# FINOLEX ACADEMY OF MANAGEMENT AND TECHNOLOGY, RATNAGIRI

**(APPROVED BY AICTE, RECOGNIZED BY DTE AND AFFILIATED TO MUMBAI UNIVERSITY)**

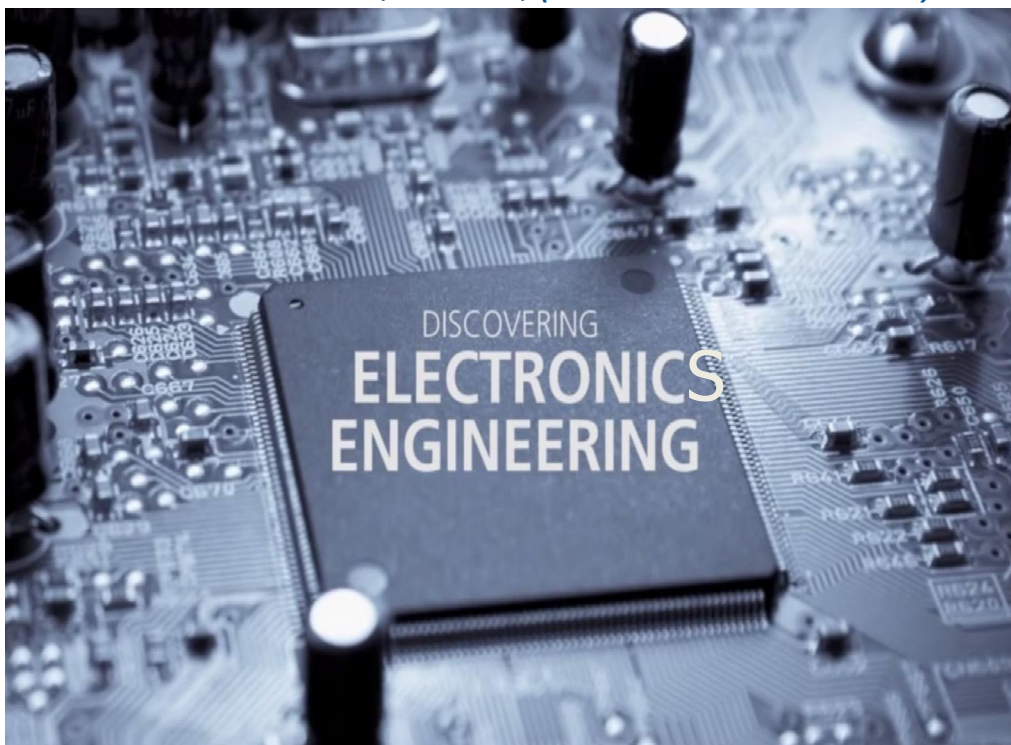# ELECTRONICA

NEWS-LETTER

OF

## ELECTRONICS ENGINEERING DEPARTMENT

*VOLUME 3, ISSUE 2, (1 Jan 2019-31 June 2019)*

## Contents

## List of Faculty/Staff Members in the Department

## Faculty Members

1. Prof. Girish G. Bhide (Associate Professor)
2. Prof. Vrishali V. Nimbalkar(Assistant Professor)
3. Prof. Amol R. Sutar (Assistant Professor)
4. Prof. Sandeep R. Nalage(Assistant Professor)
5. Prof. Mahesh A. Jadhav (Assistant Professor)
6. Prof. Rahulkumar P. Tivarekar (Assistant Professor)
7. Prof. Ashish B. Vartak (Assistant Professor)
8. Prof. Rupesh B. Ingle (Assistant Professor)
9. Prof. Suraj A. Shete (Assistant Professor)

## Staff Members

10. Mr. Bharat M. Biradar
11. Mr. Paresh S. Sambare

## Vision

- To become a leading center of knowledge and produce graduates who can adapt to ever growing field of electronics and integrated technology.

## Mission

- M1: To strengthen teaching-learning process and provide state of the art resources to help the students acquire global competency.
- M2: To offer technical skills, creativity, and integration to help the students to solve real life problems.
- M3: To provide value addition training programs such as soft skills, social and ethical values for all around development of the students to become successful in competitive career.

## Program Specific Outcomes (PSOs)

- Students shall acquire knowledge in analog circuit design, digital system design, microcontroller programming, instrumentation, and VLSI chip design.

- Students shall utilize Electronics Engineering knowledge to create and design innovative products and solutions for real life problems.

## About The Department

Department of Electronics Engineering was established as the first Engineering department of FAMT in 1996. Department has 09 faculty members experienced and post graduates from renowned institutes like IISc, COEP, VJTI, etc. Faculty has several publications, books and industry projects to their credit. Department encourages faculty to attend conferences, seminars and workshops so that they can enhance their knowledge and remain updated with the current changes in engineering field, which will help them to carry out their research and development activity. Also all of the faculties undertake NPTEL on-line courses which are conducted by IIT's and IISc and have secured top 1%, top 5% ranking score and Elite scores for the courses undertaken by them. Department has a separate

Departmental library, well-equipped 8 laboratories, wi-fi facility, ICT enabled class-room and a study friendly environment. Along with regular curricular teaching, department organizes workshops, course-enrichments, seminars and add-on courses on regular basis to impart additional knowledge to students, enhance their technical skills so that they can adapt to current industry requirement. Industrial training and Industrial visits are highly encouraged by the Department. A technical event named "Electrofocus2K19" is organized by department students committee (Electronics Student Technical Association-ESTA) every year so that along with technical skill development they learn management skills also. Over the span of 19 years, 1089 students have been graduated and our graduated students have occupied key positions in industry, academics and have taken up ME and MS programs in India and abroad.02 students have been placed through on-line campus drive for the year 2018-19. Department has its own annual e-newsletter published on college website informing about the activities carried out by the department.

## Scope and Opportunities in Electronics Engineering

Electronics Engineering has a major role to play in virtually every industry. Electronics Engineers are involved in designing, creating, developing, fabricating, testing and supervising an extensive variety of technologies required for computers, mobile phones, robotics, automated systems, integrated circuits (IC's), television, radio, as well as various other electronic gadgets and appliances, tracking devices, electric motors and power generators. The field of electronics covers a wide range of applications and devices which make our life easier and enjoyable by helping to collect, distribute, control & transmit information. Electronics Engineering is crucial in increasing productivity in the industrial sectors like oil, energy, agriculture, steel, petroleum, and chemical. These industries depend on electronic systems for daily processes and functions. The health-care sector relies heavily on Electronics Engineering. It also has major contribution in ensuring safety in transportation, industries and houses. Job opportunities for Electronics Engineers in government and public sector are listed as follows DRDO, HAL, ISRO, BEL, IOC, BSNL, MTNL, Indian Railways, All India Radio, etc.

## Highlights of the Department

- Workshops, course enrichment, add-on courses and project based learning is conducted on regular basis to enhance employability of student.
- Emphasis on Industrial training and industry visits for industry-institute interaction.
- Motivation for industry based (sponsored) projects.
- Outreach & extension activities for all round personality development of students.
- Spacious 08 laboratories with ample equipment, instruments, components & consumables.
- A technical event named "Electrofocus2K19" organized by students' association.
- Well qualified Teaching faculty (09) and experienced Lab Assistants (02) with a good retentation ratio.
- 52 PC's with good configuration
- ICT enabled Classrooms
- Departmental Library with approximately 317 titles
- Regular conduction of Wprkshops, course enrichments, Add-On courses and various Competitions.
- Alumni placed worldwide in renowned companies like INTEL, IBM, Siemens, Analog Devices India, TCS, Cognizant, Accenture, Capgemini, Vodafone, Finolex Cabel Goa, Qspiders, Yashsawi Group Pune, SEED Infotech, CEM Electromech, Infotech, etc,.

## Programs organized by the Department

## 1] Visit of Students of Shri. S. H. Kelkar College of Arts, Commerce and Science, Devgad.

Students from Shri S. H. Kelkar College of Arts, Commerce and Science, Devgad pursuing MCVC (Electronic Technology) course visited Department of Electronics Engineering and Electronics and Telecommunication Engineering, FAMT on 23$^{rd}$ January 2019. The purpose of the visit was to give additional information to the students about the equipment's in engineering college labs, experiments that are carried out and variety of projects that can be designed and developed in labs. HOD of Electronics Department Prof. G. G. Bhide welcomed the students and gave information about the department. Students visited Electronics Devices and Circuits Lab, Microprocessor Lab, Analog and Digital Circuits Lab, Instrumentation and Controls Lab and Communication Lab. In each lab demonstration of two experiments, demonstration of equipment's like DSO, Function Generator, Microprocessor and Communication Kits were given. Also demonstration of projects were given to

students in each lab by Prof. V V Nimbalkar, Prof. A. R. Sutar, Prof. R. B. Ingale, Prof. V. D. Chavan, Mr. B. M. Biradar and Mr. P. S. Sambare. 18 students and two staff members of the above mentioned college visited both the departments. The visit duration was from 11 am to 3.30 pm. Prof. V. V. Nimbalkar coordinated the event. The visit concluded by interaction with students and a talk on various career opportunities and self-employment options available for students undertaking MCVC (Electronic Technology) course.

**Photographs of the visit – Prof G. G. Bhide, informing students about Electronics Engineering Department**

**Photographs of the visit – Prof V. V. Nimbalkar, Prof A. R. Sutar, Prof R. B. Ingle, Mr. B. M. Biradar demonstrating various Lab experiments to the students**

## 2] Seminar on "GATE Awareness"

A seminar on "GATE Awareness "was conducted for TE Electronics students on 29/01/2019 from 9.30 am to 12.30 pm. The seminar was attended by 21 students. The seminar was conducted by Prof. Venkat Naidu, a faculty of Imperial Institute of Excellence, Pune. Topics covered in the seminar were overview of Concepts of Random variables, parameters like mean, variance, standard deviation, probability density function and cumulative distributive function, movement generating functions followed by Random processes and its types for continuous as well as discrete case. This seminar was jointly organized by Electronics Electrical and Mechanical Engineering Departments.

**Photographs of Seminar "GATE Awareness"**



**Prof. Venkat Naidu, Faculty of Imperial Institute of Excellence, Pune, conducting seminar session on Probability**

## 3] Educational visit of Mahesh Tutorial student's to FAMT

An Educational Visit to Hope Foundation's Finolex Academy of Management and Technology, Ratnagiri, was organized on **29th April, 2019** for 11th standard students of Mahesh Tutorial, Ratnagiri. The purpose of the visit was to give an exposure to the students about practical insight of Engineering and Applications of Science and Technology. Total **40 Students** participated in the visit. In the morning session during his welcome speech, Dr. Kaushal Prasad, Principal, threw light upon the development of science and engineering as well as discussed the need of engineering in human life with examples. It was followed by a talk on various career paths after S.S.C and different branches of engineering along with job opportunities by Dr. Milind S. Kirkire (Dean Academics). After the interactive sessions, the students in group of 20 each visited various laboratories of all the departments. The projects of final year students were showcased for these students. In the laboratories of Electronics Engineering department, the demonstration sessions were held on various projects like Remote Controlled Robot, Voice controlled Robot, Electronic Dice, Street Light Controller, Automated Well Unit, etc,. The students got an opportunity to understand the mechanism from the working models and techniques to design electronics based projects which would develop their interest in the fields of Science and Technology. The visit ended with student feedback session and interaction with Principal Dr. Kaushal Prasad.

**Photographs of the visit of Mahesh Tutorial Students**



**Visit of Mahesh Tutorial Students to Electronics Department Lab**

## 4] Electronics Department event "Electrofocus2k19"

AN event named "Electrofocus2K19" was organized by ESTA (Electronics Students Technical Association) under this event a social event (marathon) titled "#runtogive" was organized on

Sunday, and a two days workshop was conducted from 14th to 15th February 2019. Dr. Kaushal Prasad, principal, Finolex Academy of Management and Technology was invited as a chief guest for the event. "#runtogive" was a social event organized by ESTA to raise funds

through the entry fees of the participants for donating the unprivileged ones. "Not all of us can do great things but we can do small things with great love", thus #runtogive was an initiative by electronics students to create awareness amongst students to help the needies.

Three workshops were arranged for the students which included "Programming on C", "PCB designing & simulation". This workshop was organized and conducted by final year students of electronics engineering. The main motto for this workshop was to clear the basics of the students related to programming, PCB designing and simulation which will help them in their future projects.

### Photographs of "ELECTROFOCUS2k19"



**Inaugural program of workshop: From Left. Prof.V.V.Nimbalkar, Dr. kaushal Prasad, Prof. G.G.Bhide, HOD electronics and Prof. S.R.Nalage, ESTA faculty head**



**Volunteers of ESTA explaining Basics of programming during workshop**



**Participants of #runtogive**



**Dr. Kaushal Prasad rewarding the winners of marathon #runtogive.**

**Photograph of social event "#runtogive"**



**Handing over a cheque of Rs.13,500/- to the representative from "Swagruhi Sewa Sanstha, Ratnagiri" on 27/04/2019**

# 5] Various Activities in the Department:

Faculty members and students also participated in various workshops like "Python", "Scilab", "Open Source Solutions in Teaching Learning Process", and "Intellectual Property rights".

## Faculty / Students Achievements

**1] Journal/Conference Publications**

1. Prof. Amol R. Sutar, Siddhesh Bane, Hrishikesh Jadhav and Pranay Marchande, "Arduino Nano Controlled AD9850 Based Function Generator", International Journal of Science and research Technology IJSART, Vol 5, Issue 5, ISSN 2395-1052, Page No. 1296.

2. Prof. M.A. Jadhav, Suraj Shinde, Padmaja Bhole and Anagha Nagale, "Anti-Photography System for Photography Prohibited Area," International Journal of Management, Technology And Engineering, ISSN-NO: 2249-7455, volume IX, Issue IV, April/2019, Page No. 4532 to 4537.

3. Tabish Patvi, Tazim Madre, Ishan Hodekar and Prof. Vrishali V. Nimbalkar, "Smart Helmet for Accident Detection and Prevention", International Journal Of Management, Technology And Engineering, volume IX, Issue IV, April/2019, Page No. 4618 to 4623.

4. Prof. Suraj A. Shete, Prof. V. D. Chavan and Prof. R. P. Tiverekar, "Multi-Wavelet Transform-Video Encoding for Content Protection With Secret Key", Journal of Emerging Technologies and Innovative Research.

5. Ms. Purva Ghag, Ms. Sonali Ghogale, Ms. Manasi Jadhav, Prof. Amar Palwankar and Prof. Suraj Shete, "Intrusion Detection System", Journal of Emerging Technologies and innovative Research, ISSN: 2349-5162, Volume VI, Issue VI, June 2019.

6. Prof. S. R. Nalage, Miss. S. Patil, Miss R. Jamadar and Miss. S. Solkar, "Voice Control Music System Using Raspberry Pi", Journal of Emerging Technologies and innovative Research, Volume VI, Issue IV, Page No.149.

7. Prof. S. R. Nalage, Mr. M. Todankar, Mr. M. Gurav and Mr. S. Shivagan, "Automatic Target Tracking Gun", Journal of Emerging Technologies and innovative Research, Volume VI, Issue IV, Page No.500.

8. Prof. S. R. Nalage, Miss. S. Manjerekar, Mr. Omkar Pawar, Mr. Pravin Navale, Power Pack and Wind Mill Automation", Journal of Emerging Technologies and innovative Research, Volume VI, Issue IV, Page No.512.

9. Prof. S. R. Nalage, Miss. B. Khanvilkar, Prof. R. Tiverekar, Miss. S. Desai, "Hardness Reduction of Sea Water", Journal of Emerging Technologies and innovative Research, Volume VI, Issue V, Page No.19.

## 2] Award

| Name of the faculty | Achievement |
|---|---|
| Prof. A. B. Vartak | Successfully completed the On-NPTEL course on "Joy of Computing using Python" with Elite grade and Silver medal. |
| Prof. R. P. Tiverekar | Successfully completed the NPTEL course on "Introduction to Coding Theory" with Elite grade and stood in 5% Toppers List. |

## Student's Achievements

**Miss Simran Manjarekar of BE Electronics ranked 3$^{rd}$ in Mumbai University .**



Hope Foundation's Finolex Academy Of Management & Technology, Ratnagiri

Established in 1996

Congratulations!

Ms. Simran Manjarekar

BE Electronics

Stood third rank in University

of Mumbai Examination 2018-19

www.famt.ac.in  /finolexacademy

| Sr. No. | Name of Students | Achievement |
|---|---|---|
| 1 | Mr. Tabish Patvi, Mr. Tazim Madre, Mr. Ishan Hodekar (BE) | First prize in Project competition organized by RDCC Cell of FAMT, for the project titled "Smart Helmet for Accident Detection and Prevention". |
| 2 | Miss. Simran Manjerekar, Omkar Pawar, Pravin Navale | Second prize in Project competition organized by RDCC Cell of FAMT, for the project titled "Power Pack and Wind Mill Automation". |
| 3 | Suyash Suvare, Ashutosh Dalvi, Smitesh Joshi(BE ) | Third prize in Project competition organized by RDCC Cell of FAMT, for the project titled "Wireless Railway Safety System". |

# PUBLISHER

## Editors

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