhammad saud khan	Engr. Arjumand samad	
3	Data drive approach for parameters estimation of distribution system using deep neural network	1 19043 Sharjeel ahmed 2 19138 Muddasar mehmood 3 19140 Hassan ali syed 4 19176 Ijlal akhtar	Engr. Shariq sheikh	
4	Asset heath monitoring model, visualization and design and fabrication of cable testing kit	1 19006 Aliza altaf 2 19015 Bisma mustafa 3 19018 Syeda zaufyshan shakeeb 4 19019 Ifrah saiffe	Dr. Umbrin sultana	Engr Maham siddiqui Assistant Manager KE
5	Monitering and controlling of relay for power system protection using iot system	1 19111 Hadiya iftikhar siddiqui 2 19098 Muneeza riaz 3 19020 Syed asad ijtaba rizvi 4 19327 Muhammad talal ashraf	Miss hafsa wahid	Not decided yet
6	Design of calculator for adequate sizing of battery energy storage system and algorithm for its charging and discharging.	1 19134 Syed moavia zahoor 2 19118 Muhammad faizan ahmed 3 19129 Muhammad yasir iqbal 4 19096 Aeman waseem	Engr. Najia naveed	Naseer Ahmed Sr. Engineer

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7	Modeling, analysis and optimazation of battery swapping integrated charging station.	1	19100	Wania salahuddin	Dr. Umbrin sultana	
		2	19110	Fatima shakir		
		3	19108	Kashaf nizam		
		4	19090	Syed mubashir hussain		
8	Prognostic analysis of distribution transformer	1	19128	Humza maqbool	Pro. Dr. Saad ahmed qazi	
		2	19017	Ramsha waseem		
		3	19044	Syed muhammad ali jafri		
9	To design and implement a floating solar pv system	1	19042	Muhammad shaheer shahid	Dr. M. Mohsin aman	
		2	19041	Muhammad mishraz hussain		
		3	19028	Faraz ahmed		
		4	19022	Abdul wahab		
10	Prediction of electric vehicle charging behavior using machine learning	1	19193	Tooba siraj	Engr. Ayesha khan	
		2	19189	Nargis		
		3	19190	Aafia saeed		
		4	19191	Nashrah pervez		
11	Design a power quality monitoring system.	1	19123	Abdullah	Dr. Raja masood larik	Ahsan bin zahid Engineer Sales Jubilee Corporation
		2	19166	Balach iqbal		
		3	19029	Aftab ali		
		4	19161	Ifra sohail		
12	Pv panel self cleaning system	1	19132	Muhammad wasif	Dr. Abdurrahman javid shaikh	
		2	19115	Muhammad junaid		
		3	19127	Umer mehmood		
		4	19114	Syed anas imam		
13	Cloud based smart power outage sensing and reporting model on low voltage networks for electric utilities	1	19046	Muhammad bilal	Engr. Ayesha khan	Muffadal ali
		2	19309	Ali asghar		
		3	19072	Muhammad haris		
		4	19213	Muhammad hamza irshad		

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14	Design of dynamic wireless electric vehicle charging system using compensation network for improved efficiency	1	19079	Muhammad hammad khalil	Dr. Umbrin sultana	
		2	19066	Ghulam mustafa adamjee		
		3	19069	Muhammad arbab ahmed khan		
		4	19082	Muhammad hamza zakir		
15	Design and development of cpap/bi-pap respiratory assistive device	1	19192	Ushna javed	Dr. Riaz uddin	Abdullah haider ali
		2	19210	Muhammad haris		
		3	19216	Muhammad hamza tahir		
		4	19220	Muhammad talha		
16	Design of a new online condition monitoring technique of surge arresters.	1	19014	Syeda sakina haider	Dr.Abdullah Muneer	
		2	19012	Umme aaiman		
		3	19016	Hania ahmed		
		4	19010	Syeda khansa shakeel		
17	Designing of renewable hybrid mix of wind & solar energy for steel industry.	1	19101	Hamna afaque	Dr. M. Mohsin aman	Abubakar Ismail
		2	19097	Izma shaikh		
		3	19099	Mahnoor rao		
		4	19103	Wajiha fatima		
18	Fault localization in three phase 11kv power transmission system by using machine learning and deep learning	1	19037	Syed abdullah zaidi	Dr. M. Mohsin aman	Ahmed Ashraf Research Assistant PV testing Lab
		2	19036	Mohammad ahmed khan		
		3	19031	Muhammad usama		
		4	19179	Muhammad ahsan khalid		
19	Design,development and performance analysis of sun tracking algorithm for single-axis solar tracking system.	1	19141	Musheer hassan khan	Dr. M. Mohsin aman	
		2	19186	Aamina syeda		
		3	19229	Muhammad shahzain khan suri		
		4	19237	Muhammad usman farooqui		
20	Design of an on-grid solar system with hybrid capabilities using zero export device.	1	19169	Ahmed affan farooqui	Iqbal azeem	
		2	19168	Abdul wadood		
		3	19177	Muhammad hammad ali		
		4	19231	Muhammad suenan alam		

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21	Development of interactive gui for transmission system loss estimation using artificial intelligence	1 19076 Shahmeer khan 2 19060 Anushah nasi 3 19054 Yumnah fatima khan 4 19075 Muhammad nouman	Engr. Shariq sheikh	
22	smart social interaction robot for a commercial enterprise	1 19167 Wajahat ullah 2 19253 Syed basim ahmed kazmi 3 19147 Iqra asif siddiqui 4 19153 Anusha javed	Dr. Riaz uddin	Syed murtaza hassan kazmi
23	Plant leaf disease detection using transfer learning-based deep ensemble neural network	1 19223 Ehtisham khan 2 19227 Abdul rahman memon 3 19182 Jibran iqbal 4 19225 Umer faraz	Muhammad omar	
24	Underground fault detection using arduino, gps(global positioning system) and gsm(global system for mobile communication)	1 19131 Muhammad ashar shah temuri 2 19175 Muhammad sharib nadeem 3 19234 Shozab haider 4 19232 Syed hassan majid	Engr. Najia naveed	
25	Design of a gait control algorithm for a quadruped robot	1 19317 Nabeel majeed 2 19201 Azhar jawaid 3 19323 Muhammad saad arshad 4 19319 Muhammad ahsan aamir	Dr. Riaz uddin	Humayun naveed khan
26	Design and implementation of edge-computing based nilm system for residential consumers using combinatorial optimization (co) technique.	1 19233 Muhammad adeel 2 19306 Hareem arshad 3 19255 Noveera baloch 4 19315 Fatima azhar	Muhammad hassan ul haq	
27	solar pv fault detection and performance enhancement algorithm using neural network	1 19050 Huda majeed 2 19062 Tehreem khan 3 19045 Abdul qadir ashraf 4 19068 Khuzaima sajid	Dr. Raja masood larik	Abu bakar ismail

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28	Performance comparison of multiple metaheuristic algorithms to optimally locate facts controller for power loss minimization and voltage stability enhancement.	1	19163	Muzamil	Dr. Abdul gani abro	
		2	19222	Aneel kumar		
		3	19258	Amna		
		4	19252	Faraz ullah		
29	Controller of a 3-phase permanent magnet synchronous motor for an electric vehicle drivetrain	1	19021	Syed masroor ul haq	Dr. Syed quadir hussain quadri	Ali Rehan Sharif Jr. Hardware Engineer Dream Big Semiconductor Old CIS
		2	19033	Mohammad umer hassan		
		3	19039	Inayat ali		
30	Implementation of a stada based self-driving cnn model on a remote controlled car	1	19236	Mohid hussain abbasi	Muhammad Omar	
		2	19230	Zain afzal		
		3	19235	Hafsa anjum		
		4	19302	Fizza anwar		
31	Design and implementation of an open-source phasor measurement unit(pm) and phasor data concentrator (pdc) for academic and research Applications	1	19074	Syed muhammad minhaj naqvi	Muhammad hassan ul haq	
		2	19084	Daniyal ahmed farooqui		
		3	19070	Mohammad ashhad asif		
		4	19071	Mustufa siddiqui		
32	Deep learning techniques for wind power forecasting	1	19135	Syed hassan ali rizvi	Dr mirza muhammad ali baig	
		2	19137	Zeeshan arif		
		3	19165	Muhammad ameer qureshi		
		4	19171	Atharullah khan bangash		
33	An investigation into transformer based deep learning model for non-intrusive load monitoring (nilm)	1	19158	Aleema saleem	Dr. Mirza muhammad ali baig	
		2	19142	Ayesha kainat		
		3	19056	Nimrah		
		4	19049	Sualeha siddiqui		
34	Designing a universal controller to monitor the different battery management systems using iot gateway	1	19083	Syed ali abbas naqi	Dr. Umbrin sultana	S M hassan Askari R&D Engineer Tech Department
		2	19078	Taha bin feroz		
		3	19085	Syed faizan hassan zaidi		
		4	19089	Kumail abbas		
35		1	19187	Ayesha ijaz	Engr. Ayesha khan	Ms.Najia naveed

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	Renewable energy integrated power system efficiency enhancement.	2 19146 Atiqa asif 3 19155 Ayesha urooj 4 19151 Taskeen junaid khan		
36	Design and implementation of current source voltage controlled inverter	1 19212 Syed numair mubarak 2 19203 Muhammad tehseen 3 19215 Abdul moiz qureshi 4 19217 Faraz neaz	Engr. Nabeel fayyaz	Engr Hassan Ul Haq
37	High impedance fault detection using convolution neural network in distribution system	1 19059 Zainab ayub khan 2 19048 Marium sarwar 3 19055 Wajiha raza 4 19061 Samia nasir	Dr. Beenish sultana	Mr Kashif Iqbal Head Distribution Projects KE
38	Substation designing of 14 mw for hospital building-1 at indus hospital karachi.	1 19314 Israr ali jatoi 2 19308 Fajr shariq 3 19312 Manum fatima 4 19244 Syed muhammad raza zaidi	Engr. Shariq sheikh	Mr.Haris zahid
39	Remite operation of office load using dc micro grid	1 19032 Abubakar siddique 2 19027 Ayaz riaz 3 19024 Ayan saleem 4 19316 Jawad kk	Dr. Muhammad javed	
40	Home energy monitoring system using non-intrusive load monitoring technique	1 19009 Laiba javed 2 19038 Muhammad abubakar siddique 3 19040 Umair ahmed 4 19251 Sheikh talal ahmed	Dr. Umbrin sultana	Moiz Ahmed Product develop Engineer Consultant
41	Reduction of technical losses in distribution feeders using cymdist	1 19120 Abdul rauf hussaini 2 19126 Muhammad hamza mujahid 3 19130 Muhammad anus khan 4 19124 Syed muhammad huzaifa	Dr. M. Mohsin aman	
42		1 19005 Syeda gul e zehra		

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	Design of a cost optimization algorithm for electrical substations based on ieee standard 80-2013	2 19013 Bushra laraib 3 19003 Sana moin 4 19008 Rabia ahmed	Dr. Abdurrahman javid shaikh	
43	Integration of hybrid supercapacitors and lithium ion phosphate battery in battery management system	1 19026 Umaid iqbal 2 19023 Muhammad umer 3 19035 Yawar ali 4 19034 Jawad khan	Muhammad uzair khan	
44	Iot based ev charging station	1 19149 Rumela 2 19157 Dure sameen 3 19199 Sara khan 4 19030 Faraz ahmed	Dr. Raja masood larik	Sir Abu Bakr ismail Lead manager Power & Energy Projects
45	Dynamic model acceptance test on single machine infinite bus (smib)	1 19198 Asfa iqbal 2 19185 Maryam hasan 3 19188 Hafsa anum 4 19197 Fiza altaf	Dr. Beenish Sultana	Hemant Parkash Sr. Power system consultant Siemens
46	Modeling, forecasting and comparison of energy demands of various sectors of karachi, rawalpindi and islamabad using leap software.	1 19063 Noor ul ain jawed 2 19053 Ayesha inam 3 19058 Wadia siraj 4 19144 Ayesha masood	Dr. M. Mohsin aman	
47	Revamping of electrical and control system of hot abrasive cut-off machine	1 19254 Mohammad shayan 2 19250 Syed wali hasan 3 19242 Syed hassan ahmed 4 19241 Abdul wali	Dr. Riaz uddin	
48	Mppt based ups inverter	1 19073 Musawar hussain 2 19081 Ahsan samdani khan 3 19064 Shoaib ali rajpar 4 19087 Istinsar-ul-mohamen	Dr. M. Mohsin aman	Dr.Rizwan Aslam butt
49		1 19245 Taha abdullah	Dr. M. Mohsin aman	

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	Double array solar panel automatic cleaning controller using iot modules	2. 19301 Fizza shaikh 3 19246 Ayan javed 4 19228 Shaheer		
50	Automatic dual axis solar tracking system using machine learning for ev applications.	1 19122 Mohammed talha khan 2 19113 Abdul rehman 3 19318 Muhammad shehryar 4 191321 Abdul wali	Miss Hafsa wahid	Abdul rafay
51	Develop an effective design for primary and secondary distribution network to formulate overloading criteria for power cables and distribution transformers.	1 19184 Shaheerah tahreem 2 19194 Aiman kamran khan 3 19195 Syeda hadiqa hashmi 4 19196 Inshal zia	Dr. Raja masood larik	Ghazanfar Rizvi Manager Network Planning
52	Analyze the best optimized solar solution from fixed tilted vs single axis tracking with lcoe for amreli steel ltd	1 19208 Syed ahmer imam 2 19211 Osaid aqeel 3 19219 Arslan ahmed 4 19209 Osama usmani	Dr. Krishan lal khatri	Abubakar ismail
53	Vulnerability assessment of e2e based asr models by generating adversarial examples	1 19139 Hammad ali khan 2 19136 Ali aman 3 19154 Syeda rujab hussani 4 19170 Moeed alam	Dr. Muhammad javed	
54	Practical study of standalone photovoltaic solar system and its implementation.	1 19104 Areeba abid 2 19107 Ayesha urooj 3 19102 Mahma rauf siddiqui 4 19106 Usra inam	Muhammad hammad uddin	
55	“to analyze/simulate electrical power system of a utility, load flow, shortcircuit, and arc flash of each associated component of a complete feeder.”	1 19249 Ahmed bilal rizvi 2 19226 Syed rameez hasan 3 19247 Abdul baseer khan 4 19239 Muhammad bilal khan	Dr. Raja masood larik	Ghazanfar Rizvi Manager Network Planning
56		1 19311 Muhammad ismail	Dr.Abdullah munee	

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	To design a portable energy analyzer for the measurement of harmonics currents and line losses.	2 19310 Sahaab ali 3 19218 Hashir imran 4 19303 Taimoor maqbool		
57	Digitization of anemometer and wind vane for pakistan meteorological department	1 19240 Muhammad ali awan 2 19224 Muhammad jawad 3 19207 Daniyal shah 4 19214 Daud arif	Dr. Raja masood larik	
58	Operation suitability of hybrid renewable energy source for different location of pakistan using machine learning	1 19148 Aleeshbah tehreem 2 19159 Aliha arfeen 3 19145 Maryam naushad 4 19057 Shumaila iqbal	Dr. Abdurrahman javid shaikh	
59	Design and implementation of current control voltage source inverter	1 19307 Zain arshad 2 19304 Muhammad musab 3 19305 Muhammad faraz 4 19313 Altamash	Engr. Nabeel fayyaz	Muhammad Hassan Assistant Professor Electrical Dept
60	Feasibility of captive generation with solar power, bess and microgrid simulated controller designing	1 19067 Syed abeer ali 2 19086 Syed muhammad bazil aftab 3 19077 Muhammad sami arshad 4 19051 Ayesha siddiqui	Dr. Umbrin sultana	Moiz Ahmed Product developer Energy
61	Electrification of hb1 (hospital building1) at 400v of indus hospital karachi(that is in its extension phase) using iec standards .	1 19143 Manal siddiqui 2 19152 Syeda ayesha hashmi 3 19150 Rida kamal 4 19156 Sidra waheed pirzada	Dr. M. Mohsin aman	Sir Haris zahid
62	Design and implementation of edge-computing based nilm system for residential consumers using k-means clustering technique.	1 19011 Rida tahir 2 19001 Marium mahmood 3 19002 Aiman amjad ali 4 19007 Omaima atif	Muhammad Hassan ul haq	
63		1 19112 Muhammad imadullah farooqui		

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	Design and development of a thermoelectric generator for domestic applications	2 19121 Mirza hassaan baig 3 19133 Muhammad maaz uddin 4 19105 Ayesha anwar	Dr. Abdurrahman javid shaikh	
64	Modelling and simulation of optimized hybrid renewable energy system for rural areas (off-grid)	1 19248 Muhammad hamza alam 2 19238 Kashaf ali	Hafsah wahid	
65	Design and development of battery powered,fuel less and carbon footprint free 1kw electricity generator.	1 19174 Muhammad motassim billah 2 19178 Zahir hussain tunio 3 19324 Kashan ahmed 4 19243 Abdul basit	Abdullah munir	

FYDP Coordinator

FYDP Review Committee Head

Chairperson