# **Department of Electronics**

# Academic Year 2016-17 (Even Semester)

# **Department Activities:**

# Industrial visit

• An Industrial visit was organized for second and third year ETRX students (12 students) to Bisleri plant, Mumbai on 10th march 2017.

# Student Achievements/ Activities/ Projects

# **Activities**

- More than 60 students from third and final year completed Internship/ Industrial training in various companies such as BARC, HPCL, Godrej, Indian railways, etc. during summer vacation.
- Students were part of organizing teams of various events held in VESIT during Praxis-2017 on the 22<sup>nd</sup> and 23<sup>rd</sup> September 2017.
- More than 100 students from Department of electronics participated in various technical events during Praxis 2017.
- 18 Alumni are pursuing higher studies at Reputed International Universities.

#### **Spoken Tutorial:**

Spoken tutorial is an initiative of national mission on education through ICT, MHRD, Govt. of India, to promote IT literacy through open source software. In our department we selected four software such C,C++,Java and Python for certification and the following number of students got certified-

- 91 Students got certified in "C".
- 48 Students got certified in "CPP".
- 60 Students got certified in "Java".
- 38 students got certified in "python"

# **Achievements**

- Harish Yadav and Haroon Khan secured III position in "Electronic Design Automation Challenge" conducted by Dwarkadas J. Sanghvi College of Engineering in April ,2017
- Omkar Tulaskar, Pitam Mali, Mahesh Kulkarni reached Semi-Finals and won the Super Team award in Project "Deep Blue Competition" organised by Mastek Ltd. for completing a working solution for emergency situation by developing an android application during the period October 2017-February 2018.

- Narendra Walawalkar reached Quarter-Finals in IICDC organized by Texas Instruments, IIM Banglore, DST government, a national level competition for completing the project ASSIA( Aerial Servicing System Integrated with Android ) in April 2017.
- Tejveer Singh Goraya, Abhinav Sridhar and Chaitanya Bhure reached the regional final of e-Yantra Ideas Competition in March 2017.

### **Publications by students**

- Ankit Panvalkar, Shubham Sawant, Varun Ghokle, Rushabh Shah published paper in International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering titled "IMITATING BOTS" in ISSN 2278-8875 Vol. 6, Issue 4, April 2017
- Ankit Panvalkar published a paper titled "Master-Slave Configuration Based Bluetooth Controlled Robots", International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering, Volume 6, Issue 3, March 2017, ISSN 2278 8875DOI:10.15662/IJAREEIE.2017.0603136.
- **Tejveer Singh Goraya, Chaitanya Bhure ,Abhinav Sridhar** published the paper titled "APPLICATION BASED SHOPPING TROLLEY(S-MART)". International Journal Of innovative Research in Science,Engineering and Technology IJIRSET,ISSN(Online): 2319-8753Vol.6,Issue 8,August 2017.
- **Tejveer Singh Goraya, Abhinav Sridhar** published the paper titled "Automation of conventional Gas stove" .International Research Journal Of innovative Engineering and Technology IRJET,ISSN: 2395-0056Vol.5,Issue 2,February 2018.

#### **Seminars/Workshops:**

#### PROJECT SKILL DEVELOPMENT WORKSHOP

The Workshop was organized between 10th and 15th July 2017.

- Mrs. Dipti Karani introduced the students to a new circuit simulation software "SEQUEL" along with hands-on.
- Mr. Chandrasekhar Javale elaborated on "EAGLE simulation software" and different components available within the design suite.
- Mr. Abhishek Chaudhari focused on the microcontroller family ATMEL and PROTEUS software.

• Mrs. Sarika Kuhikar introduced the students to Power Electronics with MATLAB SIMULATION SIMPOWER.

#### ANALOG ELECTRONICS AND PCB DESIGNING WORKSHOP

Tinkerer's Lab conducted the Analog Electronics & PCB Designing Workshop for five days 3rd August to 10th August 2017. Students from ETRX and INSTRUMENTATION department participated in this workshop. During this workshop students learnt the working of BJTs and Relays, Voltage Regulators and Operational Amplifiers as well as Circuit Implementation on a PCB.



Analog Electronics Workshop by Tinkeres Lab



Tinkeres lab conducting PCB Designing Workshop

#### EMBEDDED SYSTEM AND IoT WORKSHOP

Tinkerer's Lab conducted the Embedded Systems & IoT Workshop for five days from 15th September to 21st September 2017. Students from ETRX, EXTC and CMPN department attended this workshop. Students were introduced to Arduino UNO development board and were given a hands-on session on interfacing switches, LEDs, sensors and Motors with Arduino IDE. In the IoT Segment, students learnt how to make Node MCU a web server and host the web page. They were also taught the basic syntax used in PHP scripting.



Session of IOT Workshop

#### **Department Rankers**

- Nair Lakshmi Muralidharan secured first rank in final Year Electronics Department (2016-17) with CGPA 9.24
- Konde Saheli Vijay Vidya secured second rank in final Year Electronics Department (2016-17) with CGPA 9.18
- Nair Rahul Ganapathi Ramani secured third rank in final Year ElectronicsDepartment (2016-17) with CGPA 9.06

#### **Placement activities**

- It's an immense pleasure to announce that 86 students of 2013 -17 batch have got placement offers from various companies like Accenture, Capgemini, Atos ,L and T Infotech, LnT Core, Sankey Solutions, General Electric, Toppers.com.
- A Mock Aptitude Test (MAT) on Quantitative Techniques was conducted for third year students (2014-18 batch).

# **Scholarships**

**1.Suman Tulsiani Scholarship** is awarded by Suman Ramesh Tulsiani Charitable Trust. This scholarship is decided centrally for VES colleges and forwarded to Tulsiani Trust. The criteria for this scholarship is that, the student should have a score of at least 7.00 grades and family income of less than three lakh per annum. This year it is awarded to following students of ETRX Department:

- Chowdhari Shoaib (S.E.)
- Akshay Bhise (S.E.)
- Gokul Narayanan (B.E.)
- Arvind Kushwaha (S.E.)
- Pawan Sukhwani (B.E.)
- Sayyadanwar Kazi (B.E.)
- Prathamesh Kulkarni (S.E.)
- Kiran Balakrishnan (T.E.)
- Sankalp Khandkar (B.E.)

**2.Vivekanand Jyoti Scholarship** is awarded every year to one student from each department. An Amount of Rupees Thirty thousand each is given every year. The criteria is a grade point of at least 7.00 and family Income of less than one lakh per annum. It was received by following student of ETRX Department:

• Harish Firatu (S.E.)

**3. Geeta Israni Foundation Scholarship** benefits meritorious students who scored grade point of 8.0 and above and whose family income does not exceed Rs.1.50 lakhs per annum. It was received by following students:

- Sankalp Dinanath Tripathi (T.E.)
- Madhav Agarwal (T.E.)

#### **Guest lecture**

• A Guest lecture by Prof. Naganada, Assistant professor, EXTC on "How to write a Research Paper" was arranged for the students of third year and final year on 21st march 2017.

• Remedial and guidance lecture is arranged by department of electronics for students having weak academic records for improving their academic performance. The schedule is as follows

Subject	Date	Time	Staff	Venue
Applied	1/03/2017	10.30am to	Mrs.	CA2
Mathematics III		12.30pm	BarnaliSaha	
Electronic	7/03/2017	12.45pm to	Mr.	CA2
Devices		2.45pm	AbhijitShete	
Digital Circuit	8/03/2017	12.45pm to	Mr.	CA2
Design		2.45pm	YogeshPandit	
Circuit Theory	10/03/2017	12.45pm to	Mrs.	214
		2.45pm	SarikaKuhikar	

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Subject	Date	Time	Staff	Venue
Microcontrollers	1/03/2017	12.45pm	Mr.	LAB
and		to	AbhishekChaudhari	201
Applications		2.45pm		
Signals and	2/03/2017	12.45pm	Mrs. Bharthi M.	213
Systems		to		
		2.45pm		
Digital	18/03/2017	12.45pm	Mrs.	214
Communication		to	RajaniMangala	
		2.45pm		

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- List of LBS projects

Sr.no	Name of the	Names of the	Mentor
	project	students	
1	College recommendation system	Nehal J, Sanjana M Darshana M, Shamli S	Mr. PrashantKanade(CMPN)
2	Smart door bell	Achyut D, Pavankumar S, Sahil T Shubham W	Mrs. AmudhaSenthilkumar (INST)

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- The student activities for the ElectronicsDepartment are as follows:

• The Technology Day was celebrated on 20<sup>th</sup> March 2017(Monday). In the Department of Electronics Engineering(VESIT), a **project exhibition** was organized and our third year (D11A & B) students attended an expert lecture on "**HoT** technologies and its impact on Indian Industry (and careers)".

• The expert lecture on "IIoT technologies and its impact on Indian Industry (and careers)" was given by Mr.PrasadRavekar, Siemens Ltd & Mr. Praveen Vaidya, B& R Industrial Automation. It was received very well by our students.

- Prasad Raverkar:
- Senior Manager, Business Development, Siemens Ltd
- Num of years of experience 22+
- Areas currently working Automation
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- Praveen Vaidya:

• Key Account - Manager at B&R Industrial Automation,

• More than 18 years of experience infield of Automation. He has associated with B&R an Automation Solution Provider for more than 13 years. Responsible for Business with Key Customers, Upskill of Sales and technical team.

• The project exhibition started from 12:30 PM. The response was very good from the students. There were 34 entries for the exhibition from second, third and final year students. Our students had good interaction and technical discussion with various Industrial experts, faculty and students from all departments who attended the exhibition. The correct approaches and design solutions were discussed.

• Mrs. Bharathi M and Mrs. NeelamChaudhari coordinated whole Technology day. Also, students and professors from various department visited project exhibition and appreciated efforts of students from Department of Electronics.

- Venue of Project Exhibition: Lab Room No. : 201, 202, 214 and 215.
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# List of Projects

#### Mini Projects by D11B

Group No.	Group Members	Project Title
	Tejveer Singh Goraya	
1&2	AbhinavShridhar	1. S-MART 2. PRO2TECT
	ChaitanyaBhure	2.11021201
	Sam David	
	ShivamGhodke	
3	Rahul Dudhande	X-Y plotter
	BhivaGawade	
	NehalJahgirdar	
4	SupriyaPalve	An show Light
4	ChetanMhaske	Anchor Light
	HarshalKadlak	
-	SarveshDhage	EN Transmitter
5	DhruvakumarAklekar	FM Transmitter

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	PrathameshChaudhari	
	AdityaGogwekar	
	ChhayaPatil	
6	GokulKizhakkeppattu	DTMF Based Cell-Phone Operated Car
	RushabhPatil	
	SarveshDhage	
7	DarshanDani	Local Audio Amplifier
	ChaitanyaAttarde	

### Mini Projects D11A

Group No.	Group Members	Project Title	
	ShubhamSharadWani		
1	SahilDilawarTasgavkar	Cru ert De erhell	
1	PavankumarMadhukarSakhare	- Smart Doorbell	
	Achyut Dave		
	ShubhamSharadWani	SmartCane	
2	SahilDilawarTasgavkar		
2	PavankumarMadhukarSakhare	SmartCane	
	AtharvRangnekar		
	Achyut Dave		
	ShrutiShetty	Remote Video Surviellance Robot	
3	MurtazaBaj	-	
	AbhishekDasari	Tracffic Classed Contarts On Destance	
	GauravDere	Traffic Signal System On Proteus	
	GauravDere		
4	ShrutiShetty	Digital Tachometer	
	Sidharth C		
5	PavankumarMadhukarSakhare	Marit I ilanama Andriad Anar	
5	ChaitanyaBhure	Vesit Library Andoird App	
	SanhitaBhagwat		
6,7	VirajBapat	1. LUX meter	
0,7	PavitraKanse	2. Password based door lock system (Proteus)	
	RoshniIyer	7	
8	KiranKharat	DI C based Sile system (simulation)	
δ	HitenMalkani	PLC based Silo system (simulation )	
0	KushalBhosale	Intelligent parking surface (Destave)	
9	HashmeetChaudhery	Intelligent parking system(Proteus)	

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	Clive dsouza		
	HariniIyer		
	KushalBhosale		
10	HashmeetChaudhery	Easter Einstein (imst. Castany (Dastany))	
10	Achyut Dave	Fastest Finger first System(Proteus)	
	GauravDere		
	ShrutiShetty		
11	SiddharthMundada	Remote Controlled Home Appliances(Home Automation)	
	GauravMahajan		

# Projects by D16A

Group No.	Group Members	Project Title	
	ApoorvaSundaresan		
1	IyerPavitraSrinivasan	Analysis of Image Enhancement Techniques	
	PriyankaPatil		
	ArjunBajpai		
2	Jay Anjankar	Rescue Assistant Inspection and Detection Rover	
2	SagarEidani		
	AmrshaSrivastava		
	AshwinPai		
2	Lakshmi Nair	LOT have A WON	
3	VikasAhuja	IOT based WSN	
	PalashGajria		
	Project	ts by D16B	
Group No.	Group Members	Project Title	
	BHARAT GIDWANI		
1	HARSHAL JASNANI		
1	JUHI MANGLANI	voiceiess to voice	
	PRIYANKA THALE		
	JAYDEEP LILARAMANI		
2	RAHUL NAIR	Fusion Based Fingerprint Scanner	
	NILESH DHANGADE		
	Projec	ts by D6B	
	AnkitPanvalkar		
1		Lucitation Dete	
1	Rushabh Shah	Imitating Bots	
	JayeshBhosale		

ShubhamSawant

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Tinkerer's Lab, VESIT - Technology Day Project List		
Sr. No.	Project Title	Group Members
1	ASSIA - Aerial Serving System Integrated with Android	RohitKashyap Nikhil Prabhu MandarKharde NarendraWalawalkar UmeshRamchandani
2	SAPER - Semi Automatic Pipeline Exploration Robot	RohitKashyap
3	Task Learning Robotic Arm	Omkar N. Tulaskar AnirudhIyyer Rushikeshbaraskar AnujaKumthekar SagarBaviskar
4	6 DOF Bipedal Robot	NitishNayak VarunGokhale Sunny Gawas Rahul Kalwar
5	Biometric Voting Machine	MiteshKhedekar Omkar N. Tulaskar Harish Yadav NarendraWalawalkar BhushanJadhav
6	DMAS - Digital Manipulator of Analog Signals	ApoorvaKelkar RachitPradhan
7	Electrical Mortise Lock Controller	RachitPradhan RonakRedkar KunalSawant
8	e-yantra Project	Abhishek Bane Gokul Narayanan ShreyashJadhav Abhijith Nair
9	Smart Stick	AtharvRangnekar ShubhamWani SahilTasgavkar PavankumarSakhare
10	C.O.D.E.S - Colour Detection for Segregation	ShreyashJadhav Abhishek Bane Gokul Narayanan

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Skill Enhancement Lecture

- SEL on "Artificial Intelligence" for final year students was delivered by Mr. Siddesh Wagale on 22nd August 2017.
- SEL on "Silicon crystal structure and Miller Indices" for final year students was delivered by Mr. Prafull Tele on 22nd July 2017.
- SEL on "Ideas for Mini Project" for third year students was conducted by Mr. V. M. Joshi on 24 July 2017.
- SEL on "Embedded Systems and IoT" for third year students was delivered by Mrs. Anita Diwakar on 24th October 2017.
- SEL on "Renewable Energy sources and and Solar PV" for second and final year students was delivered by Mr. Mehul Raval ,Solar Cell Process specialist, IMC, Mumbai on 3rd Feb 2018.
- SEL on "Robotics, its application and future scope" for third and final year students was delivered by Mr. Pratik Deshmukh, Director, Robo LAB technologies.

# Faculty News

#### **Publications**

- 1. Mrs. Asawari Dudwadkar, "Crack and Obstacle Surveillance Using Wireless Technology ",International Journal of Innovative Research in Science, Engineering Technology (IJIRSET), ISSN(Online): 2319-8753,Vol. 6, Issue 4, April 2017.
- 2. Mrs. Asawari Dudwadkar, "Implementation of Piezoelectric Sensors for Generation of Power.", International Journal of Innovative Researchin Science, Engineering Technology (IJIRSET), ISSN(Online) : 2319-8753, Vol. 6, Issue 4, April 2017.
- 3. Mrs. Asawari Dudwadkar,"Implementation of Automated Waste Segregator at Household Level", International Journal of Innovative Research in Science, Engineering Technology (IJIRSET),ISSN(Online) : 2319-8753 Vol. 6, Issue 4, April 2017.
- 4. Mrs. Sarika Kuhikar,"Automated horticultural system ", International Journal of Current Engineering And Scientific Research (IJCESR), ISSN 2394-0697, Vol.4, Issue 4, April 2017.
- 5. Mrs. Sarika Kuhikar, "PIC based protection of single phase induction motor", International Advanced Research Journal in Science, Engineering and Technology (IARJSET), ISSN (Online) 2393-8021, Vol.4, Issue 4, April 2017.
- 6. Mrs Gauri Sahoo, "Power factor correction using SCR and Microcontroller ", International Journal of Innovative Research in Science, Engineering Technology (IJIRSET),ISSN(Online): 2319-8753, Vol.6, Issue 4, April 2017.
- 7. Mrs Rakhi Jadhav, "Microcontroller based data glove to aid speech impaired ", International Journal of Innovative Research in Computer and Communication Engineering, (IJIRCCE), ISSN(Online): 2320-9801, Vol.5, Issue 3, March 2017.
- 8. Mrs Rakhi Jadhav, "Automated water distribution system and theft detection", Scientific Journal of Impact Factor (SJIF),ISSN : 2348-4470, Vol.4, Issue 4, April 2017.
- Mrs. Dipti Karani, "Biometric Security based Vehicular Safety System "Indian Journal of Industrial Relations (IJIR), ISSN: 2454-1362, Vol3, Issue 4, April 2017

# Courses conducted / attended

Courses Conducted By Faculty:

- Mr. P. Birajdar delivered a talk on Adaptive filters / Signal Processing : An overview on 27th march 2017 for all the faculties, under Research Forum, on behalf of the ETRX Department, VESIT.
- Mr. Abhay Kshirsagar conducted a session on Wireless Body area Network : An application of WSN on 14th July 2017 for all the faculties, under Research Forum, on behalf of the ETRX Department, VESIT.
- Mrs. Dipti Karani delivered a seminar Getting Started with Sequel Simulator on 4th august 2017 for all the faculties, under Research Forum, on behalf of the ETRX Department, VESIT.

### > Other activities

 Department of Electronics has organized One week Faculty Development Program (FDP) from 4<sup>th</sup> to 11<sup>th</sup> Jan 2017







Mrs.Kavita Tewari

Head of department of Electronics Engineering