## Volume:01 Vishuatronic 2013-14

The new electronic independence re-creates the world in the image of a global village.

VISHWAKARMA

Vishwakarma Institue of Technology Department of Electronics Engineering

### **About the Department**

The Department of Electronics Engineering is one of the major Departments of Vishwakarma Institute of Technology, Pune. The department is proactive in experiential learning and applied research in the areas of signal processing ; micro-electronics, speech processing, machine intelligence, communication engineering and real-time embedded systems.

The Department of Electronics Engineering established in the year 1985 offers Under Graduate course- B Tech. (Electronics Engineering). The department caters to the ever increasing needs of technical brilliance in all allied areas of electronics engineering. The Department has well-equipped 10 laboratories with high end equipments such as Digital Storage Oscilloscopes, High Frequency Counters, Antenna Trainer Kits, Combiscopes, Pneumatic Trainer Kits, Blackfin Digital Signal Processors, FPGA Vertex-5 kits, Spartan-3E kits, ARM 7, ARM 9, Cortex-M3 kits etc. and licensed softwares such as Mentor Graphics, MATLAB, etc.

Our faculty members challenge their students, share insights gained through professional experience and communicate the knowledge they have spent a lifetime acquiring. They dont rely on teaching assistants and they are supportive in the classroom.

The students are focused with the use of conceptual understanding of core domain areas as well as enhanced skills disseminating their analytical abilities. Students of the department are actively involved in various technical activities through IEEE students chapter Pune. Our aim is to provide students the lifelong learning and leadership skills that enable them to in their professions and advance to positions of responsibility by effective industry-Institute Interaction.

## From the H.O.D 's Desk



PROF. A. M. CHOPDE Head, Dept. of Electronics Engineering

On behalf of Department of Electronics Engineering, I offer you our most grateful welcome to our Newsletter. It is to make a summary of achievements, events and news related to the department available for you on a click. Certainly you will sense the growth and development for students as well as faculty.

Technical learning is inherent part of life of engineering students. But to glorify their career path we support them for their co-curricular as extracurricular activities. This newsletter shows results of the efforts. The achievements of faculty as well as sudents in various fields are published here. The technical content related to the subjects, their applicability in the projects is understood by the students thoroughly during the journey with the institute. The same is reflected in the articles. It will be definitely motivating to their juniors.

Stakeholder is one of the strongest pillar in the structure of department. Constant support and guidance by our stakeholders helps to achieve better. With your assistance as always I believe that our team can march towards professional excellence.

### Departmental course conduction by industry faculty 2013 -2014

Sr. No.	Subject Taught	Name of Industry Expert	Experience in years	Organization of work	Domain
1	EC24313 Introduction to LINUX	Mr. Gaurang Gorasiya	4.5 Yrs	Global Talent Track Pvt. Ltd.	LINUX Operating System
2	EC30106 Power Electronics	Mr. Prasad Deshpande	15 Yrs	Philips, Pune	Power Electronics
3	EC33312 Switch Based Simulation	Mr. Sravan Vaidya	5	IBM, Pune	VLSI
4	EC33314 PCB design	Mr. Subhash Akiwate	18 Yrs	Akiwate Industries, Pune	PCB Design
5	EC33316 Industrial Wireless Communication	Mr. Deepak Bodhani	20 Yrs	Digitech Engineers	Communication
6	EC41301 Embedded Systems	Mrs. Sayali Kulkarni		KPIT Cummins	Embedded
7	EC42115 High Power Semiconductor Devices	Mr. Prasad Deshpande		Philips	Power Electronics
8	EC48101 High Level Verification (Honors)	Mr. Sravan Vaidya		IBM, Pune	VLSI
9	EC48105 Real Time Operating Systems	Mrs. Sayali Kulkarni		KPIT Cummins	Embedded

# Faculty Awarded 2013

Sr No 1	Name of Faculty Vijay Gaikwad	Award received VIT SHRI	Awarding Body VIT, Pune	Date Awarded Sep-13	Place Pune	Details of Awards
2	Vijay Gaikwad	Best Project	University of Pune	Dec-13	Pune	Avishkar- 8th Maharashtra state Inter university research convention
3	S.N.Shilaskar	publication in journal	VIT, Pune	Sep-13	Pune	

### Conferences Attended (2013-14)

Faculty Name	Name of the conference/ Workshop/Seminar	National/ Internati onal	Dates	Place	No. Of Days
S.N.Raut	International conference for convergence of technology	Internati onal	6-8 april 2014	Sharadchandra pawar college pune	03
S.N.Raut	Statistical signal analysis in MATLAB		10th -12 th oct2013	Trinity college of engg. Pune	03
V.P.Parkhi	Simulation of power electronics circuits		8th 9th oct2013	IIT Bombay	02
A.B.Barbadekar	NuMicro ARM Cortex M0		15-16 Jan 2014	University of pune	02
R.V.Tornekar	Signals & systems	1	2nd 12th jan 2014	Conducted by IIT Kharagpur in vit	11
A.K.Talele	Signals & systems	113	2nd 12th jan 2014	Conducted by IIT Kharagpur in vit	11
Sunil Biradar	Signals & systems	125	2nd 12th jan 2014	Conducted by IIT Kharagpur in vit	11
S.N.shilaskar	VLSI Design Seminar		23-08-2013	Cadence design systems	01
S.N. shilaskar	Signals & systems		2nd 12th jan 2014	Conducted by IIT Kharagpur in vit	11
B.G.Taralekar	Signals & systems		2nd 12th jan 2014	Conducted by IIT Kharagpur in vit	11
S.B.Bhorage	Signals & systems		2nd 12th jan 2014	Conducted by IIT Kharagpur in vit	11
D.G. Kanade	Signals & systems		2nd 12th jan 2014	Conducted by IIT Kharagpur in vit	11
M.B.Tirmare	Signals & systems		2nd 12th jan 2014	Conducted by IIT Kharagpur in vit	11
D.G.Kanade	FTP on nuvoton numicro ARM cortex-m0 and its application		15-16 jan 2014	University of pune	02
S.N.Raut	Signals & systems		2nd 12th jan 2014	Conducted by IIT Kharagpur in vit	11
A.B.Barbadekar	Signals & systems		2nd 12th jan 2014	Conducted by IIT Kharagpur in vit	11
M.M.shidore	Embedded control systems		12-16 may 2014	IIT bombay	05
M.M.shidore	Signals & systems		2nd 12th jan 2014	Conducted by IIT Kharagpur in vit	11
S.B.Bhorge	FTP on Statistical inference and linear algera		16-21 dec. 2013	SGGSIE&T Nanded	06
S.P.Ballal	VLSI Design Seminar		23-Aug-13	Hotel Courtyard, pune	01
S.P.Ballal	Signals & systems		2nd- 12th jan 2014	Conducted by IIT Kharagpur in vit	11

## Student Achievement Award July 2013 -June 2014

Sr No	Name of Student	Event	Venue	Award	Year
1	Pratik Gandhi	Smart Analyst	VIT Melange 14	Second	24-28 Feb 2014
3	Shruti Patil	Scientia 13 – PICT IET Student chapter.	PICT Pune	Participated	31 Aug -1 Sep 2013.
4	Sumit Sathe	National Level Inter- Engineering Sports meet'13	MIT , Pune	Participated	20-24 Sep 2013
8	Jagriti Dhawan	Summer project	Cummins India Limited , Pune	Completed Project work on " Pokayoke system for lube oil cooler o ring missing	6 June – 15 July 2013
9	Pratik Gandhi	IEEE Student Branch workshop on Microcontroller	VIT , Pune	Completed	30-31 January 2014.
10	Pratik Gandhi	IEEE Student Branch workshop on Web Designing	VIT , Pune	Completed	16-17 October 2013.
11	Shruti Dhangonde	Melange 2014	VIT Pune	Event – Logic – x , Participated	24-28 Feb 2014.
12	Shruti Dhangonde	Melange 2014	VIT Pune	Event – C – Athlon , Participated	24-28 Feb 2014.
13	Sumit Sathe	Inter Engineering College cricket	Pune	Winner	2013-2014

14	Sanyogeeta Kadu	Western Equestrian premier Leauge	Col Khans Equeestrian Academy	Won 1 Gold, 2 Silver and 1 Bronze. Third Prize	Feb 2014
15	Swapnali Sangale	Melange 2014	VIT , Pune	First Prize – Volleyball ( Girls )	24 -28 Feb 2014
16	Rahimullah Samandar ( Afghanistan )	Fourth International conference on "Youth Dialogues Universal Development"	Pune	Participated	8-9 Feb, 2014.

## **IEEE ACTIVITIES**

1	Guest Lecture – Ganesh Ramakrishnan
2	Membership Drive
3	Guest Lecture – Dr. K.K. Ramakrishnan
4	Orientation Programme for the members
5	Matlab Workshop
6	Graphics Designing Workshop
	( Adobe Photoshop and Corel Draw )
1	Web Designing Workshop
8	MATLAB Workshop in Collaboration with
	SAE Student Branch
9	PCB Designing and Manufacturing Workshop
10	Microcontroller Workshop
11	Vishwatronix-
	Technical Festival of Electronics and EnTC department
12	Industrial Visit to VACPL and BSNL
13	Social Activity ( Pitashree Vrudhashram
	and Bal Sangopan Kendra )
14	LATEX Workshop
15	Guest lecture- Prof. Mukesh Motwani
16	Industrial Visit to PARI

**Companies offering Internship** to students during summer 2014 **B. S. N. L. RTTC. Chinchwad Pune** Air India. Mumbai **RCF.** Alibag Damodar Vally Corpn. **Skytech**. Bangalore Sandvik Asia Pvt. Lt. Alstom India Ltd. Siemens Ltd. Nasik

## Placement record of students

	A.Y. 2012-13	A.Y. 2013-14
Placement offers in core electronics companies	17%	13%
Total placement offers	57%	72%

## Industry Sponsored Projects AY-2013-14

Sr. No.	Sponsoring Industry	Area	Title
1	Honeywell Automation India Ltd. Pune	Power Electronics	Brush DC Motor Drive system
2	Forbes Marshall, Pune.	Embedded System	Diagnostic Data Logger System
3	Digitech Engineers. Pune,	Embedded System, IP, Communication	PLC with co-ordinator.
4	Tata Motors Pune	Mechatronics	Engine Assembly Assistance Systems
5	Neowatt Energy Solutions Co Pvt Ltd. Pune.	Biomedical automation	Driver Fatigue Detection System.
6	G. M. R.T.	Power Electronics, Embedded System	Precision position control of DC motor using embedded system.
7	Mahindra Engineering Services, Chinchwad	Automation & Embedded System	Smart Body Controller.
8	SPJ Embedded Tech. Pune,	DIP & Embedded System	Implementation of image processing algorithm for robotics in Embedded system.
9	Forbes Marshall, Pune.	Embedded System	Smart Blowdown Controller

## Vishwatronic 2013-14

## Staff Editors Prof.V.D.Gaikwad Prof.B.G.Tarlekar Prof.K.S.Devgaonkar

## Student Editors Pratik Rokade Priyanka Palshetkar