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

2014-2015

ACTIVITIES SUMMARY SHEET 2014-2015

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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 2014-15 for the Electrical Engineering Department (EED), Sardar Patel College of Engineering (SPCE). As Head Electrical Engineering Department, the greatest achievement this year is the addition of first PG course in the electrical department in Power Electronics & Power System, M. Tech. (Electrical) (PEPS), approved by DTE, AICTE & University of Mumbai. 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. I am very happy to mention that Dr. Rahul Dahatonde completed his Ph. D. this year.

Being autonomous institute, measures are taken to reorient curricula, teaching & learning methods & assessment procedures to promote Outcome based Education. The process of gathering feedbacks from the stake holders (students, parents, alumni & industry) is initiated to assist this process. The scheme & syllabi are modified based on the inputs obtained from industrial experts. The new scheme is effective for the batch entered in 2014-15. The value added course on 'PLC programming and applications' is introduced at semester IV. This year we have applied for N.B.A. accreditation (Tier 1) which will reaffirm our academic system against global benchmark.

I am pleased to inform that department has taken a prominent role within SPCE to utilize TEQIP funds constructively to meet our mission. The report features the corresponding activities. The laboratories modernized under TEQIP are: Basic Electricity and Electronics, Switchgear, Electronics, Microcontroller, Power electronics, Communication. 'Renewable energy' laboratory is developed using TEQIP funds.

Industry institute interaction is a key focus area which helps us to keep our academic programmes up to date and relevant. Institute has signed MOUs, with various industries &

academic institutes. As part of MOU activities innovative projects, internships & training programs, industrial visits, seminars, expert lectures, workshops, are conducted throughout the year. Students attended training programs in Siemens, Advanced Training Institute. Two students from second year are selected by Siemens for one year Structured Internship Program. Students are encouraged to do internships in industry. In the year 2014-15, our students have done internships in Railways, BEST, Tata Power, JSW steel, Reliance infra, Supreme petrochemicals limited, ONGC, and Schneider.

Students passionately participated in national level technology competitions like ROBOCON and they are stood fourth. Final year students have participated and won prizes in project competitions. Three groups of final year students have done their projects with industries namely TOYO, HVDC Padghe and Siemens. Training programs and workshops are conducted on Microcontrollers, Lab view. Industrial visits are arranged in Siemens and Railways. Various experts from industries like IBM, Nayak Power Sytems, L and T, Monorail, guided the students through guest lectures in the application areas beyond syllabus. Department has taken initiative for academic affiliation of the institute with IET (Institute of Engineering and Technology). During the first year of PG program L and T had shown interest to offer project to the PG student. One of our students is selected to do her PG project in the second year with L and T.

Dr. Bijnan Bandyopadhyay, IIT Bombay has been senior research advisor for the department. Under his guidance department has started 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, equipments 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

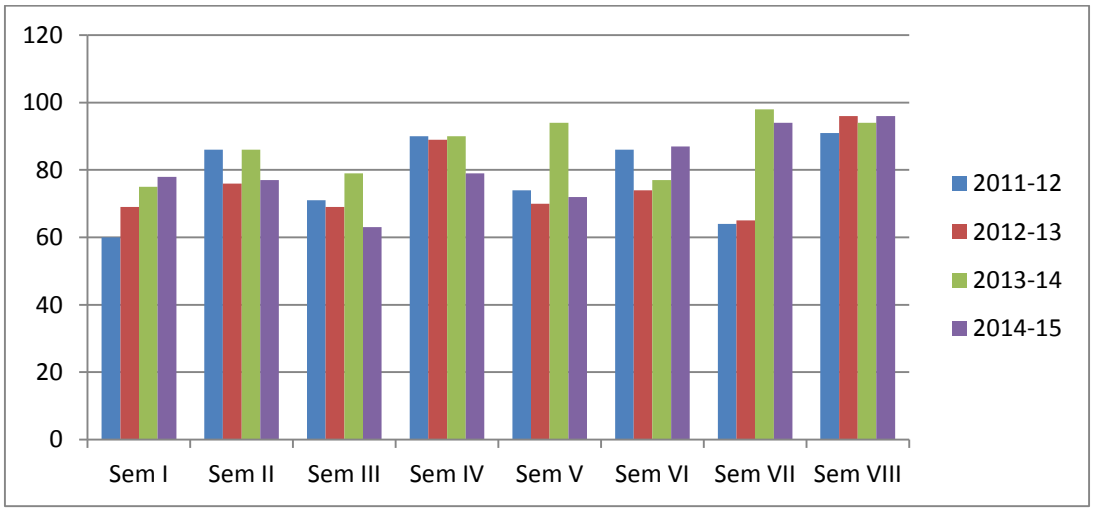
Academic Program	Specialization	Duration	Intake
Undergraduate			
Bachelor of Technology (B. Tech.)	**Electrical Engineering**	**Four Years**	**60**
Postgraduate			
Master of Technology (M. Tech)	**Power Electronics and Power System**	**Two Years**	**18**

6. Department Financial Data (Rs.)

Expense heading	AY2014-15	AY2013-14	AY2012-13
Laboratory Expenses	1,72,650	1,5,4600	3,31,194
Laboratory Consumables	1,67,591	1,10,219	64,988
Training and Travelling	5,38,888	32,716	56,213
Training and Placement Office	29,817	91,403	31,484
FDP under TEQIP	7,77,484	15,22,398	2,09,199
Laboratory Development under TEQIP	6,26,6247	21,04,585	4,69,756
Remedial Coaching under TEQIP	5,250	8,250	-
Total	**79,57,927**	**40,24,171**	**11,62,834**

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

Sr. No.	Name of Faculty	Title of Publication	Referred Journal/ International/ National Conference	Year of Publication
1.	Prof.B. B. Pimple	Compensation of negative sequence stator flux of doubly-fed induction generator using polar voltage control-based direct control under unbalanced grid voltage condition	IET Journal	December 2014
2.	Prof. Anupa Sabnis	Lyapunov based Steering Control for Visual Homing of a Mobile Robot	International Conference MED2014,22nd Mediterranean Conference on Control & Automation	June 2014
3.	Prof. Sangita Daingade	1) Multi UAV Formation Control for Target Monitoring 2) Consensus based Deviated Cyclic Pursuit for Target Tracking Applications	1) International Conference ICC (IEEE). 2) International Conference ECC (European Control Conference).	1) January 2015 2) July 2015 (Accepted)
4.	Prof. Nandkishor Kinhekar	1) Utility Oriented Demand Side Management Using Smart AC and Micro DC Grid Cooperative 2) Practical Swarm Optimization Based Demand Response for Residential Consumers	1) IEEE Transactions on Power System. International Journal 2) IEEE International Conference	1) February 2015 2) July 2015 (Accepted)

9. Faculty and Staff

Faculty

Prof. (Mrs) V. P. Joshi
Associate Professor & I/C Head
BE (Electrical), ME (Electx), 27 Yrs of Experience
Area of specialization: - Electronics

Prof. (Ms) Ramadevi C
Associate Professor
BE, M Tech (Electrical), 27 Yrs of Experience
Area of specialization: - Power Systems

Prof. (Mr) B. B. Pimple
Associate Professor
BE, M Tech (Electrical),), 18 Yrs of Experience
Area of specialization: - Power Systems

Prof. (Mrs) Anupa Sabnis
Associate Professor
BE (Electrical), ME (Electx), 23 Yrs of Experience
Area of specialization: - DSP Communication Engg.

Prof (Mr) Rahul Dahatonde
Associate Professor & TPO
BE (E & TC), ME (E & TC), Ph. D. 11 Yrs of Experience
Area of specialization: - Antennas, Communication.

Prof (Mrs) Sangeeta Daingade
Assistant Professor
BE, M Tech (Electrical), 16 Yrs of Experience
Area of specialization: - Control Systems

Prof (Mr) N W Kinhekar
Assistant Professor
BE (Electrical), MTech(Electrical), 15 Yrs of Experience
Area of specialization: - Power System, Demand side Management

Prof (Mr) N G Bhitre
Assistant Professor
BE (Electrical), ME (Electrical), 15 Yrs of Experience
Area of specialization: - Control Systems

Prof (Mrs) Ushma Shah
Assistant Professor
BE (Electronics), 8.5 Yrs of Experience
Area of specialization: - Electronics

Prof (Mrs) Prajakta Joshi
Assistant Professor
BE (Electrical), 07 Yrs of Experience
Area of specialization: - Power System

Prof (Mrs) Sumbul Abidi
Assistant Professor
BE (Electrical), M. Tech (Electrical), 09 Yrs of Experience
Area of specialization: - Power System & Drives

Prof (Mrs) Matilda J
Assistant Professor
BE (Electrical),
Area of specialization: - Power Electronics and Power System

Ad-hoc Faculty

Prof (Dr) Arpit Rawankar
Associate Professor
M. Tech (Electx), Ph. D
Area of specialization: - Lasers (Linear Beam Collider)

Prof (Mrs) Hemlata Rao
Assistant Professor
BE (Electrical), ME (Electrx), 09 Yrs of Experience
Area of specialization: - Electrical & Electronics

Prof (Mrs) Archana Lakhe
Assistant Professor
BE(Electrical),MTech(Electrical), 15 Yrs of Experience
Area of specialization: - Control Systems

Prof (Mrs) Pallavi Patil
Assistant Professor
BE, M E (Electrical), 04 Yrs of Experience
Area of specialization: - Power Systems

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

Prof (Mrs) Dipti Roy
Assistant Professor
BE, M E (Electrical), 05 Yrs of Experience
Area of specialization: - Control Systems

Prof (Mr) Vishal Dhake
Assistant Professor
BE (Electrical), M E (Electrical), 1.5 Yrs of Experience
Area of specialization: - Power Systems

Prof (Mr) Rahul Chavhan
Assistant Professor
BE (E&TC), ME (E&TC), 3.5 Yrs of Experience
Area of specialization: - VLSI and Embedded System Design

Supporting Staff

Shri P R Amborkar
(Forman)

Shri P M Dhopatkar
(Lab Assistant)

Shri A M Shah
(Electrician)

Shri R R Govalkar

Shri S V Shelar

Shri S P Pawar

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)

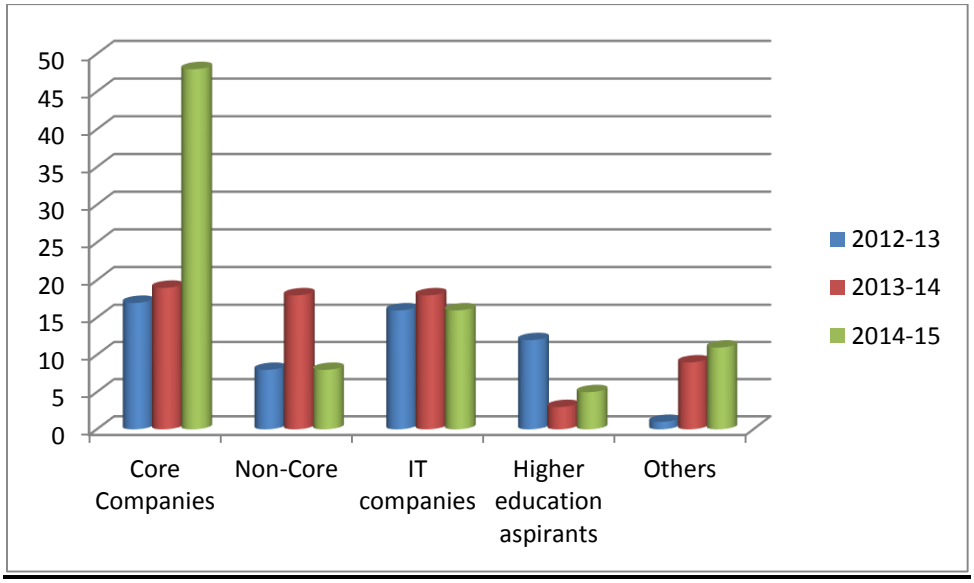
Shri S Ambre
(Hamal)

Shri I Saudagae
(Hamal)

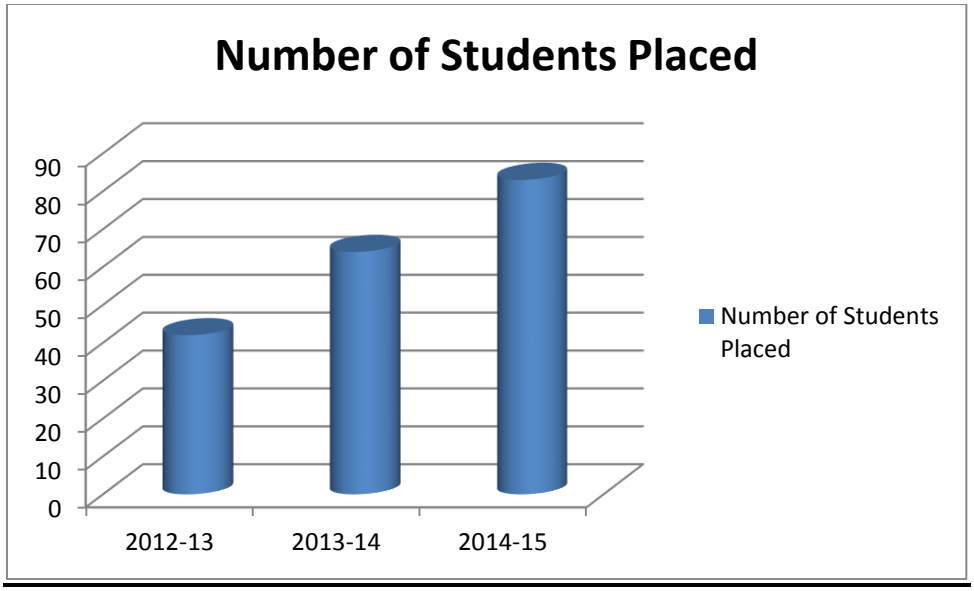
Shri C M Deladia
(Lab Attendant)

10.Campus Placement

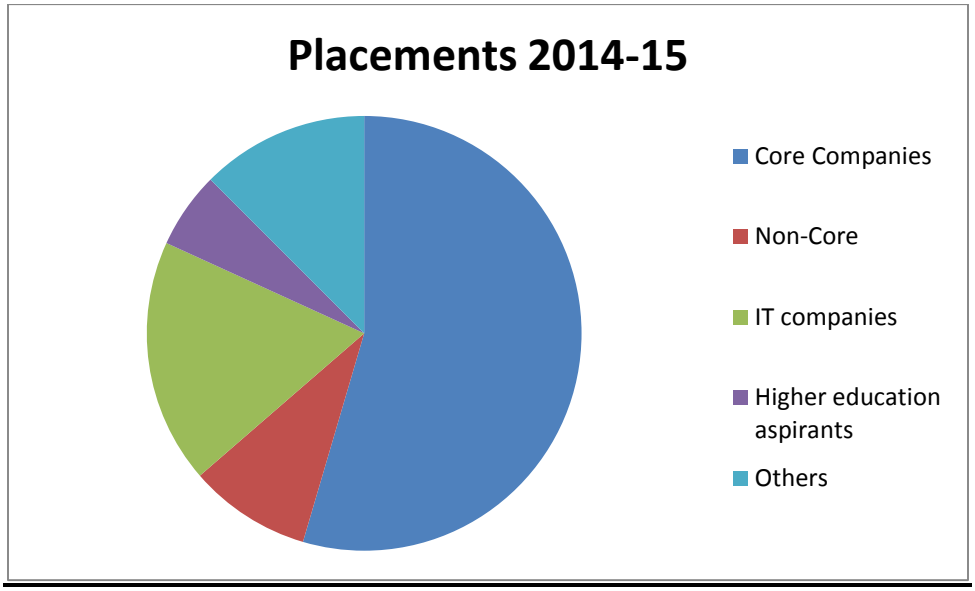
Placement Statistics (Domain wise) for B. Tech. Electrical						
Year	Number of students placed in Company				Total Placed	Higher Education Aspirants
	Core	Non Core	IT	Others		
2014-15	48	8	16	11	83	5
2013-14	19	18	18	9	64	3
2012-13	17	8	16	1	42	12



Industry wise Placements of last four years



Year wise Placements of last three year.



Industry wise Placements in academic year 2014-15

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

Labs Developed (under TEQIP)

This year equipments are received under TEQIP procurements in various labs. Some of them are:

Renewable Energy Lab

Renewable Energy lab is developed under TEQIP procurements in the academic year 2014-15. Some of the equipments are as below:

Communication Lab

Communication lab is modified under TEQIP procurements in the academic year 2014-15. Some of the equipments are as below:

Microcontroller Lab

Microcontroller lab is modified under TEQIP procurements in the academic year 2014-15 with trainer kit of MicroElektronica Microcontroller with Micro Pro for 8051.

Analog Electronics Lab

Analog Electronics lab is modified under TEQIP procurements in the academic year 2014-15 with electronics instruments for measurement and observation.

Switchgear Lab

Switchgear lab is modified under TEQIP procurements in the academic year 2014-15. Some of the equipments are as below:

12. Industry Institute Interaction

MoU with Industries

MOU Signing with Aker Solutions, Mumbai.
MOU Signatories:- Mr S Joshi (MD, Aker solution)
Dr P H Sawant (Principal SPCE, Mumbai)

IET AFFILIATION has signed on July 18, 2014 followed by a lecture on First Monorail in India by Mr. A.K. Das; an expert in modern transport systems was under IET. (Currently works with Louis Berger).

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, Virar, Mumbai.

One day industrial visit to Siemens Transformer Factory in Kalwa, Mumbai

Expert Lectures Arranged Under TEQIP

Sr. No.	Date	Topic	Name of the person	Industry/Academia	For Class
1.	17/04/2015	Switchgear and Protection	Ms. Medha Pandit	L and T	TY
2.	01/04/2015	Smart Grid	Dr. Karandikar	K. J. Somaiya College of Engineering	B. Tech
3.	09/04/2015	Applied Non linear Control	Prof. M. D. Patil	Vivekananda College	M.Tech
4.	13/09/2014	Modeling and analysis of Electrical	Mr. Ashwin Damle	Nayak Power Systems	M.Tech

		Machines			
5.	12/09/2014	Modeling and analysis of Electrical Machines	Dr. Sushma Wagh	VJTI, Matunga	M.Tech
6.	22/09/2014	Modeling and analysis of Electrical Machines	Prof. Bindu R.	FCRIT, Vashi	M.Tech
7.	29/04/2015	Renewable energy resources	Dr. Roshini Easow	St. John College of Engineering and Technology	B. Tech
8.	08/11/2014	SCADA	Mr. Vikrant Sankhe	IBM	M.Tech
9.	18/09/2014	Project Management	Mr. Tejas Sura	IET, Tech Dias	B. Tech
10.	10/08/2014	First MONORAIL	Mr. A.K. Das	IET, Tech Dias	B. Tech

L&T Technical Lecture Series

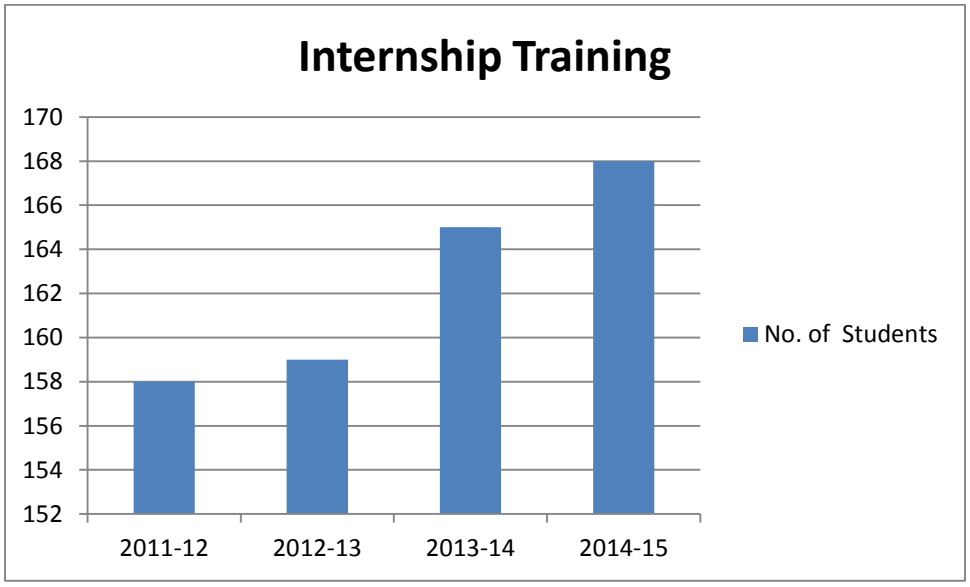
L&T Technical Lecture Series (TLS) was organized at Sardar Patel College of Engineering, Andheri (W) on 10th & 11th April 2015. Inauguration function was organised where Chief Guest was Mr. Jayant D. Patil who is Executive Vice President, D&A and Member of the Board, L&T Heavy Engineering Division. The guest of honour was Dr. P. H. Sawant, Principal, Sardar Patel College of Engineering, Mumbai. Students from TE Mech, TE Elect, ME Mech. Machine Design, ME Power Electronics & Power Systems attended the programme. The TLS comprised various technical & managerial lectures by expertise from L&T.The details are given as follows. The TLS was a inspirational activity for students dreaming to join this esteemed organisation spread across each & every aspect of engineering. On the successful completion of the TLS, it was concluded with the Valedictory function. It was graced by chief guest was Mr. A.D. Shahane, Vice President, Corporate Training-Technical, Larsen & Toubro. The guest of honor was Dr. P. H. Sawant, Principal, Sardar Patel College of Engineering, Mumbai. Following 6 sessions were conducted during the lecture series.

Date	Session Topic	Name of Expert
10 April 2015	Engineering & Technology for Strategic Sectors	Mr. P. Mahajan, AGM, Product & Tech Development
10 April 2015	Microgrid	Mr. S P Sharma, JGM, Switch Gear Design & Development Centre
10 April 2015	Manufacturing technologies for heavy industries	Mr. Krishnan Sivaraman, DGM - Welding Engineering
11 April 2015	Project Management	Mr. Tarun Jain, AGM-Project Management
11 April 2015	Engineering : From Classroom to Real World	Dr. Barun Chakrabarti, General Manager & Head, R&D Centre
11 April 2015	Competition on Smart Home (Bungalow)	Expert Panel from L&T

Speakers at L&T Technical Lecture Series held at SPCE, 10-11 April 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.

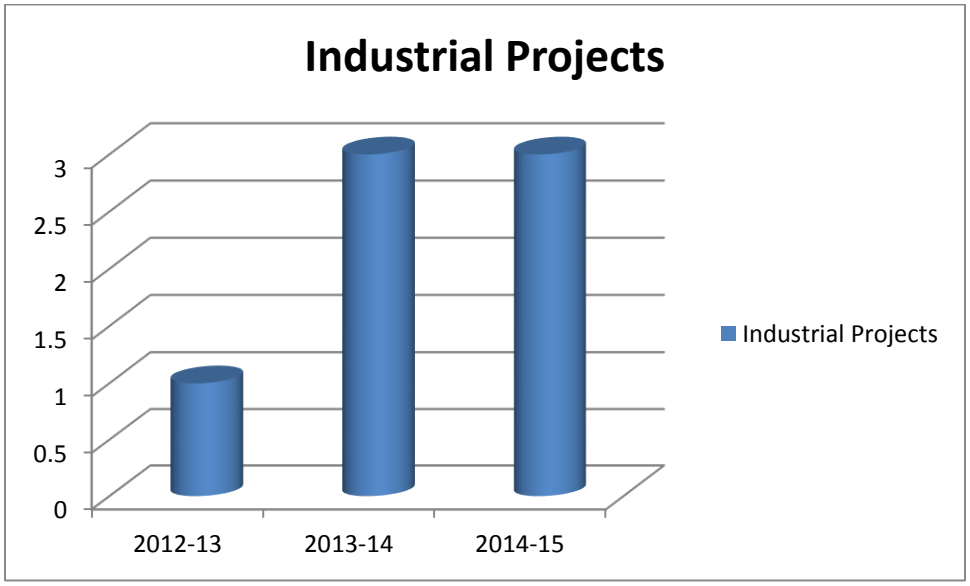


Successive Chart of Internship Training for Last four years.

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



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

4. **P04: Microwave Reactor**
   Students:
   - VaibhavBhosale - T.Y. Electrical
   - Rahul Kamath - T.Y. Electrical
   - Harsh Gosar - T.Y. Electrical
   - Pratik Hirani - T.Y. Electrical
   - Prakhar Mehta - T.Y. Electrical

5. **P07: Pyrolysis system for conversion of plastic waste to useful chemicals**
   Students:
   - Prasad Hadawale - T.Y. Electrical
   - NayanBagale - T.Y. Electrical
   - Jay Kshirsagar - 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	03
2	Prof. B.B. Pimple	01
3	Prof. Anupa Sabnis	02
4	Prof. Remadevi C.	02
5	Dr. Rahul Dahatonde	08
6	Profs. Sangeeta Daingade	02
7	Prof. N.W. Kinhekar	02
8	Prof. N.G. Bhitre	01
9	Prof. Prajakta P. Joshi	03
10	Prof. Matilda Justin	01
11	Prof Ushma shah	02
12	Prof. Rahul Chavhan	04
13	Prof. Vishal Dake	02
14	Prof Archana Lakhe	05
15	Prof. Raye	01
16	Prof. Hemlata Rao	01

Participants at Training program on best practices in outcome based curricula design and pedagogy alignment on Feb. 9- 13, 2015 at Yashada, Pune.

14. Courses Attended by Supporting Staff Under TEQIP

Sr. No.	Name of the faculty	Title of the training program	Date of training	Duration (No. of days)	Training providing agency
1	Mr. P. M. Dhopatkar	Development of positive attitude towards work and life	Jan. 30-31 , 2015	2 days	Saitej life training institute
2	Mr. S. V. Shelar				
3	Mr. A. M. Shah				
4.	Mr. R. Gowalkar	Life skills for a happy life - III	April 23-25, 2015	3 days	Walchand College of Engineering Sangli
5.	Mr. S. V. Shelar				

Participants at "Life skills for Happy Life" staff development program, WCE, Sangli, sponsored by TEQIP III.

15. Industrial Trainings Conducted for Students Under TEQIP

Sr. No	Date	Duration	Name Of Course	For Class	Organized by	Guest Speaker
1.	18/12/2014 19/12/2014	10.00 am-5.00 pm	Basics of LabVIEW programming for engineers	BE, TY, SY and ME (PEPS)	MS.Archana Lakhe Ms.Varsha Thandassary	Prof.P.V.Kasambe (S.P.I.T, Andheri) Prof.D.S.Sawant (M.P.I.T, Mumbai)
2.	17/02/2015 19/02/2015	10a.m-5.00 pm	Applications of Embedded Systems in Microcontroller	TY	Ms.Prajakta Joshi	Pawankumar L. Fakatkar (Jubilant Technologies)
3.	13/05/2015 15/05/2015	10a.m-5.00 pm	Microcoprocessor	TY	Ms. Matilda	Prof. Smapada Pinge Prof. Anupa Sabnis

Workshop Conducted By Industry Person from Jubilant Technologies for 55 Students of Third year Electrical from 17th Feb, 2015 to 19th Feb 2015. *(MOU signing with Jubilant Technologies is in Process)*

Pawankumar Fakatkar from during Workshop

Activities under MoU

Sr. No.	Name of Activity	For Whom	Date
1.	Training in Etap software operation and implementation in electrical system	One B. Tech. project batch in 2013-14 batch	21st & 28th March2014
2.	Guest lecture on 'Earthing Techniques' by Rupesh Malpani from Aker solutions	SY Electrical students batch 2013-14	9th April 2014
3.	Training in Etap software operation and implementation in electrical system	2013-14 pass out batch' 9 students	25 July 2014 & 1st August 2014
4.	Training in Etap software operation and implementation in electrical system	ME students of 2014-16 batch	13th & 14th October 2014

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

As an activity under MoU between SPCE-AKER solutions electrical dept. organized expert lecture on 'EARTHING TECHNIQUES' for SE Electrical students. Lecture was delivered by experts from Aker solutions Mr. Rupesh malbari, Mr. Wagale and Mr. Satish Rapol. Lecture was on Wednesday 9th April 2014 from 10.30am to 1.15 pm.

Expert lecture on 'EARTHING TECHNIQUES'

16. Meritorious Students

Merit No.	Name of Student
First Year B. Tech	
1	Gholap Pavan Bharat
2	Surve Uddhav Ramchandra
3	Srivastava Arti Ramannath
Second Year B. Tech	
1	Upadhyay Abhishek
2	Gogate Madhura Vinayak
3	Acharya Sameer
Third Year B. Tech	
1	Karat Nikita Pradip
2	Deshmukh Parikshit Vijay
3	Thorat Anjali Rajendra
Final Year B. Tech.	
1	Amala Thomas
2	Kurminla Venkatesh Dhananjay
	Patil Swati Ramesh
3	Sadavarte Pranita Vinod

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.	Inauguration of the Committee	11th August,2014	Inauguration by Mr. Vinod Sadavarte
2.	Seminar on "Importance Of Electrical Engineering"	11th August,2014	Seminar By Mr. Vinod Sadavarte
3.	Scientific Calculator Workshop	22nd August, 2014.	Workshop to teach FE students to use scientific calculator
4.	Treasure Hunt	22nd August,2014	Fun Event for students
5.	Teacher's Day	5th September,2014	Teachers Day Celebrations
6.	Guest Lecture on 'Technical Paper Presentation	19th September,2014	Guest Lecture by Dr. Dhananjay Kalbande
7.	Seminar on "Share market"	27th September,2014	Seminar was conducted by Ashok Jainani

8.	Technical Workshop on Eagle Software	14th January,2015	Workshop to teach Eagle software to students
9.	Guest Lecture	12th February,2015	Guest Lecture by Dr. Ambarish Bhatt
10.	Technical Workshop on 8051 uC	19th & 21st February,2015	Students were taught how to use 8051 uC for their embedded system projects
11.	Seminar on " Challenges of power sector"	23 rd February,2015	Seminar was conducted by Mr. Vijay Sonawane
12.	Technical Quiz	24th March,2015	A Quiz was conducted for all the students.
13.	Seminar on 'competitive exams'	20th March,2015	Seminar was conducted by the final year students Dhruvin Gosar and Aditya Zade
14.	EESA sports	1st,2nd,3rd and 4th April,2015	Sports events were conducted for all the students
15.	Industrial visit	14th April,2015	A visit was conducted to Siemens, Transformer Factory, for the third year students.

EESA inauguration lecture by Mr. Vinod Sadavarte

A seminar on the'Challenges in Power Systems' by Mr. Vijay Sonavane, MERC.

18. Students Achievement

Examination	No. of students appeared	No. of students Qualified
GATE	18	12
CAT	15	ALL
CET (MBA)	15	ALL

The students of Electrical Engineering have come out with flying colors as far as competitive exams are concerned.

- ***Abhijit Khaladkar secured AIR 565 in GATE 2015.***
- ***Dhruvin Gosar got Admission into SPJIMR for PGDM by qualifying CAT.***
- ***Vijay Saraf secured AIR 34 in CMAT 2015***
- ***Namra Patel and Siddhant Patil scored 99.90 and 99.50 percentile respectively in CET (MBA).***

- SPCE Robocon team stood 1st in Maharashtra and 4th in India at "ABU - ROBOCON" 2015 competition. Robocon team consists of 18 electrical students out of 23 totals in the team.
- Project group of Dhruvin Gosar, Gopal Ishwar, Keval Kapadia, Mayank Jaggi won 1st prize in National Level Project exhibition at FCRIT, Vashi, Navi Mumbai for their project on "Sun tracking Solar Panel."
- Santosh kumar Chaturvedi, Ushma Shah and Mahesh Utekar presented a technical paper on topic "Maglev wind generator: An efficient form of vertical axis wind turbine" at IREC (International Renewable Energy Congress) 2015 organized by IEEE's PES (Power & Energy society) at Sousse, Tunisia which was held on 24th- 26th, March 2015.
- Adtiya Zade, Santosh kumar Chaturvedi, Mayank Wadhawan and Mahesh Utekar won "Best Poster" award at first ever "SPARKLE" organized by KPIT & COEP (National level Project competition).
- Jasraj Sarode and Prabsharan Kaur secured 1st in Intercollegiate Debate organized by the ROTRACT CLUB OF JUHU.
- Vivek Bhilare, Chandan Yadav, Mangilal Chaudhary secured 2nd position in intellect IEEMA IEEE exhibition.

AVISHKAR-2015

In view of globalization, to survive in a competitive environment, it is necessary for students to have technology related innovative ideas. 'Avishkar' aims to provide a platform for budding engineers to exhibit their ideas and share their knowledge with each other.

To provide a platform for technology related innovative ideas from the student community

- To motivate the young professionals.
- To share new ideas

Total 10 groups were selected for participation from various colleges like SPCE, LTCE, SIES and FCRIT.

19. Students Pursuing Higher Studies

Ms. Utkarsha Barate M.Tech (Power System) National Institute of Technology, Tiruchirapalli	Ms. Sampada Sahare M.Tech (Power System) National Institute of Technology, Tiruchirapalli

Dhruvin Gosar PGDM in Finance S P Jain Institute of Management and Research	Jitu Chaudhari MS in Engineering Management Northeastern University, Boston
Gopalkrishnan Iyer MS Electrical and Computer Engineering Drexel University, Philadelphia, USA	Namra Patel MMS Pursuing Jamnalal Bajaj Institute of Management Studies

20. Alumni Corner

- Dr. Mangalvedekar from VJTI is a subject board member.
- Mr. Nadkar from Aker Solution is BOG member.
- Guest Lecture by Mr. Sadavarte who is one of the parents of final year student.
- 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
- Mr. Hemant Kudtarkar also contributed for final year B. Tech. Project in TOYO
- Our alumni 2008 batch Pralay and Priyanka working in Siemens helped us for arranging I.V.
- Medha Pandit from L & T who is also one of our alumni has taken a guest lecture on the topic air circuit breaker for TE students

21. Departments Strength and Best Practices

Departmental Strengths

- Modernized and State of art Laboratories
- Highly Qualified Staff
- Good blend of young & experienced staff
- Strong Industry Institute Interaction
- Academic calendar
- Department well equipped with latest software
- Regular Participation of students in Technical Activities
- Mentorship Program
- 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

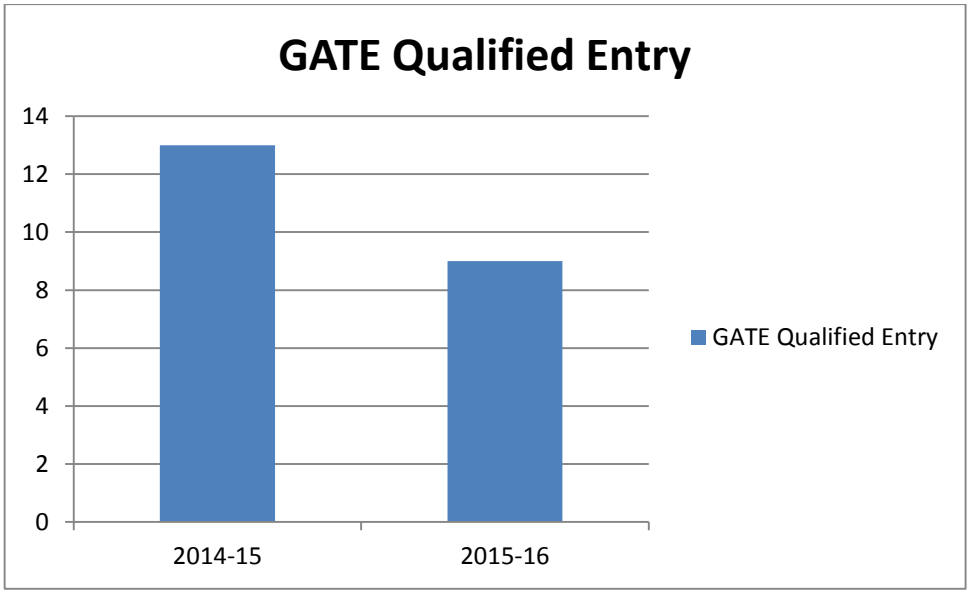
PG Coordinator

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.

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	My project title is " 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.