BHARATIYA VIDYA BHAVAN'S

SARDAR PATEL COLLEGE OF ENGINEERING

(Government Aided autonomous institution affiliated to University of Mumbai)

Website: http://www.spce.ac.in

DEPARTMENT OF ELECTRICAL ENGINEERING

ANNUAL REPORT

2015-2016

ACTIVITIES SUMMARY SHEET 2015-2016

Our Inspirations

Dr. P. H. Sawant
Professor & Principal - SPCE, Andheri

Dr. M. M. Murudi
Professor & Vice Principal - SPCE, Andheri.
TEQIP Coordinator

1. Message from Head of Department

It is a great pleasance to share with you Annual Report 2015-16 for the Electrical Engineering Department (EED), Sardar Patel College of Engineering (SPCE). Currently department has one UG program B. Tech. Electrical and one PG program M. Tech. Electrical) Power Electronics & Power System. We have applied to University of Mumbai for Ph.D. center in Electrical Engineering. This was possible due to continuous efforts of all stake holders of the department & continuous support & encouragement of Principal Dr. P. H. Sawant & Vice Principal Dr. M. M. Murudi.

Many of the staff members are pursuing Ph. D. I am very happy to mention that this year Dr. Nadkishor Kinhekar and Dr. B. B. Pimple completed Ph.D.

Being autonomous institute, measures are taken to reorient curricula, teaching & learning methods & assessment procedures to promote Outcome Based Education. The scheme & syllabi are modified based on the inputs obtained from industrial experts. To interact with our stakeholders various meets are arranged this year namely parent meet, alumni meet and Industry experts meet. The suggestions are noted for further action.

This year first batch completed the value added course on 'PLC programming and applications ' which is offered at semester IV.

It's a great pleasure to mention here that this time first Industry supported Elective subject is offered. Department signed agreement with L & T for the elective subject at semester VIII, 'Industrial Automation'. Industry participation helped students to correlate the theoretical knowledge with practical applications.

Department signed the MOU with L & T to enhance interaction in the fields like

automation, switchgear and protection ,Drives and control, Power Electronics.

Students are encouraged to do internships in industry. In the year 2015-16, our students have done internships in industries like Siemens, Railways, BEST, Tata Power, TOYO, AKER solutions etc.

Students passionately participated in national level technology competitions like ROBOCON. Final year students have participated and won prizes in project competitions. Some of the projects are done with industries like Schneider, L & T. UG and PG students have contributed in paper publication.

Training programs and workshops are conducted on MATLAB, SCILAB. Industrial visits are arranged in Railways and in Reliance. . Various experts from industries guided the students through guest lectures in the application areas beyond syllabus.

As SPCE is academic affiliate partner of IET (Institute of Engineering and Technology), Department has taken initiative to host IET PATW 2016 competition at SPCE. Students from various colleges took part in this competition. It was successful because of the team work of all organizing committee c which comprised of teachers, nonteaching staff, and students from all branches of SPCE.

Dr. Bijnan Bandyopadhyay, IIT Bombay has been senior research advisor for the department. Under his guidance department is working on research project proposals.

With background of good academics, our students are pursuing higher studies in India as well as abroad in the core fields and in the management. Campus placements are also good as all eligible and interested students got placed. Alumni are supporting in all the department activities as a representative in subject board, III cell, BOG, panel of examiners, guest speakers, etc.

Department is encouraging nonteaching staff to undergo training and workshops in technical as well as personality development fields.

Strengthening the newly started PG program, addition of new PG programs in Electronics, control and automation, starting Ph. D. centre are the areas in which we are working out currently. I am sure these goals can be achieved with great support from our stakeholders and the continuous efforts of all the faculty members, staff and our students.

2. Vision and Mission of the Department

Vision

Department of Electrical Engineering aspires to produce socially responsible and dedicated electrical engineer by providing conceptual learning that enhances research based activities.

Mission

- To educate through classroom teaching along with intensive practical activities and promote academic excellence with the help of expertise in different fields of Electrical Engineering from industries and academic institutes.
- To promote innovative ideas through seminars and projects.
- To bring awareness of social responsibilities as an Electrical Engineer.

3. Programme Educational Objectives [PEOs]

- The students will have the skills and expertise in the area of Electrical Engineering with sound foundation, essential engineering fundamentals and latest development in the field of Electrical Engineering.
- The student will become proficient in engineering and communication skills eventually leading them to higher studies in various discipline of Electrical Engineering.
- The students will have skills to participate effectively in design and implementation of multidisciplinary projects.
- The student will be lifelong learner respecting professional ethics.

4. Programme Outcomes [POs]

- Demonstrate the real world engineering problems and techniques necessary to formulate analyze and solve.
- Demonstrate the ability to design and conduct experiments, interpret and analyze data, and report result.
- Demonstrate an ability to function on engineering and science research projects, as well as on multidisciplinary industrial projects.
- Demonstrate the ability to design electrical systems that meets desired specifications or requirements.
- Comprehend issues / problems in various domains of Electrical Engineering.
- Demonstrate an understanding of professional & ethical responsibilities.
- Be able to communicate effectively.
- Develop an ability of adapting to the latest developments in software, equipment's or technology in the field of Electrical Engineering.
- Develop an ability of self-education and understand the value of life-long learning.
- Demonstrate an awareness of contemporary issues and assess the impact of engineering on society.
- Produce skilled graduate engineers with goodwill for humanity.

5. Overview of Academic Program

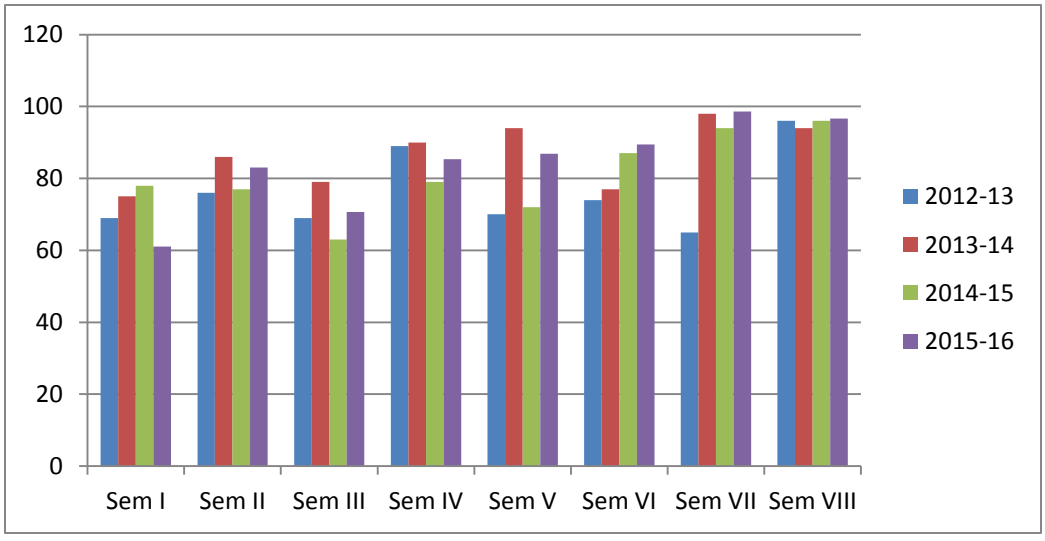
Academic Program	Specialization	Duration	Intake
Undergraduate			
Bachelor of Technology (B. Tech.)	**Electrical Engineering**	**Four Years**	**60**
Postgraduate			
Master of Technology (M. Tech)	**Power Electronics and Power System**	**Two Years**	**18**

6. Department Financial Data (Rs.)

Expense heading	AY2015-16	AY2014-15	AY2013-14
Laboratory Expenses	1,91,522	1,72,650	1,5,4600
Laboratory Consumables	1,26,067	1,67,591	1,10,219
Training and Travelling	--	5,38,888	32,716
Training and Placement Office	--	29,817	91,403
FDP under TEQIP	--	7,77,484	15,22,398
Laboratory Development under TEQIP	--	6,26,6247	21,04,585
Remedial Coaching under TEQIP	--	5,250	8,250
Total	**3,17,589**	**79,57,927**	**40,24,171**

7. Trends and Statistic - Result Analysis (UG)

Percentages of passing undergraduate students in each semester of the courses are as shown in the chart for current and last 4 academic years.



UG Result Analysis of Last four year

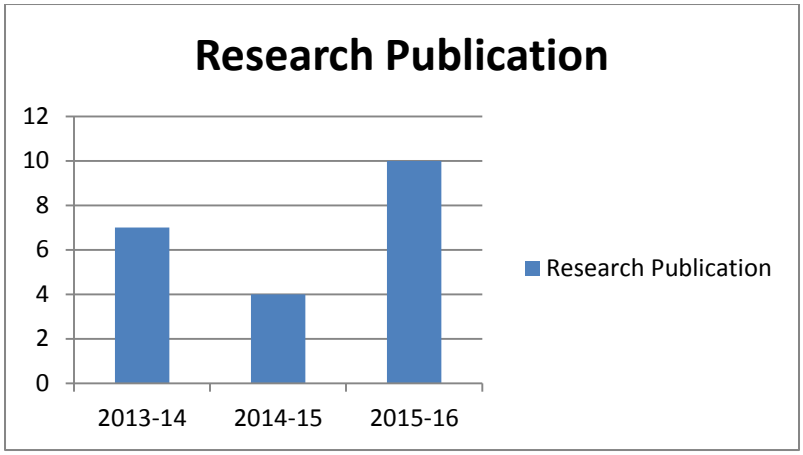
8. Faculty Research Publication

International Journal:

1) **A. Sabnis**, L. Vachhani, Arunkumar G., V. Reddy, "Probabilistic Approach for Visual Homing of a Mobile Robot in Presence of Dynamic Obstacles," accepted for publication in IEEE Transaction on Industrial Electronics (2016).
2) **S. Lavand** and S. Soman, "Predictive Analytic to Supervise Zone 1 of Distance Relay using Synchrophasors", *IEEE Transactions on Power Delivery*, (2016), DOI: 10.1109/TPWRD.2016.2521784.
3) **S. Daingade**, A. Sinha, A. Borkar and H. Arya, "A Variant of Cyclic Pursuit for Target Tracking Applications: Theory and Implementation", Autonomous Robots, (2015), 1-18, DOI: 10.1007/s10514-015-9487-3.
4) G. R. Mallik, **S. Daingade** and A. Sinha, "Scalable Multi-agent Formation using Consensus based Deviated Cyclic Pursuit with Bearing only Measurement", European Journal of Control, (2015), DOI: 10.1016/j.ejcon.2015.10.002.
5) **S. Daingade** and A. Sinha, "Fail-safe Encircling Strategy for Multiple UA Vs with Bearing only Measurement", International Journal of Micro Aerial Vehicles, accepted (2015).

International Conference:

1) **Nandkishor Kinhekar**, Narayana Prasad Padhy, Furong Li and Hari Om Gupta, "Utility Oriented Demand Side Management Using Smart AC and Micro DC Grid Cooperative", Accepted for presentation at *IEEE Power & Energy Society General Meeting*, Boston, July 17-21, 2016.
2) **S. Lavand** and S. Soman, "Mining Spatial Frequency Time Series Data for Event Detection in Power Systems", *13th IET International conference on Developments in Power System Protection*, March 2016.
3) Vinayak Sonandkar, Arun Bhati, Dheeraj Gupta, Shivdayal Chavan, **Nandkishor Kinhekar**, N. P. Padhy, "Power measurement using arduino for effective demand response", *International Conference on Power System 2016 (ICPS-2016)*, IIT, Delhi, India, March 4-6, 2016.
4) **Nandkishor Kinhekar**, Narayana Prasad Padhy and Hari Om Gupta, "Particle Swarm Optimization Based Demand Response for Residential Consumers", *IEEE Power & Energy Society General Meeting*, Denever, Colarado, USA, July 2015.
5) Galib R. Mallik, **Sangeeta Daingade** and Arpita Sinha, "Consensus based Deviated Cyclic Pursuit for Target Tracking Applications", *European Control Conference (ECC 2015), Johannes Kepler University, Linz, Austria*, 15th to 17th July 2015.



Faculty Research Publication for last three years

9. Faculty and Staff

Faculty

Mrs. V. P. Joshi
Associate Professor & I/C Head
BE (Electrical), ME (Electx), 28 Yrs of Experience
Area of specialization: - Electronics

Ms. Ramadevi C
Associate Professor
BE, M Tech (Electrical), 28 Yrs of Experience
Area of specialization: - Power Systems

Dr. B. B. Pimple
Associate Professor
BE, M Tech (Electrical),), 19 Yrs of Experience
Area of specialization: - Power Systems

Mrs. Anupa Sabnis
Associate Professor
BE (Electrical), ME (Electx), 29 Yrs of Experience
Area of specialization: - DSP Communication Engg.

Dr. Rahul Dahatonde
Associate Professor & TPO
BE (E & TC), ME (E & TC), Ph. D. 12 Yrs of Experience
Area of specialization: - Antennas, Communication.

Mrs. Sangeeta Daingade
Assistant Professor
BE, M Tech (Electrical), 17 Yrs of Experience
Area of specialization: - Control Systems

Dr. N. W. Kinhekar
Assistant Professor
BE (Electrical), MTech(Electrical), 16 Yrs of Experience
Area of specialization: - Power System, Demand side Management

Mr. N. G. Bhitre
Assistant Professor
BE (Electrical), ME (Electrical), 16 Yrs of Experience
Area of specialization: - Control Systems

Ms. Swati Lavand
Assistant Professor
M.E. (Electrical Power System)
10 years of Teaching Experience
Research Area :Power System protection, WAMS

Mrs. Ushma Shah
Assistant Professor
BE (Electronics), 9.5 Yrs of Experience
Area of specialization: - Electronics

Mrs. Sumbul Abidi
Assistant Professor
BE (Electrical), M. Tech (Electrical), 10 Yrs of Experience
Area of specialization: - Power System & Drives

Mrs. Prajakta Joshi
Assistant Professor
BE (Electrical), 08 Yrs of Experience
Area of specialization: - Power System

Mrs. Matilda J
Assistant Professor
BE (Electrical), 7 Yrs of Experience
Area of specialization: - Power Electronics and Power System

Mr. Rahul Chavhan
Assistant Professor
BE (E&TC), ME (E&TC), 5 Yrs of Experience
Area of specialization: - VLSI and Embedded System Design

Mr. Vishal Dhake
Assistant Professor
BE (Electrical), M E (Electrical), 2.5 Yrs of Experience
Area of specialization: - Power Systems

Ad-hoc Faculty

Mrs. Hemlata Rao
Assistant Professor
BE (Electrical), ME (Electrx), 10 Yrs of Experience
Area of specialization: - Electrical & Electronics

Mr. C. B. Lahoti
Assistant Professor
M.E. (Elect). 25 Yrs of Experience.

Mrs. Varsha T
Assistant Professor
BE (Electrical), M.Tech (Electrical),
Area of specialization: - Control Systems

Ms. Deepti Bansod
BE (Electrical) M.Tech. (Energy). 10 Yrs of Experience
Area of specialization: - Energy

Supporting Staff

Shri P R Amborkar
(Forman)

Shri P M Dhopatkar
(Lab Assistant)

Shri A M Shah
(Electrician)

Shri R R Govalkar
(Electrician)

Shri S V Shelar
(Electrical Mistry)

Shri S P Pawar
(Electrician)

Shri S S Gurav
(Data Entry operator)

Shri S I Naik
(Lab Attendant)

Shri N P Pujari
(Junior Clerk)

Shri V N Rembavlkar
(Lab Attendant)

Shri B L Solanki
(Lab Attendant)

Shri T Diwan
(Lab Attendant)

Smt S S More
(Mali)

Shri V Y Tambvekar
(Lab Attendant)

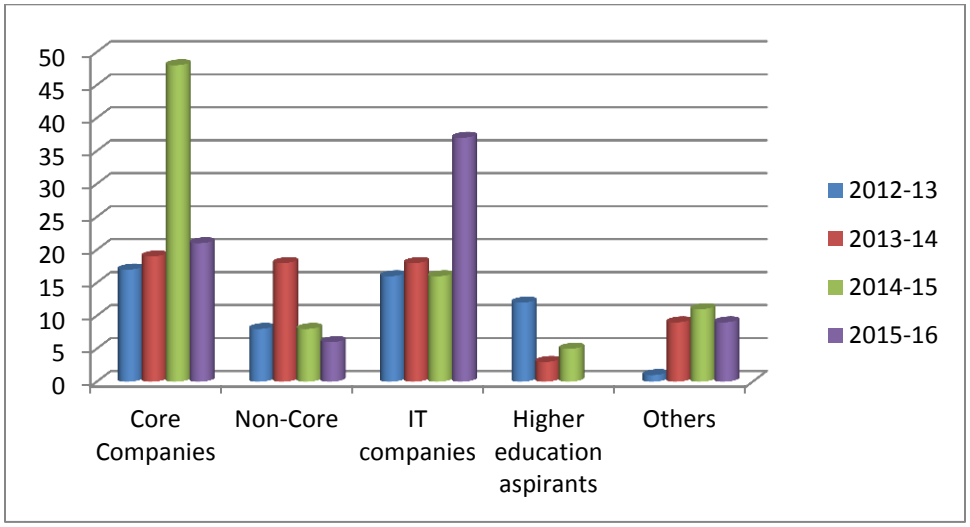
Shri S Ambre
(Hamal)

Shri I Saudagae
(Hamal)

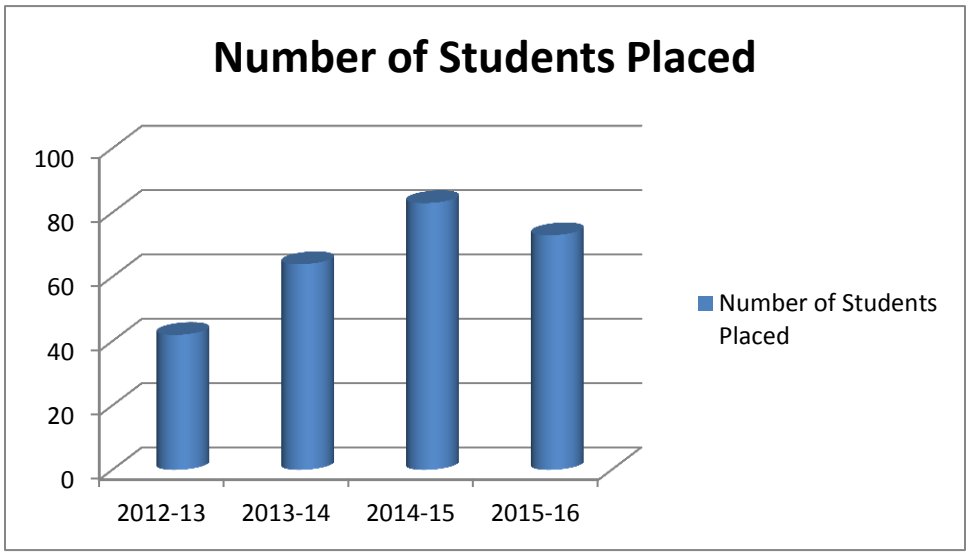
Shri C M Deladia
(Lab Attendant)

10.Campus Placement

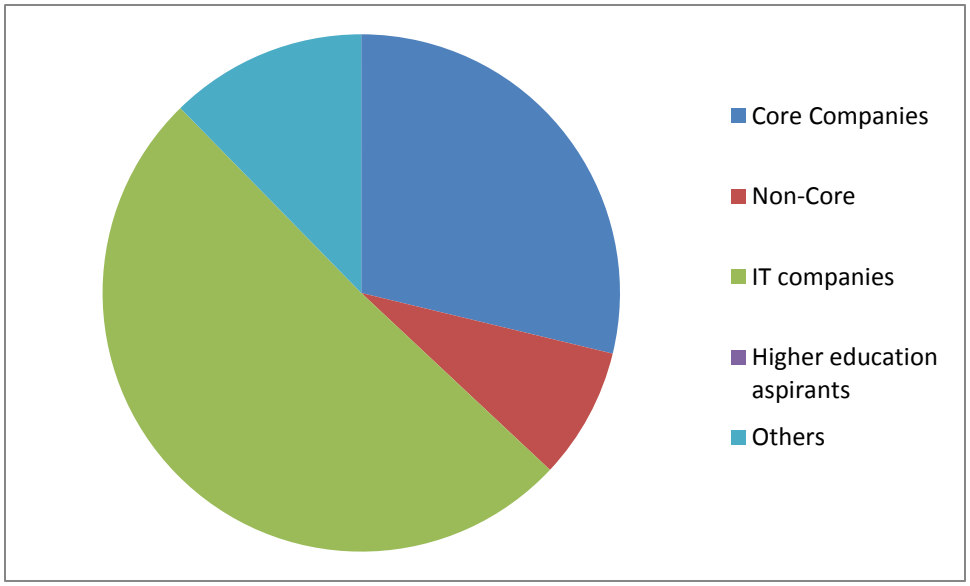
Placement Statistics (Domain wise) for B. Tech. Electrical						
Year	Number of students placed in Company				Total Placed	Higher Education Aspirants / Family Business / Not interested
	Core	Non-Core	IT	Others		
2015-16	21	6	37	10	74	17
2014-15	48	8	16	11	83	5
2013-14	19	18	18	9	64	3
2012-13	17	8	16	1	42	12



Industry wise Placements of last four years



Year wise Placements of last four year.



Industry wise Placements in academic year 2015-16

11. Laboratories

Sr. No.	Name of Laboratory	Associated Faculty
1	Basic Electrical & Electronics Laboratory	Prof. Ushma Shah Prof. Matilda J
2	Machines Laboratory	Prof. Ramadevi C
3	Renewable Energy Laboratory	Prof. Ramadevi C
4	Switchgear Laboratory	Prof. Prajakta Joshi
5	Control System Laboratory	Prof. N G Bhitre
6	Electronics Laboratory	Prof. V P Joshi
7	Microcontroller Laboratory	Prof. Matilda J
8	Integrated circuits Laboratory	Prof. Ushma Shah
9	Communications Laboratory	Prof. Anupa Sabnis
10	Measurement Laboratory	Prof. N W Kinhekar
11	Power Electronics Laboratory	Prof. B B Pimple
12	Drives and Control	Prof. B B Pimple

12. Industry Institute Interaction

MoU with Industries

MOU Signed: The agreement for the industry supported elective course is signed with L and T.

This year we have introduced new elective subject Industrial Automation which has conducted by Mr. Apurva Ghosh from L&T.

Industrial Visits

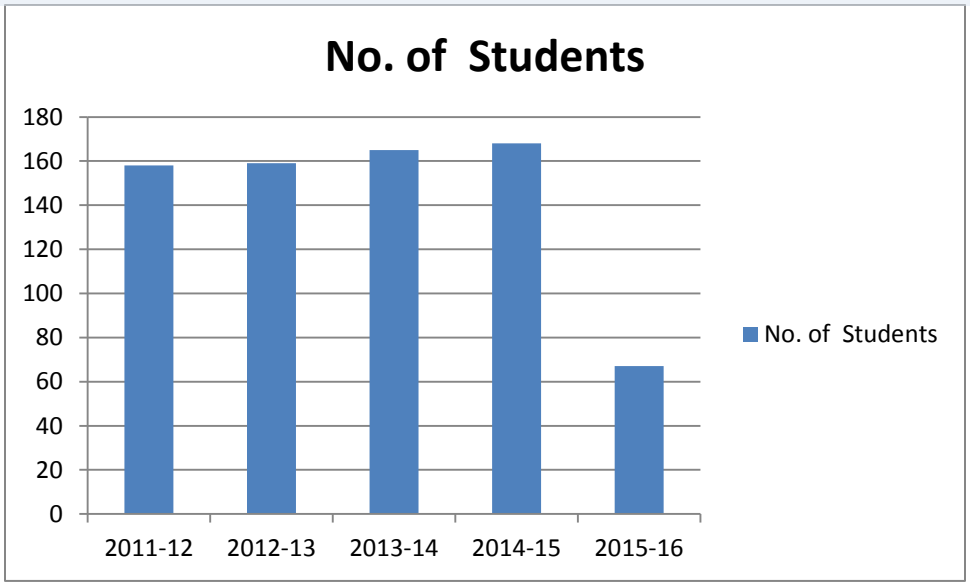
Industrial Visit is a part of college curriculum. With an aim to go beyond academics, industrial visit provides students with an opportunity to learn practically through interactions, working methods and employment practices. In every academic year our department arranges various industrial visits in order to provide them the exposure to recent technologies which have emerged and help them to co relate the theoretical knowledge with the practical knowledge.

Industrial Visit arranged for Final year students for the subject "Electric Traction" at Indian Railways Workshop, Sanpada, Navi Mumbai.

The Industrial Visit to Reliance Thermal Power Station was organized by Electrical Engineering Students Association (EESA) in association with IET on 12 September 2015.

Internship Training

Every year around hundreds of students underwent internship training.
These trainings benefit the students by making them aware of the trends/activities carried out in an industry and will make them job ready.
Such students can contribute more effectively in classroom teaching with their views, knowledge, experiences gained in industry.



Successive Chart of Internship Training for Last four years.

Industrial Projects (Undergraduate)

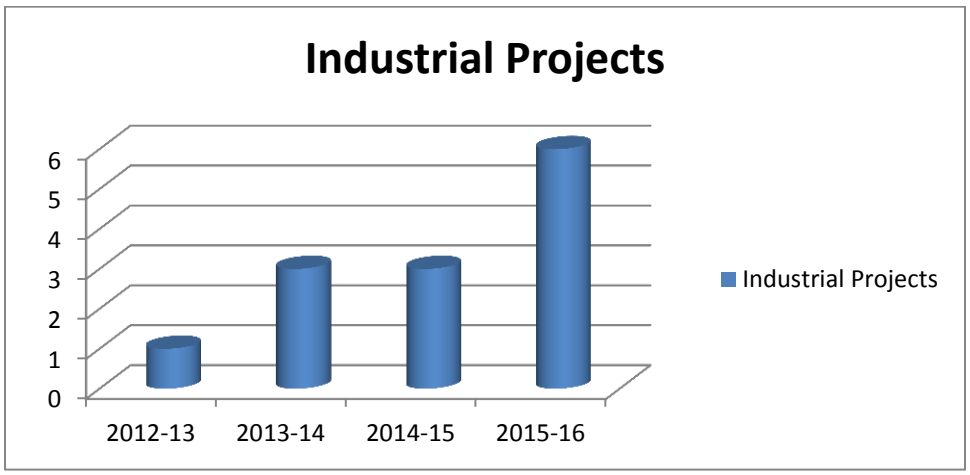
The industrial projects benefits the students by making them aware of the trends/activities carried out in an industry and will make them job ready. The students can contribute more effectively in classroom teaching with their views, knowledge and experiences gained in industry. List of industrial projects is as follows.

Group No.	Name of the students	Project topic	Guide	Name of industry
1	Rohan Jalgaonkar Rohit Dukhande Suvedh Jaywant Vaibhav Fere	Efficient method of load flow studies for distribution systems	Ms. Vidyullata Joshi	TOYO Engineering India Ltd.
2	Priyanka Jethe Pooja Pangarkar	Online monitoring of dissolved gas in	Ms. Prajakta	HVDC, Padghe

	Harshali Sawant Gauri Wagh	transformer.	Joshi	
3	Shrikant Chinchole Pranita Sadavarte Utkarsha Barate Sampada Sahare	Process planning and implementation in testing of switchboard panel	Ms. Hemlata Rao	Siemens, Kalwa

Short Circuit Model Development on EXCEL

Pranil Ugale from B.Tech (Electrical) helping Mukul Mehta(T.E Elect) and Alisha Gedam (T.E Elect) to develop this model.



Last Three years Industrial Projects done by Students

Projects with ICT (Institute of Chemical Technology)

1. **P01: Micro-channel reactors for highly pressurized and exothermic reactions**
   Students:
   - Krunal Chaudhari - T.Y. Electrical
   - Vaibhav Bhosale - T.Y. Electrical

2. **P02: Bio-sensors for detection of pesticides in water**
   Students:
   - Krunal Chaudhari - T.Y. Electrical
   - Rahul Kamath - T.Y. Electrical

3. **P03: Microwave assisted micro-reactor systems**
   Students:

- Krunal Chaudhari - T.Y. Electrical
- Pratik Hirani - T.Y. Electrical
- Prakhar Mehta - T.Y. Electrical
- VaibhavBhosale - T.Y. Electrical
- Harsh Gosar - T.Y. Electrical
- Rahul Kamath - T.Y. Electrical

4. **P04: Microwave Reactor**
   Students:

- Vaibhav Bhosale - T.Y. Electrical
- Pratik Hirani - T.Y. Electrical
- Rahul Kamath - T.Y. Electrical
- Prakhar Mehta - T.Y. Electrical
- Harsh Gosar - T.Y. Electrical

5. **P07: Pyrolysis system for conversion of plastic waste to useful chemicals**
   Students:

- Prasad Hadawale - T.Y. Electrical
- Jay Kshirsagar - T.Y. Electrical
- Nayan Bagale - T.Y. Electrical

6. **P09: Laboratory scale inexpensive gas chromatograph**

A gas chromatograph is a very important device used for the separation of gases. A gas chromatograph available in the market is very costly. So this project aims at creating an inexpensive chromatograph so that it can be afforded by many.

13. Courses and Conferences Attended by Faculty Under TEQIP

Sr. No.	Name of faculty	Courses/workshops /seminars attended
1	Prof. V.P. Joshi	3
2	Prof. B.B. Pimple	1
3	Prof. Anupa Sabnis	2
4	Prof. Remadevi C.	2
5	Dr. Rahul Dahatonde	5
6	Profs. Sangeeta Daingade	2
7	Prof. N.W. Kinhekar	2
8	Prof. N.G. Bhitre	1
9	Prof. Prajakta P. Joshi	3
10	Prof. Matilda Justin	1
11	Prof Ushma shah	2
12	Prof. Rahul Chavhan	5
13	Prof. Vishal Dake	5
14	Prof. Lahoti	--
15	Prof. Ushma Ahuja	--
16	Prof. Hemlata Rao	1
17	Prof. Varsha T.	--
18.	Prof. Archana Lakhe	2

14. Faculty Achievements

Award:

Dr. Nandkishor Kinhekar received the POSOCO Power System Award (PPSA) 2016, (Cash prize of Rs. 60,000/-) as a recognition of his Ph.D. thesis accomplishment in the field of power system.

POSOCO Power System Award (PPSA) is an initiative to recognize and reward innovative technical research excellence in power system by discovering and encouraging fresh Doctoral research accomplishments in power system and related field.

This project is a joint venture of Power System Operation Corporation (POSOCO), a subsidiary of Power Grid Corporation of India Ltd (POWERGRID) and Foundation for Innovation & Technology Transfer (FITT), IIT, Delhi.

Ph. D.:

Prof. Dr. Nandkishor Kinhekar successfully completed Final Defense on the topic "Demand Side Management Using Smart Grid Technology" leading to Ph. D. degree on 8th February 2016 at Indian Institute of Technology, Roorkee, Uttarakhand.

Prof. Dr. Rahul Dahatonde have successfully defended Ph. D. Thesis "Design & Development of High Gain, Broadband and Compact Microstrip Patch Antenna", on April 24, 2015, at Dr. BATU, Lonere before Prof. Dharmendra Singh, IIT Roorkee and Prof. Anjaneyulu, NIT Warangal.

Prof. Sumbul Hasan joined for Ph. D. this year.

PG:

Three faculty members namely Prof. Ushma Shah, Prof. Matilda Justin and Prof. Prajakta Joshi enrolled for PG this year. They have successfully completed semester I.

Supporting Staff Development:

Number of training programmes where organized for supporting staff in the Institute. Also Number of supporting staff has attended various training programs at various organizations.

New Appointments:

Prof. Rahul Chavhan and Prof. Vishal Dake joined the institute as an Assistant Professor.

15. Industrial Trainings Conducted for Students Under TEQIP

Expert Lectures Arranged Under TEQIP

Sr. No.	Date	Topic	Name of the person
1.	17/03/2016, 18/03/2016	Basic Electrical Engineering	Prof. Archana Lakhe
2.	14/03/2016 to 18/03/2016	PSOC	Mr. Abhijit Balerao
3.	10/03/2016	Solar thermal system	Dr. Roshini Easow
4.	3/11/2015	Design of switchgear cables	Mr. Sudhir Bhagwat
5.	30/10/2015	Microprocessor based relays	Prof. Anupa Sabnis
6.	27/10/2015	Design of switchgear cables	Mr. Shashank Kanade,
7.	16/10/2015	Design of switchgear cables	Mr. Hemant Kudtarkar,
8.	16/10/2015	Inverter connection to grid	Prof. B.B. Pimple
9.	12/10/2015	Energy auditing	Mr. Bharat Kadam
10.	12/10/2015	basics of illumination engineering	Mr. Nikhil Diviker
11.	29/9/2015	Space Vector Modulation	Mr. Abhijit Kadam
12.	11/04/2016	Smart Grid	Mr. Rahul Rane
13.	17/07/2015	Basics of MATLAB: Programming and Simulation	Mr. Pawan Fakatkar

Activities under MoU

The main agenda of MoU between Industry and Electrical Department was to conduct industrial training, orientation courses, industrial visits, etc. for faculty and students at regular interval.

Sr. No.	Name of Activity	For Whom	Date
1.	Present Around The World Competition Organised in Collaboration with IET	All Engineering Students	12th March 2016

16. Meritorious Students (2015-16)

Merit No.	Name of Student
First Year B. Tech	
1	Sridhar Nidhi Sridhar
2	Madhavi Surabhi R.
3	Haridwaj Yash Shivkumar
Second Year B. Tech	
1	Gholap Pavan Bharat
2	Surve Uddhav R.
3	Srivastava Aarti R.
Third Year B. Tech	
1	Gogate Madhura Vinayak
2	Abhishek Upadhyay
3	Sameer Acharya
Final Year B. Tech.	
1	Thorat Anjali Rajendra
2	Deshmukh Parikshit Vijay
3	Kharat Nikita Pradip
M. Tech. Electrical (PEPS)	
1	Rao Pratik Girish
2	Birajdar Dheeraj Dilipkumar
3	Ushkewar Sandeep Sunil

17. Students Activities

SPCE ROBOCON TEAM" stood **3rd Runners up** at All India Level in ABU Robocon 2015. Ours was the only team from the state of Maharashtra to reach the quarter finals stage. The 'All India ABU Robocon 2015 - Robominton', was held at Balewadi Stadium, Pune.

Activities of EESA

Sr. No.	EVENT	DATE	Description
1.	Treasure Hunt	9th August, 2015	The purpose of this event was to increase the interaction between juniors and seniors.
2.	Introductory Seminar For Direct second year (Diploma) Electrical Engineering Students.	28thAugust, 2015	The seminar was conducted to give information about grading system of exams in SPCE and other extra-curricular activities in our college.
3.	Basics Of MATLAB: Programming and Simulation	15 July to 17 July 2015.	The students were taught how to use the MATLAB software.
4.	Teachers' Day	4 September 2015	To Felicitate teachers.
5.	Counselling Seminar by Mr. Ambrish Bhatt.	3 September 2015	In this seminar the students were taught to be mentally strong irrespective of the conditions around them, good or bad.
6.	Introductory Seminar For First Year Electrical Engineering Students	30th July 2015	To make aware first year students.
7.	Felicitation Program of Non-Teaching Staff on Navami	20th October 2015	--

18. Students Achievement

Electrical Department:

1.] Following are GATE ranks for GATE 2016

(i) Vaibhav Bhosale AIR 71

(ii) Aditya Zade AIR 15

(iii) Muklul Patharde AIR 420

(iv) Kartiuk Gayakwad AIR 1290

(v) Anjali Thorat AIR 1498

2.] Vidhi Jain from TY B. Tech. won 1st prize in VRC Technovanza '15

3.] A group of 4 students from the department won first prize for IET NICE 2015. (Rahul, Prakhar and Alok and Vatsal).

4] Total 20 students worked on SIX **ONGOING PROJECTS** under innovation networking under **TEQIP** with ICT.

5] Rahul Kamath and his team won first prize in IET Karmaveer Exopo national level working model project competition.

6] **Prakhar Mehta:**

GRE score 324/340

TOEFL score 116/120

Got admission in ETH ZURICH in Switzerland for Renewable Energy.

7] Tejas Kopte and team along with Ad-hoc teacher Deepti Bansod won the prize for their presentation on Energy Conservation project competition at Dahanu Thermal power Station on 4th Feb 2016

9] SPCE team participated ABU ROBOCON competition and got rank 20.

19. GATE/CAT/GRE Qualified Students (Year 2014-15 & 2015-16)

GATE -2014-15 & 2015-16			
Sr. No	**Candidate Name**	**Branch**	**All India Rank**
1	Mukul Pathade	Electrical	432
2	Vaibhav Bhosale	Electrical	72
3	Aditya Zade	Electrical	15
4	Anjali Thorat	Electrical	1498
CAT -2014-15 & 2015-16			
Sr. No	**Candidate Name**	**Branch**	**Percentile Score**
1	Ashna Shukla	Electrical	90
2	Parikshit Deshmukh	Electrical	97
GRE -2014-15 & 2015-16			
Sr. No	**Candidate Name**	**Branch**	**Score out of 340**
1	Prakhar Mehta	Electrical	323
2	Krunal Chaudhary	Electrical	312
3	Ajinkya Patil	Electrical	319
4	Renuka Shahare	Electrical	319
5	Nikita Kharat	Electrical	319

20. Alumni Corner

The purpose of Alumni meet is:

- Strengthening of ties between former students and the College
- Stimulating the interest and activity of the alumni of the College
- Preserving and furthering the mission of the College
- Participating in further development of the College

- Dr. Mangalvedekar from VJTI is a subject board member.
- Mr. Nadkar from Aker Solution is BOG member.
- Board of studies comprises of 5 members apart from internal members. Out of these five, two are our (electrical) alumni, one Mr. Hemant Kudtarkar from Toyo & the other Prof Dr. V. Mangalwedhekar from VJIT.

21. Departments Strength and Best Practices

Departmental Strengths

- Well Equipped Laboratories
- Qualified and Experienced Staff
- Interaction with Core Industries
- Execution of Academic activities as per calendar
- Laboratories equipped with latest software like Lab view, MATLAB, ETAP, etc.
- Participation of students in Technical Activities
- Remedial Coaching
- Good Placements

Departmental Best Practices

- Digital Data Management
- Online feedback system for students
- Regular Publication of Annual Progress report and event newsletters

22. Postgraduate Program

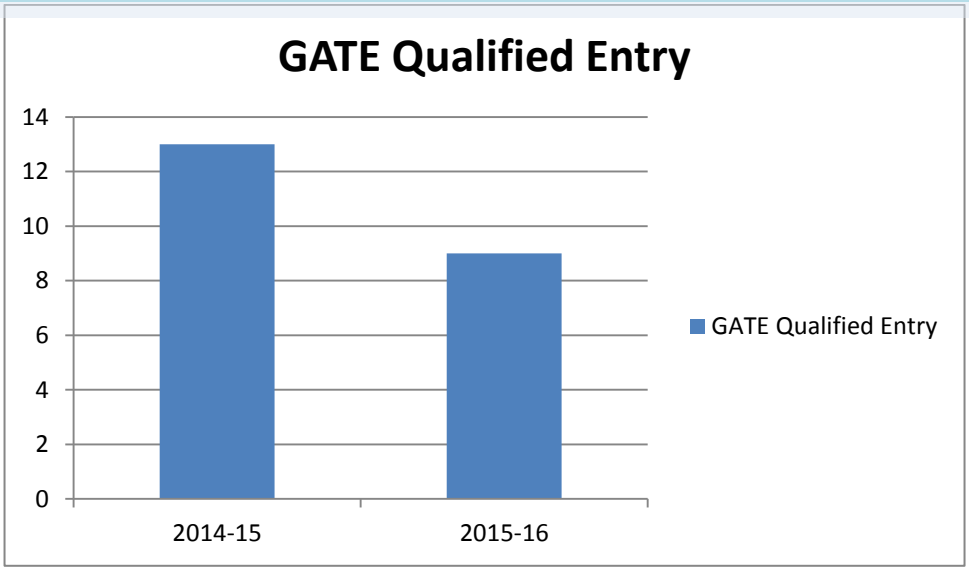
PG Coordinator

Prof. B. B. Pimple

M. Tech. (Power Electronics and Power system) Coordinator

PG Programs

Department has a started M. Tech. in Power Electronics and Power System with an intake of 18 from academic year 2014-15.
The chart shows the GATE Qualified entry for academic year 2014-15 and 2015-16.



M. Tech. GATE Qualified entry for last two year.

Students Publication

Sr. No.	Paper Title	Author Name	Journal/Conference	Guide
1	Boost Factor Modulation of Z-Source Inverter Under	Rahul J. Nagla, Aditya U.	IET & IEEE PES 8th International	Prof. B. B. Pimple

	Unbalanced Grid Condition	Gadekar, B. B. Pimple.	Conference on Power Electronics Machines and Drives (PEMD 2016), The Hilton Hotel Glasgow, Scotland, UK, 19th -21st April 2016.	
2	Application of Polar Voltage Control for Solar PV based Water Pumping System for Villages in Rural India	Rahul J. Nagla, Aditya U. Gadekar, B. B. Pimple.	Dept. Science & Technology India GOI, VIBHS India, ISRO, DRDO, 1st India International young Scientist conference, India International Science Festival, IIT New Delhi, India, 4th -8th Dec 2015.	Prof. B. B. Pimple
3	Solar PV Array Based BLDC Motor for Fans in Indian Railways in Electric Traction using MPPT	Naman Agrawal, B. B. Pimple.	National System Conference IEEE Agra section, Shivnadar University, Dadri UP, India, 12th -14th Dec, 2015.	Prof. B. B. Pimple
4	Injection of Reactive Power into Grid by Polar Voltage Control Technique for Wind Power Applications	Aditya U Gadekar, Rahul J. Nagla, B. B. Pimple.	IET 4th International Conference on Renewable Power Generation North China Electric Power University, Beijing, China 17-19 Oct 2015	Prof. B. B. Pimple
5	Comparitive Analysis of parallel Operation of two Three Phase System with and without Interphase Transformer	Sourav Ghatak, R. D. Kulkarni, N. Bhitre.	IEEE sponsored Fifth International Conference on Computing of Power , Energy & Communication, ICCPEIC-2016	Prof. N. Bhitre
6	FPGA based Highly Efficient , Fast and Reliable controlled braking Method Based on 13 Level Medium Voltage Drives suitable for	Deepak Kotkar, Millan Sabat, Tanmay Tandel, Atul Gupta, Dipak	6th IEEE international conference on power system	Prof. Mrs. A. Sabnis

	High Inertia	Banbakode.		
7	Three Phase Asymmetric Multilevel Inverter with Reduced Number of Switches for Improved Harmonic Performance	Neeraj Seth, R.D. Kulkarni, V.P. Joshi.	International Journal of Engineering Research & Technology	Prof. V. P. Joshi
8	Control of Standalone Solar PV System in varying operating conditions for DC Load	Urmi shah, Pratik Kadam, Gopal Lahoti.	2016 IEEE International Conference on Engineering and technology	Prof. B. B. Pimple
9	Spark Gap Synchronization Using Sub nano second Pulsur based on Avalanche Transistor	Harshal Shelar, Akash Wajpe.	IEEE sponsored Fifth International Conference on Computing of Power , Energy & Communication, ICCPEIC-2016	Prof. Mrs. V. P. Joshi

Industrial Projects

Industrial projects for post-graduate students provide an important opportunity to in-depth study the problems faced by industry and to develop innovative solutions to them.

Sr. No.	Project Title	Student Name	Industry	Guide
1	Forecasting of Solar and Wind Power Generation	Mr. Ninad Gaikwad	GERMI	Prof. N. G. Bhitre
2	Development and Study of Crow-baring on Electromagnetic Forming System and Process	Mr. Kalyankumar Reddy	BARC (APPD)	Prof. Mrs. V. P. Joshi
3	Design and Implementation of Interphase Transformer	Mr. Saurav Ghatak	BARC (RED)	Prof. N. G. Bhitre
4	Critical Studies of EMI in 70kJ EMM System	Mr. Jayesh Patil	BARC	Prof. Mrs. V. P. Joshi
5	Efficient Speed Control of Induction Motor with Auto tuning	Ms. Millan Sabat	L&T	Prof. Mrs. A. Sabnis
6	Design and Simulation of Multilevel Inverter	Mr. Niraj Seth	BARC (RED)	Prof. Mrs. V. P. Joshi
7	PV-Wind Hybrid System	Ms. Urmi Shah	VJTI	Prof. B. B. Pimple
8	High Voltage Sub nano	Mr. Harshal Shelar	BARC	Prof. Mrs. V. P.

	Second Pulse Generator Based on Avalanche Transistor		(APPD)	Joshi
9	Design of 30 KV Resonant Converter Based Power Supply	Mr. Akash Wajpe	BARC (RED)	Prof. N. G. Bhitre
10	Load Encroachment Protection for Smart Grid	Ms. Pallavi Bedekar	COEP	Prof. Mrs. V. P. Joshi

Postgraduate Teaching Assistants

Sr. No.	Name of PG Teaching Assistant	Specialization
1	Mr. Saurav Ghatak	Power Electronics and Power System
2	Mr. Naman Agarwal	Power Electronics and Power System
3	Mr. Ganesh Hemke	Power Electronics and Power System
4	Mr. Jayesh Patil	Power Electronics and Power System
5	Ms. Urmi Shah	Power Electronics and Power System
6	Mr. Saidulureddy Duddukunta	Power Electronics and Power System
7	Mr. Aditya Gadekar	Power Electronics and Power System
8	Mr. Kalyankumar Reddy	Power Electronics and Power System
9	Mr. Siddhant Guhe	Power Electronics and Power System
10	Mr. Rahul Nagla	Power Electronics and Power System
11	Mr. Santosh Ramayanam	Power Electronics and Power System
12	Ms. Milan Sabat	Power Electronics and Power System
13	Mr. Neeraj Seth	Power Electronics and Power System
14	Mr. Harshal Shelar	Power Electronics and Power System
15	Mr. Akash Wajpe	Power Electronics and Power System

* NOTE: The statistical data referred in this report represents general trend and not exact data.