Power Electronics & Drives (PED) Research Group

Introduction:

The efficient use of depleting energy resources, static power electronic converters employing advanced semi-conductor devices are currently used in an increasing number of applications. Applications range from low-power converters, for milliwatt applications, to converters for high-voltage dc transmission systems handling hundreds of mega-watts. Other classical applications include adjustable-speed ac and dc drives for use in industry, switch-mode power supplies, audio amplifiers, uninterruptible power supplies, and welding machines. In the last decade Power Electronics and Electrical Drives have penetrated deeply the renewable energy sector. Today, power electronic converters provide vital functionality in a diversity of new technologies including large wind turbine systems, fuel-cells systems and photovoltaic power generation. Motor drives comprising power electronic converters and advanced electric machines play a key role in the transportation sector, where new technologies are exploited in order to electrify many kinds of vehicle.

Objectives:

The objective is to provide research group members with the ability to model, analyze, synthesize, and develop PED systems. The objectives of the Power Electronics and Drives group are:

- To provide the knowledge to members with a detailed understanding of the operation, function and interaction between various components and sub-systems used in power electronic converters, electric machines and adjustable speed drives
- To enabling design, modelling, simulation and synthesis of power converter-based systems used for conversion of electric energy
- To provide the member with experience of the practical implementation of controllers using DSPs, FPGAs, DSPICs and PIC.
- To conduct staff colloquiums for extracting the knowledge one among others
- To make use of facilities in the research group and produce quality publications.

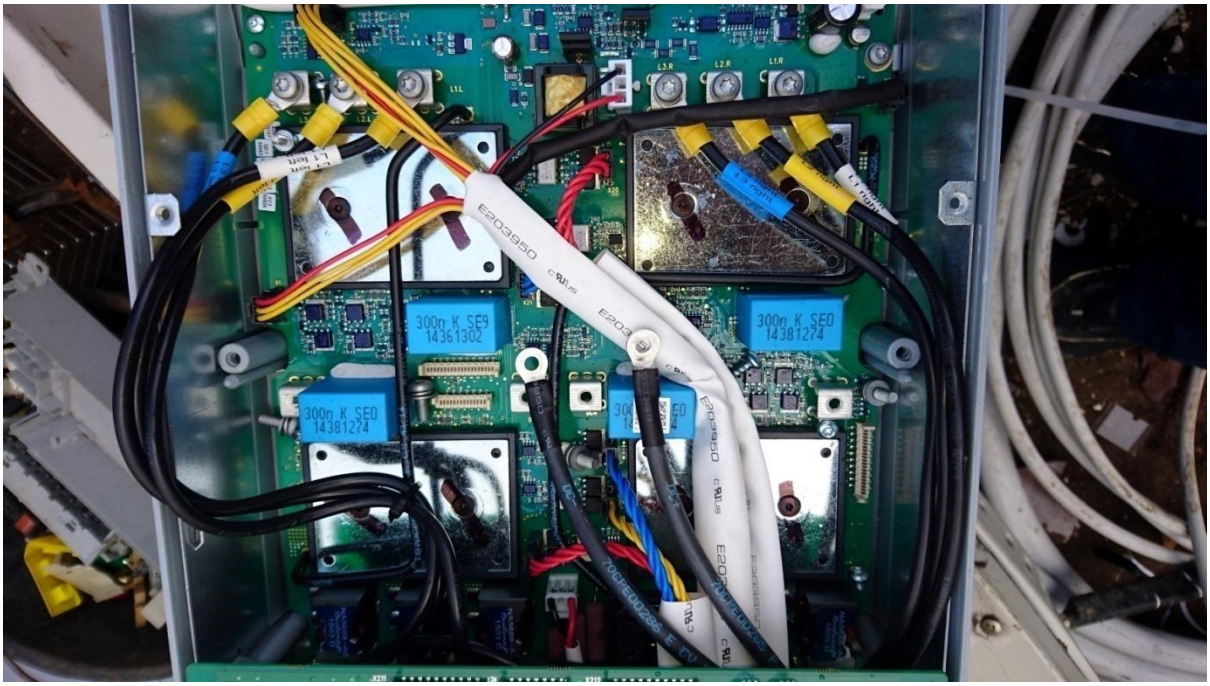
Members of PED Group:

S.No	Name	Designation
1.	**Dr. J. Siva Vara Prasad**	**Coordinator**
2.	Dr.K.R.L.Prasad	Member
3.	Mr.P.Deepak Reddy	Member
4.	Mr.A V G A Marthanda	Member
5.	Mr. J.V.Pavan Chand	Member
6.	Mr.Ch.Rajesh	Member
7.	Mr.E.Raghu Babu	Member
8.	Mr. K.Nagalingachary	Member
9.	Smt. T.Naga Durga	Member
10.	Mr K.Sudheer Kumar	Member
11.	Smt. G. Thabitha	Member
12.	Ms R.Padma	Member

Major Research Equipments:

S.No	Name of the Equipment	Cost (Rs.)
1	3-Phase Fully Controlled Bridge Converter	1,07,100
2	Four Quadrant Chopper Drive	78,150
3	3- Phase A.C Voltage Controller For 1HP Induction Motor Drive	1,01,700
4	3-Phase IGBT Based PWM Inverter	84,700
5	3-Phase 3-Level PWM Inverter	79,620
6	3-Phase Slip Ring Induction Motor Drive	84,650
7	PIC Micro Controller Based Boost Converter	89,450
8	0.5 HP BLDC Motor Drive	1,13,850
9	0.5 HP Switched Reluctance Motor Drive	1,43,650
10	DSP Based Control of 1HP 3-Phase Induction Motor Drive (V/F Control)	1,00,350
11	DSP Based Control of 3 Phase Induction Motor Drive (Speed Control)	1,36,000
12	DSP Based Control of PMSM Drive	2,03,253
13	FPGA Based Control of BLDC Motor Drive	1,15,000
14	DSP Processor Trainer Kit (TMS320F2812)	95,858
15	Active Power Filter with Protection & Accessories	6,11,531
16	FPGA Controllers	2,34,160
17	3-Phase Multi Level Inverter Power Module	1,90,000
18	Power Quality Analyzer (Hioki Make)	3,48,791
19	AC Automatic Insulation Hitester (Hioki Make)	3,01,412
20	Digital Storage Oscilloscope 60MHz Channel and 2GSa/s and with 20Kpts Memory- 4 Nos	79,936
21	3-Phase Voltage Source Inverter Power Modules	95,000

22	DSPIC Micro Controller (Make Power Labs)	45,000
23	R&S HZ050 Current Probe	53, 238
24	FPGA Based DC-DC Isolated Soft Switching Resonance Converter.	86,283
25	FPGA controlled DC-DC Buck converter	83,727



Research Projects:

Project Proposals Submitted:

S.No	Name of the Faculty	Project Title	Project Amount In Ruppes	Funding Agency	A.Y
1.	Dr.J.Sivavara Prasad	Soft Switching Mechanism Based Solar-Grid Interconnected System with Capacitor- Less Three-Phase Pulsating-DC-Link Inverter using Grey Wolf Optimization MPPT Technique File File No : ECR/2018/000027/ES (Ver-1)	28,55,000	DST ECR	2018-19
2.	Mrs T.Naga Durga Dr.J.Sivavara Prasad	Harness Of Maximum Solar Energy With	26,15,000	DST WOS-B	2018-19

		Solar PV Module Using Particle Swarm Optimization Technique File No : TPN / 22896			
3.	Dr.J.Sivavara Prasad	Solar-Grid Soft Switching Interconnected System using Modified Adaptive Neuro-Fuzzy Inference System based MPPT Technique CRG/2018/001192/EEC (Ver-1)	38,24,000	DST CRG	2018-19
4.	1. Dr.U.Uma Vani (EEE) 2. Mr. J.Siva Vara Prasad (EEE) 3. Mr. P.Deepak Reddy (EEE)	FIST Proposal Reference No: SR/FST/College-009/2016)	89,23,000	DST	2016-17
5	Mrs.T. Naga Durga(EEE) Dr. K.Harinadha Reddy (EEE)	Design and Development of Fuzzy Logic based Control technique for shunt Active power filter using DSP controller	29,80,000/-	WOS-A	2016-17
6	Mr.P.Deepak Reddy (EEE)	Modeling and Control techniques of DC-DC Converter	Rs.5 Lakhs	UGC MINOR	2015-16
7	Mr.J.Sivavara Prasad (EEE)	Development of Soft switching schemes for single and multi level dc-dc converter	Rs.5 Lakhs	UGC MINOR	2015-16
8	Mr.K.Sudheer Kumar(EEE)	Modeling and implementation of matrix converter	Rs.5 Lakhs	UGC MINOR	2015-16

Completed projects:

S.No.	Title of the Project	Project Investigator and Scientific Mentor	Funding Agency	Reference Number	Amount Sanctioned (Rs.in lakhs)	Status
1	FPGA based Active Power filter for industrial Drives and Non-linear loads for Power Quality improvement	Dr.Y.P.Obulesh	RPS/ AICTE	8023/RID/RPS-40/2010-11		Completed
2	Power quality	Dr.Y.Kusuma	Women	SR/WOS-	24.05	

	improvement with the design of neuro-fuzzy based active power filter for small nonlinear loads	Latha	Scientist-A/ DST	A/ET-13/2011		Completed

FUNDS RECEIVED FOR FDP & MODERNIZATION OF LABS FROM AICTE & DST

1. Received Rs.3.5 Lakhs from AICTE under SDP-Staff Development Program on "Advances in Power Electronics for renewable energy systems" in the year 2011-12.

2.Sanctioned Rs.6.0 Lakhs from AICTE under MODROBS for "Advanced Electric Drives Lab" in the year 2012-13

Staff Colloquiums:

S.No	Name of the faculty	Topic of presentation	Date of presentation given	A.Y
1	R.Padma	Induction motor control with small DC link capacitor inverter fed by MBC and HVC controllers	4-11-17	2017-18
2	T.Naga Durga	DC bus voltage regulation of shunt active power filter using PI, fast and fuzzy controller	24-2-18	2017-18
3	K.Nagalinga Chary	Islanding in power systems	10-3-18	2017-18
4	E.Raghu Babu	Hybrid Electrical Vehicles	17-3-18	2017-18
5	V.Siva Parvathi	Multi level full bridge ZVZCS DC-DC converter topology	17-3-18	2017-18
6	Ch.Rajesh	Analysis and implementation of single stage boost inverter	28-4-18	2017-18
7	J.Sivavara Prasad	Five level dc-dc soft switching converter	2-7-16	2016-17

8	P.Deepak Reddy`	Modelling and analysis of control techniques for dc-dc buck converter	30-7-16	2016-17
9	J.V.Pavan Chand	Power control and stability enhancement of VSC-HVDC grid interconnected systems	04-2-17	2016-17

Research Publications:

S. No	Name of the authors	Title of the paper	Name of the Journal	DOI/Indexing and Impact Factor	A.Y
1	J.Sivavara Prasad K.R.L.Prasad, G. Nageswara Rao	Linear Peak Current Mode Control Of Two Level Isolated DC-DC Converter	International Journal Of Advanced Research In Dynamical And Control Systems (JARDCS), ISSN No.1943-023X, Volume 10 , July 2018, Pages 42-57.	**Scopus Indexed** IF: 0.294	**2018-19**
2	M.Kiran Kumar J.Sivavara Prasad	Three- Port Soft - Switching DC-DC Interleaved Boost Converter Topology Using Renewable Energy Sources	International Journal Of Advanced Research In Dynamical And Control Systems (JARDCS), ISSN No.1943-023X, Volume 10 , July 2018, Pages 36-41.	**Scopus Indexed** IF: 0.388	**2018-19**
3	A.Sharmila Begum, P. Deepak Reddy	FOT Controlled Buck Converter Based Grid Integrated Scheme Using PV System	International Journal of Engineering Research and General Science Volume 6, Issue 4, July-August, 2018 ISSN 2091-2730, PP 74-82	Open Access	**2018-19**
4	E.Damodar Reddy J.V .Pavan Chand,	A Flywheel Energy Storage System Integrated With PV For FRT Support Of Grid Connected HVDC – Based Offshore Wind Farms	International Journal of Engineering Research and General Science Volume 6, Issue 4, July-August, 2018 ISSN 2091-2730, PP 60-66	Open Access	**2018-19**

5	G.Supriya K.Nagalinga Chary	Modeling And Implementation Of Hybrid AC/LVDC Micro Grid	International Journal of Engineering Research and General Science Volume 6, Issue 4, July-August, 2018 ISSN 2091-2730, PP 111-119	Open Access	**2018-19**
6	K.Ravikumar Reddy K.Sudheer Kumar	Sinusoidal Pulse Width Modulation Based Adaptive Dc Link Voltage For CPI Voltage Variations	International Journal of Engineering Research and General Science Volume 6, Issue 4, July-August, 2018 ISSN 2091-2730, PP 120-126	Open Access	**2018-19**
7	K.Sudha Rani E.Raghu Babu	Fuzzy Controller Based Low Cost High Efficiency Converter For Autonomous Photovoltaic Water Pumping System	International Journal of Engineering Research and General Science Volume 6, Issue 4, July-August, 2018 ISSN 2091-2730, PP 83-93	Open Access	**2018-19**
8	Sk. Nawaz shareef G.Tabita	Design And Analysis Of Modular Cascaded H-Bridge Multilevel Inverter For MPPT Based PV Connected Grid Applications	International Journal of Engineering Research and General Science Volume 6, Issue 4, July-August, 2018 ISSN 2091-2730, PP 67-73	Open Access	**2018-19**
9	1. P.Pragna Sree 2. J.Sivavara Prasad	Two level Half bridge dc-dc converter with reducing circulating losses	International Journal of Advance Engineering and Research Development e-ISSN (O): 2348-4470, Volume 4, Issue 10, October 2017.	Open Access	**2017-18**
10	1.AVGA Marthanda 2.G.V.Maruteswar	A Three Phase Sensor Less Field Oriented Control For BLDC Motor	International Journal of Advance Engineering and Research Development e-ISSN (O): 2348-4470, Volume 4, Issue 11, November 2017.	Open Access	**2017-18**
11	1. Kandula Ramesh, 2. K. Nagalinga Chary	Operation of Multilevel Inverters under Unbalanced DC Sources Using Neutral Voltage Modulation	International Journal of Latest Engineering Research and Applications (IJLERA) ISSN: 2455-7137 Volume – 02, Issue – 10, October – 2017, PP – 01-10	Open Access	**2017-18**

12	1.K.Mounika Yadav 2. Mr.K.Sudheer Kumar	Implementation of a New Control Strategy for Diode-Clamped Multilevel Inverter in Distributed Generation	e-ISSN (O): 2348-4470 p-ISSN (P): 2348-6406 International Journal of Advance Engineering and Research Development Volume 4, Issue 10, October -2017.	Open Access	**2017-18**
13	1.K. Chinababu 2.Ch. Rajesh	Closed loop PI control for solar fed switched reluctance motor drive based water pumping system	International Journal of Latest Engineering Research and Applications (IJLERA) ISSN: 2455-7137 Volume – 02, Issue – 10, October – 2017, PP – 64-77.	Open Access	**2017-18**
14	1.U. Sai Kumar 2.J. V. Pavan Chand	Source Current Harmonics Reduction with Improved Shunt Active Power Filter for Renewable Energy Source	International Journal of Latest Engineering Research and Applications (IJLERA) ISSN: 2455-7137 Volume – 02, Issue – 10, October – 2017, PP – 56-63.	Open Access	**2017-18**
15	1.R. Manikanta , 2.A.V.G.A. Marthanda	A three phase closed loop vector control for IPMSM drive	International Journal of Latest Engineering Research and Applications (IJLERA) ISSN: 2455-7137 Volume – 02, Issue – 10, October – 2017, PP – 72-77.	Open Access	**2017-18**
16	P.Ramesh, *E. Raghu Babu*	Pv Based Grid Interconnection At Distribution Level With Power Quality Improvement Features	International Journal of Advance Engineering and Research Development (IJAERD), e-ISSN : 2348-4470, p-ISSN : 2348-6406, Volume 04 Issue 11, November-2017	Open Access	**2017-18**
17	V.Siva Parvathi R.Padma	IOT based Home Automation using Arduino and NODEMCU	International Journal for Research in Applied Science & Engineering Technology	Open Access	**2017-18**

			(IJRASET), *Volume 6 Issue IV, April 201, ISSN: 2321-9653*		
18	J.Sivavara Prasad Y.P.Obulesh Ch.Sai Babu	FPGA controlled solar based zero voltage and zero current switching DC-DC converter for battery storage applications	Journal of Energy (**Elsevier**)	10.106/j.energy.2016.03.002 **SCI Indexed** IF: 3.65	**2016-17**
19	B.Eswar E.Raghu Babu	A Novel Full bridge DC-DC converter with energy recovery turn-off snubber	Journal for Research in Applied Science & Engineering Technology	UGC Approved	**2016-17**
20	A.V.Ravi Kumar K.Nagalinga Chary P.Srihari	Implementation of a closed loop system to improve DVR Reponse	Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering	DOI 10.17148/IJIREEICE.2016.4802	**2016-17**
21	A.Saritha Reddy T.Naga Durga	Reduced Switching Loss AC/DC/AC Converter with feed forward control	Journal of Innovative Research Technology		**2016-17**
22	R.Bhaskar Rao J.Sivavara Prasad K.R.L.Prasad	A High voltage gain flyback converter with soft switching for solar applications	Journal of Engineering & Technology		**2016-17**
23	J.Sivavara Prasad Y.P.Obulesh Ch.Sai Babu	FPGA controlled five level soft switching full bridge DC-DC converter for high power applications	Electrical & Electronics Journal **(Taylor & Francis**)	10.1080/23311916.2016.1253933 IF: 0.42 **SCI Indexed**	**2016-17**
24	R.Bhaskar Rao J.Sivavara Prasad K.R.L.Prasad	A Single Phase Photovoltaic Microinverter with Soft-Switching Flyback Converter	Journal of Control Theory & Applications	**Scopus Indexed Journal**	**2016-17**
25	M.Deepika K.Sudheer Kumar	A new H-Bridge Cascaded Multi level inverter with reduced number of components	Journal for Research & Development in Technology		**2016-17**
26	T.Raja Reddy Ch.Rajesh	High Gain Switched Boost Inverter with Single LC Filter	Journal of Innovative Research Methodology		**2016-17**
27	A.V.G.A.Marthanda , Dr. G.V. Marutheswar	Designing of Five Level Diode Clamped Inverter Based PV System Fed Induction Motor Drive	International Journal of Applied Sciences, Engineering and Management ISSN 2320 – 3439, Vol. 06, No. 01, January 2017, pp. 140-		**2016-17**

			144		
28	A.V.G.A.Marthanda , Dr. G.V. Marutheswar	Reduction of Torque Ripple using 3-Level and 5-Level Inverter for Three Phase Induction Motor	International Journal for Modern Trends in Science and Technology Volume: 03, Special Issue No: 02, March 2017 ISSN: 2455-3778		**2016-17**
29	M Gayathri Neelima, K Naga Linga Chary	A REDUCED SWITCH THREE-PHASE BUCK–BOOST AC–DC CONVERTER	INTERNATIONAL JOURNAL FOR RESEARCH & DEVELOPMENT IN TECHNOLOGY, Volume-6,Issue-2 (Sep-16) ISSN (O) :- 2349-3585		**2016-17**
30	J Sivavara Prasad, YP Obulesh, Ch Sai Babu	Three-Phase Three-Level Soft Switching Dc-Dc Converter for Industrial Applications	International Journal of Power Electronics and Drive Systems (IJPEDS), Vol. 8, No. 2, June 2017, pp. 785~794, ISSN: 2088-8694	IF: 0.71 **Scopus Indexed** Journal	**2016-17**
31	J Sivavara Prasad, YP Obulesh, Ch Sai Babu	FPGA Controlled Five-Level Soft Switching Full Bridge DC-DC Converter Topology	Journal of Electrical Systems, Volume 13, Issue 2, ISSN :11125209	IF:0.63 **SCI Indexed**	**2016-17**

Text Books:

S.No.	Title of the Book	Name of the Authors	Name of the Publisher with Address	ISBN number
1	Regulated Multiple Output Isolated DC-DC Converter Topologies	J.Sivavara Prasad Y.P.Obulesu Ch.Sai Babu	Lambert Academic Publishing, Meldrum street, Beau Bassin, Mauritius, Germany	978-620-2-02731-1
2	FPGA Controlled Five Level Soft Switching Isolated DC-DC Converter	J.Sivavara Prasad Y.P.Obulesu Ch.Sai Babu	Lambert Academic Publishing, Meldrum street, Beau Bassin, Mauritius, Germany	978-620-2-02812-7

B.Tech Main Projects-2017-18

Power Electronics and Drives Module:

S.No	BatchNo	Regd.No	Student Name	Name of Supervisor	Project Title
1	3	14761A0235	M. Bhavana	Mr.P.Deepak Reddy	Current mode Controlled DC-DC Buck Converter
2		14761A0282	K. Navitha		
3		14761A02A6	R. Srinivasa Rao		
4	4	14761A0220	G. Sai Kumar	Mr.J.S.V.Prasad	Zero voltage switching full bridge DC-DC PWM converter for high power applications
5		14761A02A7	S. Renuka Devi		
6		14761A0269	B. Siri Priya		
7	7	14761A0209	Ch. Taruni Sai Hanuma Devi	Mr.P.Deepak Reddy	Closed loop control system for buck converter using different techniques
8		14761A0278	K. Indiradevi		
9		14761A02A1	P. Sai Krishna		
10	8	15765A0223	P. Srinivasa Rao	Dr.M.S.Giridhar	A two stage boost conversion system for Photo-Voltaic Based HVDC Grid
11		14761A0296	M. Suma Sree		
12		14761A0265	A. Srujana		
13	9	14761A0277	K. Naga Sai Sowjanya	Mr.Y.Murali Krishna	Design of single stage grid type inverter for residential single phase application
14		14761A02A3	P. Raga Sai		
15		14761A0275	J. Joy Vireesh		
16	10	14761A0247	R. Narasimha Rao	Mr.A.Imran	A Novel Single stage Buck-Boost inverter
17		15765A0220	M. Praveen Kumar		
18		14761A0264	A. Mohana Venkata Dileep		
19	12	14761A0255	S. Naga Prasanna	Mr.J.S.V.Prasad	Commutation Torque Ripple Reduction strategy of Brushless DC motor using single DC Current Sensor
20		14761A0231	L. Shainy Supriya		
21		14761A0299	N. Nageswararao		
22	13	14761A0271	G. Sneha	Dr.K.Harinadha Reddy	Stability of Boost Converter Connected to a Photovoltaic Energy System
23		14761A0266	A. Rajesh		
24		14761A0210	Ch.S.V.N. Phani Kumar		
25	20	15765A0209	N. Lakshmi Bhargavi	Dr.P.Sobha Rani	Reduction of Voltage and Current Ripples in Z-Source Inverter for Photo Voltaic Applications
26		15765A0218	G. Durga Rao		
27		14761A0280	K. Satya Sandeep Reddy		
28	27	15765A0212	T. Reddy Savithri	Dr.M.S.Giridhar	An Optimal method to design a trap CL filter for a PV AC-module based on Flyback inverter
29		15765A0203	B. Usha		
30		14761A0267	B. Anand Kumar		
31	39	14761A02B7	V. Tirumala Bharadwaj	Mr.S.Prem Kumar	DC-AC switching converter modelling of a

S.No	BatchNo	Regd.No	Student Name	Name of Supervisor	Project Title
32		15765A0213	U. Mani Venkata Teja		PV grid connected system under islanding phenomena
33		14761A0294	M. Maneesh Kumar Reddy		
34	40	14761A0243	P. Sai Priyanka	Mr.A.V.Ravi Kumar	Reduction of total harmonic distortion by using seven level active neutral point clamped converter
35		14761A0261	Abdul Nadeem		
36		14761A0203	B. Gopal Krishna Naik		
37	45	14761A0238	N. Purna Chandra Reddy	Mr.K.Nagaling a Chary	A variable DC link based hybrid multilevel inverter topology for low voltage applications
38		14761A0253	Shaik Salma		
39		14761A0257	T. Leela Venkata Sai Krishna		
40		14761A0202	B. Prathap Raju		

B.Tech Main Projects-2016-17

Power Electronics and Drives Module:

S.No	BatchNo	Regd.No	Student Name	Name of Supervisor	Project Title
1	3	13761A0215	Cheruku Rajani	Mr. Ch. Rajesh	Single stage Grid connected Inverter for battery Energy Storage System
2		13761A02A0	Pavuluru Srinadh		
3		14765A0205	Hari Krishna Vavilapalli		
4	4	13761A0209	Bhanu Venkatesh Amudala	Mr. J.V. Pavan Chand	Grid connected VSC-HVDC based offshore wind farms and fault ride through support
5		13761A0298	Pantangi Tarun Kumar		
6		13761A0275	Dara Avinash		
7	9	13761A0261	Adapa Sai Kiran	Mr. J. Siva Vara Prasad	Compensation of harmonics using active power filter for renewable power generation system
8		13761A0236	Nalluri Anuhya		
9		13761A02B9	Yadavalli Dasarada Naga Prasanna Reddy		

S.No	BatchNo	Regd.No	Student Name	Name of Supervisor	Project Title
10	10	13761A0232	Meka Baby Prathyusha	Mr. P. Deepak Reddy	Robust adaptive back stepping controller design for DC-DC buck converters with external disturbances
11		13761A0231	Meduri Sudheer Kumar		
12		13761A02A4	Relangi Udaykiran		
13	12	13761A0285	Kante Bhavya	Mr. A. V. Ravi Kumar	Development of a unified control strategy for 3-phase inverter in distributed generation
14		13761A0248	Salluri Parimala		
15		13761A0280	Guduru Venkateswara Reddy		
16	17	13761A0217	Dara Anagha Devi	Mr. J.V. Pavan Chand	An input-parallel output series DC/DC Converter
17		13761A0291	Mettu Venkata Pujitha		
18		13761A02B7	Vemireddy Prabhakar Reddy		
19	21	13761A0224	Kandula Kalyan Srinivas Reddy	Mr. A. V. Ravi Kumar	Implementation of Buck Boost converter for both AC and DC using MATLAB
20		13761A0219	Duru Meghana		
21		13761A0277	Divi Ram Siva Sainath		
22	23	13761A0212	Channamallu Sai Bala	Mr. A.V.G.A. Marthanda	Speed control of universal motor using IGBT-Hardware
23		13761A02B6	Veesam Raviteja		
24		14765A0223	Tammarapu Narendra		
25	26	14765A0218	Jonnala Sainavya	Mr. M.B. Chakkravaarthy	Modelling and simulation of Cyclo converter
26		13761A02B3	Tummala Satya Harika		

S.No	BatchNo	Regd.No	Student Name	Name of Supervisor	Project Title
27		13761A0265	Bandaru Sunil Gopi Krishna Raju		
28	27	13761A0260	Yerramsetti Prudhvi Teja	Dr, M. Uma Vani	Power quality improvement in a grid connected PV system using converter controls
29		13761A02B5	Vanisha Sri Peetha		
30		13761A0227	Kovelakuntla K Chaithanya Ambedkar		
31	28	13761A0241	Paruchuri Sai Charan	Mr. S. Prem Kumar	Steady state time comparison between Double frequency Buck converter and conventional buck converter
32		13761A0216	Chunduru Lakshman Kumar		
33		14765A0211	Valluru Amruthavalli		
34	32	13761A0213	Chappidi Purnadurga	Mr. J. Siva Vara Prasad	PV-Grid inter connected single – phase seven – level inverter topology
35		13761A0223	Kaipu Venkateswara Reddy		
36		13761A0205	Banda Sai Swethan		
37	33	13761A0214	Chennu Revanth Varma	Mr. P. Deepak Reddy	Cascaded control structure for the buck converter in CCM
38		14765A0208	Rapeti Varaha Siva Satya Laxmana Rao		
39		13761A0206	Bandlamudi Arun Kumar		
40	37	13761A0257	Veeravalli Sai Kumar	Ms. R. Padma	Improved active power filter performance for renewable power generation systems
41		13761A0269	Chagamreddy Kartheek Reddy		

S.No	BatchNo	Regd.No	Student Name	Name of Supervisor	Project Title
42		13761A02B4	Tupakula Vamsi Krishna		
43	38	14765A0219	Kattera Naga Seshu	Mr. Imran Abdul	A Novel PWM technique for chopper cell based modular multilevel converters
44		13761A0290	Mallela Uma Sai Krishna		
45		13761A0251	Shaik Riyaz Sharif		
46	40	13761A0282	Jujjavarapu Sneha	Mr. Ch. Rajesh	Novel DC-DC Buck Boost Converter with soft switching operation
47		13761A0250	Shaik Maabu Subhani		
48		14765A0213	Bandapu Chakrapani		
49	41	14765A0216	Gantela Prakasini	Mr. K. Sudeer Kumar	Development of multi carrier PWM technique for multi level inverter
50		13761A0270	Cheedella Venkata Siva Ramakrishna		
51		13761A0293	Muthyala Gopala Krishna		
52	42	13761A0237	Nanabala Sekhar	Mr. S. Prem Kumar	MSPWM and MPPWM techniques for asymmetric H-bridge multi level inverter
53		13761A02A7	Shaik Altaaf Hussan		
54		13761A0246	Rayapudi Jaswanth Krishna		
55	43	13761A0238	Nanduri Reshma	Mr. A.V.G.A. Marthanda	Z-source inverter fed induction motor drive
56		13761A0222	Jorige Kiransiddhardha		
57		13761A0294	Nallamothu Subhash		
58	44	13761A0279	Gorla Venu Babu		

S.No	BatchNo	Regd.No	Student Name	Name of Supervisor	Project Title
59		13761A0287	Kelavathu Uma Devi	Mr. Ch. Phanindra	Seven -level, three-phase cascaded H-bridge inverter with a single DC source
60		13761A0242	Peralla Ravi Teja		
61	45	13761A0284	Kamani Mohanakrishna	Mrs. Tabita	Pre-determination performance of Electrical machine a cloud based computational model
62		14765A0206	Pentakota Jabili		
63		14765A0220	Kojja Gopi Krishna		

B.Tech Main Projects-2015-16

Power Electronics and Drives Module:

S.No	BatchNo	Regd.No	Student Name	Name of Supervisor	Project Title
1	7	12761A02B7	V. Naga Jaya Bhargavi	Mr. J. Siva Vara Prasad	Direct Torque Control of Induction Motor Drives
2		12761A02B6	V. Jagadish Kumar		
3		12761A0248	S. Indira Priyadarsini		
4	8	13765A0208	Shaik Dil Shad	Mr.K.Nagalinga Chary	Photo Voltaic Power Generation System with a Five Level Inverter
5		12761A0274	G. Siva Mahesh Babu		
6		12761A0234	M. Basava Krishna Priya		
7	9	12761A0240	P. Srikanth	Mr.P.Deepak Reddy	Simulation of Voltage mode digital pulse Skipping Modulation of Buck Converter
8		12761A0224	J. Aruna Sri		
9		12761A0261	A. Chandra Kanth		
10	10	12761A0238	P. Tejaswi	Mr. J. Siva Vara Prasad	Stability Analysis of Brush Less DC Motor using PWM Technique
11		12761A0257	Y. Divya Saraswathi		
12		12761A02C0	Y. Narendra Reddy		
13	12	12761A0276	J. Naga Sai	Mr. J.V.Pavan Chand	Hysteresis Controller and Delta Modulator-A Two Viable Scheme for current Controlled Voltage
14		12761A0299	P. Bharath Chandra		

S.No	Batch No	Regd.No	Student Name	Name of Supervisor	Project Title
15		12761A0214	Chinni Prasanna		Source Inverter
16	13	12761A0262	A. Bhavya Sindhu	Mr. Ch.Rajesh	Three Phase to Single Phase Power Converter System
17		12761A0284	K. Naga Chandra		
18		12761A0203	A. Praveen Kumar		
19	14	12761A0228	K. Pavan Pulla Rao	Mr.E.Raghu Babu	PFC Cuk Converter-Fed BLDC Motor Drive
20		13765A0204	G. Saikumar		
21		12761A0287	M. Keerthi		
22	15	12761A0235	N. Sai Krishna Prasad	Mr.A.V.Ravi Kumar	Compensation of Harmonics Using Active Power Filter for Renewable Power Generation System
23		13765A0224	S. Prasanth		
24		12761A02A8	Shaik Parveen		
25	19	12761A0226	K. Ramya Sai	Mr.A.V.G. A.Marthanda	Two Viable Schemes of Induction Motor Torque Control
26		12761A0260	Y. Jaya Satyanarayana		
27		12761A02A0	P. Venkata Raghuramreddy		
28	21	12761A0272	G. Venkata Sai Harish	Ms.V.Siva Parvathi	An Interleaved Soft-Switching Boost Converter
29		13765A0219	E. Jagadeesh		
30		12761A02B1	S.V.R.S.Vinay Kumar Gupta		
31	23	12761A0250	S. Lakshmi Manasa	Mr. S. Prem Kumar	Bi-Directional DC-DC Converter
32		12761A0231	L. Vijay Kumar		
33		13765A0201	Abdul Varis		
34	25	12761A0255	U. Mukund	Mr.K.Sudhher Kumar	Modelling of Induction Heating System using Half Bridge Resonant Converter
35		12761A0218	D. Kishore		
36		12761A0246	Shaik Dariya Hussain		
37	26	12761A0297	P. Mounika	Mr.M.Vijay Kumar	Suppression of Leakage Current in Multilevel Inverter Based PV System for Grid Protection
38		13765A0209	Shaik Khadara Baba		

S.No	BatchNo	Regd.No	Student Name	Name of Supervisor	Project Title
39		13765A0211	T. Ramya Swathi		
40	30	12761A0291	M. Rajya Lakshmi	Mr.A.V.G. A.Marthanda	A Study of Brushless DC Motor using DTC Technique
41		12761A02B0	Shaik Sameer Saheb		
42		12761A0264	B. Bangaru Naik		
43	31	12761A0295	M. Poornachand	Mr.B.Buchi Reddy	Design & Implementation of Three Level Inverter Topology
44		13765A0220	K. Satish Babu		
45		12761A0277	K. Sai Kumar		
46	37	12761A0283	K. Ramya Keerthi	Mrs. T.Naga Durga	Harmonic Mitigation using Seven Level Shunt Active Power filter with PI Controller
47		12761A02A2	P.V.V.N Phanindra		
48		12761A0254	U. Vinay Naga Kumar		
49	42	12761A0271	G. Talpa Siva Sai	Mr.K.Sudhher Kumar	Simulink Model of Novel Sparse Step-up Matrix Converter
50		12761A0268	Ch. Bharath Chowdary		
51		12761A02B5	V. Praveen		
52	46	12761A0202	A. Durga Prasad	Mr.P.Deepak Reddy	Simulation of Current Mode Pulse Train Controlled DCM BUCK Converter
53		12761A02B9	V. Raghu Rami Reddy		
54		12761A0209	B. Solomon Swaroop		

PED Research Group Coordinator