Sanjeevan Engineering & Technology Institute, Panhala
Department of Electrical Engineering

Annual Report for AY 2015-16

Vision

To create professionally competent engineers and entrepreneurs in the field of electrical engineering for the benefit of society

Mission

- To impart quality engineering education as per curricula and industry need.
- To motivate and create awareness in the students to undertake higher studies & research in the field of electrical engineering.
- To create an environment that shall foster growth of professionals capable of effectively using the scientific and technical knowledge for the betterment of mankind.

Objectives (PEO)

- To impart latest and relevant knowledge from the field of Electrical Engineering theory and practice to the students.
- To impart / develop the right kind of values and attitudes to function effectively in Engineering, managerial / administrative positions.
- To provide the best possible educational facilities where students are urged to develop their professional skills with global perspectives.
- To provide a creative atmosphere in which higher studies and research thrive both among the students and the faculty.
- To provide opportunities for students to work as part of teams on core and/or multidisciplinary projects.
- To organize short intensive courses, conferences and seminars on current technological developments which will be of benefit to the surrounding community.
- To undertake sponsored research and provide consultancy services in industrial educational and society relevant areas.
- To provide leadership in curriculum design and development

Programme Outcomes

Graduates will demonstrate

a. Knowledge of fundamentals of electrical engineering, mathematics, science and an ability for its application.
b. An ability to identify, formulate and solve electrical engineering problems, to understand, evaluate and design electrical circuits and demonstrate working principles of electrical machines, power systems, control systems, microcontroller and embedded systems.
c. An ability to design a system, component or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability and sustainability.
d. To conduct experiments on electrical circuits/systems/work setups/projects, etc, and work in multidisciplinary teams, as well as to analyze and interpret data.
e. Skills to use modern engineering tools, software and equipment to identify, formulate, analyze and solve electrical engineering problems.
f. Knowledge and understanding of professional and ethical responsibility.
g. An ability to communicate effectively in both verbal and written form.
h. The understanding of impact of engineering solutions in the global, economic environmental and societal context and also will be aware of contemporary issues.
i. Confidence for self learning, and recognition of the need to engage in lifelong learning.
j. an ability to participate and succeed in competitive examinations like GATE,GRE,GMAT, IELTS to pursue higher education encapsulating wide areas, and prepare for meeting the needs of Indian and Multinational companies.
k. Capabilities to serve the nation by acquiring key administrative positions by succeeding in civil service examinations like MES, IES.

Academic calendar Semester-I 2015-16

DEPARTMENT OF ELECTRICAL ENGINEERING

Academic Calendar I- Term(2015-16)

Month	Week No.	Week Days							No. of working days	Events
		MON	TUE	WED	THUR	FRI	SAT	SUN		
July	0			1	2	3	4	5	0	1,2,3 Reporting of students
	1	6	7	8	9	10	11	12	6	6 - Commencement of classes
	2	13	14	15	16	17	18	19	5	16-Workshop on 'Applications of Power Electronics to Power Systems'
	3	20	21	22	23	24	25	26	6	18 - Ramjan ID holiday
	4	27	28	29	30	31			5	
AUG	4						1	2	0	
	5	3	4	5	6	7	8	9	6	7,8 - PCB Designing Workshop
	6	10	11	12	13	14	15	16	5	15-Independence Day celebration
	7	17	18	19	20	21	22	23	5	20-Workshop on 'Empowering Employability'
	8	24	25	26	27	28	29	30	6	
	9	31								
SEPT	9		1	2	3	4	5	6	4	2,3-Workshop on Energy Scenario & Impact of Power Electronics in sustainable Energy Systems
	10	7	8	9	10	11	12	13	6	7,8,9 Mid term Test
	11	14	15	16	17	18	19	20	4	15- Engineers Day,Teachers Day &Freshers Party celebration 17- Ganesh Chaturthi Holiday
	12	21	22	23	24	25	26	27	5	16- 1st letter to Parents
	13	28	29	30					3	28-30 Test II
OCT	13				1	2	3	4	1	1- Display of test marks 2- Mahatma Gandhi Jayanti Holiday
	14	5	6	7	8	9	10	11	6	7- 2nd Letter to parents
	15	12	13	14	15	16	17	18	5	16 - Last Teaching day
	16	19	20	21	22	23	24	25	4	19 - 21 TW submission & Internal oral 22- Dashera holiday, 24 - Moharam holiday
NOV	17							1		1-20 - 1st vacation slot (Tentative)
	18	2	3	4	5	6	7	8		1-14 Preparatory Leave
	19	9	10	11	12	13	14	15		11-13 - Dipawali Festival Holiday
	20	16	17	18	19	20	21	22		16- Start of University exam (Tentative)
	21	23	24	25	26	27	28	29		25- Guru Nanak Jayanti holiday
	22	30							88	

Govt. Holiday | Activities | Test | Holiday

Academic Calendar (2015-16) Sem II

Month	Week No.	Week Days							No. of working days	Events
		MON	TUE	WED	THU	FRI	SAT	SUN		
Jan (22)	*0*					1	2	3	0	4 - Reporting of students
	1	4	5	6	7	8	9	10	6	5 - Commencement of classes 9 - One Day FDP for Staff
	2	11	12	13	14	15	16	17	5	12 - National Youth Day
	3	18	19	20	21	22	23	24	6	18-19 - Annual Social Gathering 23 - 1st NAAC Audit
	4	25	26	27	28	29	30	31	5	26 - Republic Day
Feb (22)	*4*	1	2	3	4	5	6	7	5	13 - 2nd NAAC Audit
	5	8	9	10	11	12	13	14	6	15 - 17 Unit Test 1 18 - Display of UT1 Marks
	6	*15*	*16*	*17*	18	19	20	21	4	19 - ShivajiMaharajJayanti
	7	22	23	24	25	26	27	28	6	24 - 1st Letter to Parents
	8	29							1	27 - Parents Meet
Mar (23)	*9*		1	2	3	4	5	6	4	3 - 4 National Level Symposium + Project Competition
	10	7	8	9	10	11	12	13	5	7- Mahashivratri Holiday 12 - 3rd NAAC Audit
	11	14	15	16	17	18	19	20	5	14 -18 Online Students Feedback
	12	21	22	*23*	24	*25*	*26*	27	5	23 - 26 Unit Test 2 24 - Holi Holiday 25 - Good Friday
	13	28	29	30	31				4	29 - Display of UT2 Marks 31 - 2nd Letter to Parrents
Apr (21)	*13*					1	2	3	1	4 -7 NAAC Activity
	14	4	5	6	7	8	9	10	5	8 - Gudhipadva Holiday 9 - Alumni Meet
	15	11	12	13	14	15	16	17	4	14- AmbedkarJayanti 15 - Ramnavami
	16	18	19	20	21	22	23	24	5	20 - Last Teaching day 20-21 - Remedial Test
	17	25	26	27	28	29	30		6	25-3 Pra./Ext. oral exam. (Tentative)
May	*17*							1		1- Maharashtra Day
	18	2	3	4	5	6	7	8		
	19	9	10	11	12	13	14	15		16 - Commencement of theory Exam (Tentative)
	20	16	17	18	19	20	21	22		
	21	23	24	25	26	27	28	29		21- BuddhPorrnima
	22	30	31						90	

Govt. Holiday | Activities | Test | Holiday

Principal

Faculty details:-

Sr.No	Name	Qualification	Designation	Specialization	No. of Years of Experience
1	Mr. P.P.Kulkarni	M.Tech	Assist. Prof. & H.O.D	Electrical Power Systems	6
2	Mrs.M.R.Kandgaonkar	M.Tech	Assist. Prof.	Energy Technology	5
3	Mr.A.M. Bhandare	M.Tech	Assist. Prof.	Power Systems	5
4	Mr. N.S.Jadhav	M.Tech	Assist. Prof.	Power Systems	5.5
5	Mr.V.T. Metkari	M.Tech	Assist. Prof.	Power Systems	4
6	Mr. A.P Redekar	M.E	Assist. Prof.	Control Systems	6
7	Mr. Y.R.Naik	M.Tech	Assist. Prof.	Power Systems	3
8	Mr. P.B.Gurav	M.E (APP)	Assist. Prof.	Power Systems	4
9	Mr.D.R.Shelar	M.Tech	Assist. Prof.	Power Systems	3
10	Ms.P.G.Bendre	M.Tech	Assist. Prof.	Power Systems	2
11	Mr.V.S.Bhandare	M.Tech	Assist. Prof.	Power Systems	2

Details of Infrastructural facilities:-

Labs-

S/r	Name of laboratory	Lab. Area in Sq.Meter	Investment
1	Basic Electrical Engg. Laboratory	111.91	1299798/-
2	Machine Laboratory (AC & DC)	169.28	1574140/-
3	Computer Software Laboratory	79.25	3325232/-
4	Power Electronics & Drives Laboratory	79.25	723832/-
5	Control System Laboratory	78.93	307932/-
6	Measurement & Instrumentation Laboratory	78.94	867877/-
7	Switchgear & Protection Laboratory	51.53	343470/-
8	Micro Controller & Its Application Laboratory	79.56	78750/-
9	High voltage Engineering Laboratory	84.22	509876/-
	Total investment		**9030907/-**

Department's classrooms:-

Sr.no	Description	Room ID	Carpet area (In Sq.m.)
1	Classroom 1	D-302	78.25
2	Classroom 2	D-303	78.25
3	Classroom 3	D-304	79.25
4	Tutorial Room	D-305	51.53
5	Seminar Hall	D-104	133.44

Study resource:-

Sr.	Particular	Total
1	Books	1690
2	National journal	19
3	International journal	38

Major equipment list:-

S/R	Department	Level	Name Of Laboratory	Major Equip[ment
1	Electrical Engineering	Under Graduate	BASIC ELECTRICAL LAB	TRANSFORMER,EARTH TESTER,D.C. SHUNT MOTOR,ENERGY METER,TRANSFORMER RECTIFIER CKT,3 INDUCTION MOTOR,GENERATOR
2	Electrical Engineering	Under Graduate	MACHINE LAB	5H.P. D.C. Shunt motor# 3 Ø Alternator,Parrallel Operation Of Alternator,5H.P. SYN. Motor,3 Phase Auto Dimmerstat,D.C. Series Motor,Load Bank,100 Amp /230V DC Rectifier Circuit
3	Electrical Engineering	Under Graduate	MEASUREMENT LAB	WEIN BRIDGE,MAX WELL BRIDGE,GALVANOMETER,3 PHASE ENERGY METER
4	Electrical Engineering	Under Graduate	FEED BACK CONTROL SYSTEM LAB	PNUMATIC TRAINER TABLE,HYDRAULIC TRAINER TABLE,ON/OFF TEMPRETURE CONTROLLER,STEPPER MOTOR CONTROLLER,DC SERVO MOTOR,AC SERVO MOTOR
5	Electrical Engineering	Under Graduate	INSTRUMENTATION TECHNIQUES LAB	RTD & THERMOCOUPLE, LVDT, STRAIN GUAGE,BOURDEN TUBE,ROTAMETER,PID CONTROLLER,PLC ADVANCED TRAINER KIT
6	Electrical Engineering	Under Graduate	ANALOG ELECTRONICS LAB	. DUAL POWER SUPPLY, FUNCTION GENERATOR,OSCILLOSCOPE,OPAMP KITS, CRO.
7	Electrical Engineering	Under Graduate	POWER ELECREONICS LAB	SCR/DIAC/TRIAC/MOSFET/GBT,3Ø FULLY CONTROLLED CONVERTER,CYCLO-CONVERTER,JONES& MORGANS CHOPPER
8	Electrical Engineering	Under Graduate	Electrical Circuit Analysis Lab	THEROMS KIT, H ABCD Z & Y PARAMETERS,STAR DELTA TRASFORMATION
9	Electrical Engineering	Under Graduate	HIGH VOLTAGE ENGGINEERING LAB	100mm SPHERE GAP,TRANSFORMER OIL TEST KIT,HIGH VOLTAGE TESTER
10	Electrical Engineering	Under Graduate	ELECTRICAL DRIVES & CONTROL LAB	SEPERATELY EXICITRD DC MOTOR, POWER MOSFET,1PHASE INDUCTION MOTOR
11	Electrical Engineering	Under Graduate	ADVANCED SWITCHE GEAR LAB	IDMT OVER CUTTENT RELAY,DIRECTION OVER CURRENT RELAY,UNIVERSAL RELAY TESTING KIT

Co-Curricular & Extra-curricular Activities-

Social activity at department in sem-I & sem-II 2015-16

Sr. no.	Social activity	date
1	Blood Donation Camp	13/03/2016
2	Celebrate Republic Day	26/02/2016
3	Celebrate Independence Day	15/08/2015
4	Celebrate Gandhi Jayanti	02/10/2015
5	Celebrate Chh. ShivajiJayanti	19/02/2016
6	Swacchata Abhiyaan	March 2016
7	Celebrate Dr. B. R. AmbedkarJayanti	14/04/2014
8	Celebrate Women's Day	08/03/2016
9	Celebrating national youth day	12/01/2016
10	Celebrating project exhibition	19/03/2016
11	Celebrating last days of final year student	March 2016
12	Celebrating fresher's welcome ceremony	17/08/2016
13	Celebrating farewell ceremony	13/03/2016

Activities under Entrepreneurship Development Cell:-

EDC Co-coordinator:- Asst. Prof. Miss. P. G. Bendre

Sr.	activity	Guest person	date	No. of participant
1	04 day workshop on 'Entrepreneurship awareness'	1. Mr. Vivek S. Yavalkar (former sr. analust intellectual property Honeywell tech. sol. Benguluru) 2. Mr. Prashant Kulkarni(CEO Micriotech sol. kolhapur)	02 feb. 2016 to 05 feb. 2016	19

Co-curricular Activities

TECHNICAL activity at department in sem-I &sem-II 2015-16

Sr.No.	Workshop/Skill program Name	Resource Person	Conducted date	No. of student	Arranged by
1	One day workshop on, 'Application of Power electronics in Power System'. (university level)	Dr. Prof. S. S. Tanwade (DBATU, Lonere)	16/07/2015	100	Asst. Prof. P. P. Kulkarni
2	Two day workshop on, 'Energy Scenario & impact of Power quality issue in sustainable energy system'. (university level)	Dr. Prof. P. K. Katti & Dr. Prof. K Vadiarajacharya (DBATU, Lonere)	02/09/2015 & 03/09/2015	90	Asst. Prof. P. Padghan
3	Two day workshop on, 'PCB Design'. (university level)	Mr. A. S. Kamble (SK Electronocs)	07/08/2015 to 08/08/2015	80	Asst. Prof. P. P. Kulkarni
4	Two day workshop on, 'Application of CATIA IN Electrical Machine Design'.. (university level)	Prof. V. H. Deokar & Prof Bhosale sir SETI, Panhala	03/03/2016 to 04/03/2016	55	Asst. Prof. D. R. Shelar
5	Guest lecture on 'Electrical machine design'	Prof. S.S. Katre. Shivaji university	26/02/2016	90	Asst. Prof. D. R. Shelar
6	Guest lecture on 'Electrical machine design'	Prof. A. Malgave Shivaji university	02/03/2016	55	Asst. Prof. D. R. Shelar
7	Department level test program for competitive exam	Dept. faculty		55	Asst. Prof V. S. Bhandare

Following students of Department participate in various activities:-

List of Students Participated in Extra Curricular Activity						
Academic Year 2015-2016						
Sr. No.	Name of Participant	Class	Event	Date of Event	Location	Award
1	Patil Pruthviraj S.	B.E.	Idea Presentation	09/11/2015	NMCOE Peth	Runner-Up
2	Swami Ketan C.	B.E.	Idea Presentation	09/11/2015	NMCOE Peth	Participated
3	Ghevari Vijay M.	B.E.	Idea Presentation	09/11/2015	NMCOE Peth	Participated
4	Shinde Neha B.	T.E.	Idea Presentation	09/11/2015	NMCOE Peth	Participated
5	JadhavKalyani R.	T.E.	Idea Presentation	09/11/2015	NMCOE Peth	Participated
6	Mulla Rehana A.	T.E.	Idea Presentation	09/11/2015	NMCOE Peth	Participated
6	Patil Gaytri D.	T.E.	RSF	22/8/15	S.G.I.	1 Rank
7	Koli Komal D.	T.E.	RSF	22/8/15	S.G.I.	2Rank
8	Patil Gaytri D.	T.E.	G.S.F.	8-10/01/15	C.O.E.Pune	Participated

St ud en t 's achievement:-

Sr.	Name of students	class	Event	Name	Organizer	Award
1	Patil Gaytri D.	T.E.	RSF	22/8/15	S.G.I.	Rank 1
2	Koli Komal D.	T.E.	RSF	22/8/15	S.G.I.	Rank 2
3	Patil Pruthviraj S.	B.E.	Idea Presentation	09/11/2015	NMCOE Peth	Runner-Up
4	Aniket vidnodkar	T.E.	CRICKET ZONAL	Jan 2016	SUK	Winner

Placement Details:-

Sr.	Name of students	class	Company	Profile
1	Komal Kamble	B.E.	XL Dynamics, Navi Mumbai	Assistant Analyst

Student achievement in academics:-

SE TOPPER LIST 2014-15

S/r	Name of student	Percentage
1	BORAGE SUYOG SAMBHAJI	71.11
2	SHINDE ANIKET RAMAKANT	67.86
3	MULLA REHANA ANVAR	64.97

TE TOPPER LIST 2014-15

S/r	Name of student	Percentage
1	NAYAKWADI ROHIT UTTAMRAO	66.5
2	NARUTE DIGAMBAR VILAS	65.9
3	NAVALEKAR ARIF RIYAJ	62.5

BE TOPPER LIST 2014-15

S/r	Name of student	Percentage
1	PATIL SUPRIYA GANAPATI	78.19
2	BATE NILESH MADHUKAR	75.65
3	KHANCHAUHAN IMRAN SALEEM	75.25

LIST OF PG STUDENTS			
Acedamic Year: 2015-16			
Sr.No	Name of Student	Specialization	College
1	ParitAnjinkya B.	Power Systems	R.I.T.Islampur
2	SheteSayali R.	Power Systems	R.I.T.Islampur
3	Toraskar Ajay A.	Energy Systems	ShivajiUniversity,Kolhapur
4	DeshmukhMaitreyee J.	Electrical Drives & Control	Fr. C. Rodrigues Institute of Technology,Vashi

B.E. Student Project list during the AY-2015-16:-

Total 18 Projects were carried out during the AY-2015-16 & the list of projects is as follows,

1. Energy Conservation- ENCON
2. TCR Compensation for leading Power Factor
3. Land Sliding Protection using Control Logic
4. Prototype Electric Car
5. SIMO- Converter
6. Overhead Line Fault detector
7. Voltage Sag & Swell Compensation using DVR
8. Modeling of DFIG
9. 5 level Inverter
10. IM operation on single phase & three phase
11. Wind Energy Systems
12. Overhead Line Breakage
13. Underground Fault Detection using GSM
14. Multitasking Robot using Solar Energy
15. Advanced Billing System
16. Van De Graff Generator
17. FACTS Devices
18. DC Injection Braking

This is all about academic year 2015-16, now we are very sure that the academic year 2016-17 will be a progressed year. We decided that in this year 2016-17 we focus on discipline, academics, not only the word but the path towards achieving our departmental program objective.

- **PROJECT PHOTO GALLERY B.E. (2015-16)**

Van-De- Graff Generator

Wind Energy Systems

Underground Fault Detection Using GSM

SIMO Converter

Self Excited Induction Generator

Overhead Line Breakage

Overhead Fault Detection

Land Sliding Prevention

Four Quadrant Operation

Five Level Inverter

FACTS Device

Energy Conservation

Electric Car

Dynamic Voltage Restorer

Doubly Fed Induction Generator

Automatic Green Car

Automatic Billing System Using GSM