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

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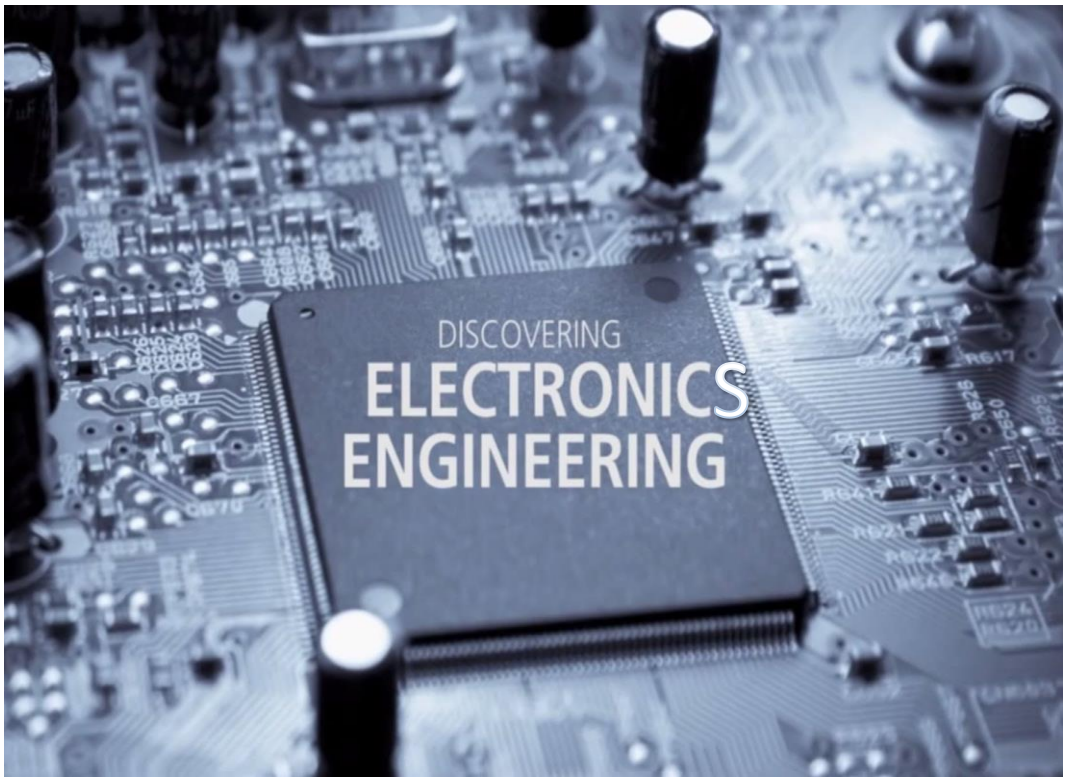


Publisher
Department of Electronics Engineering

Editors
Prof. Girish G.Bhide (HOD)
Prof. Vrishali V. Nimbalkar
Prof. Mahesh A. Jadhav

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. Bhakti Y. Sathe(Assistant Professor)
10. Prof. Suraj A. Shete (Assistant Professor)

Staff Members

11. Mr. Bharat M. Biradar
12. 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 department in 1996 and conducts B.E program in Electronics Engineering. Department has 10 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 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 classroom 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, 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 "Electrofocus" 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 18 years, 1029 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.40 students have been placed through on-line campus drive for the year 2017-18. 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, and project based learning, aptitude test is conducted on regular basis to enhance employability of student.
- Emphasis on Industrial training 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 “Electrofocus” organized by students’ association.
- Well qualified Teaching faculty (11) and experienced Lab Assistant (02) with a good retention ratio
- PCs with good configuration
- Departmental Library with approximately 317 titles
- Alumni placed worldwide in renowned companies like INTEL, IBM, Siemens, Analog Devices India, TCS, Cognizant, Accenture, Capgemini, Vodafone, Finolexcable Goa, Qspiders, Yashsawi Group Pune, SEED Infotech, CEM Electromech, Infotech, etc.

Programs organized by the Department

1] Thirty hours ADD-ON course on “Computer Networking Hands-on with GNS3”

The 30 hours add-on course on “Computer Networking: Hands-on with GNS3" for designing various networking topologies was arranged by the department of Electronics Engineering from 21/07/2017 to 24/03/2018. The add-on course was attended by 21 students. Total 30 lecture hours were engaged on various topics on computer networking and GNS3 as a tool. As an outcome of this course; students were able to understand concepts of networking and use of networking devices to emulate networking topologies with ease and more accuracy within less time. The long term benefit of this activity is to facilitate students for future job interviews.

Photograph of ADD-ON course "Computer Networking: Hands-on with GNS3"

Add on course Session by Mr. Ashish B. Vartak

2] A Seminar on Learning MAX10 FPGA Board

Electronics Engineering Department organized a seminar on topic **"Learning MAX10 FPGA Board and Current R&D in Industry on 26th March 2018** at Microprocessor Lab for third year Electronics students. Mr.KiranJambhale, Alumnus of FAMT, conducted the seminar. Mr KiranJambhale is a FPGA Design Engineer in Unizen Technologies, Bangalore.

This seminar was an initiative taken by Mr.RiteshBelgudri, Alumnus of FAMT, who felt a need to make students aware about a plenty of job opportunities available in VLSI domain, specifically in programming using Verilog and VHDL and implementing a design on FPGA/CPLD. Mr.RiteshBelgudri is working in this domain for more than three years.

The seminar began by welcome and introducing Mr.KiranJambhale by Ms.ShalakhaKeer followed by an introductory speech by Prof. G. G. Bhide (HOD Electronics Department). Topics covered in the seminar were basics of FPGA-CPLD, Verilog coding, hardware details of MAX10 FPGA board, using Quartus-II software, Led blink code in Verilog and implementing it on MAX10 FPGA board. Thereafter, Mr.Kiran explained the students about the projects that he had worked on like Digital Stamp, JTI packet printer and ARINK 1553 programmer. He also discussed the projects, the research and development that is on-going in industry. The students interacted with him. The seminar ended

with a vote of thanks. Total 28 students participated in the seminar. Miss. V. V. Nimbalkar coordinated the seminar.

Photograph of seminar on "Learning MAX10 FPGA Board"

Alumni Mr. Kiran Jambhale conducting the seminar on "**Learning MAX10 FPGA Board**"

3] Seminars conducted were as follows:

Sr.No	Date	Name of Resource Person	Topic	Number of students
1	24/01/18	Mr. Sumanyu Rao	Open Source Technologies in Computer Communication	68 students of BE Electronics
2	16/01/2018	Mr. A. S Datar	Role of Electronics in Energy Auditing	39 students of BE Electronics

4] AICTE-ISTE approved One Week STTP on "Digital Image Processing – Issues, Challenges and Research Avenues"

Introduction:

The AICTE-ISTE Approved One Week STTP entitled "Digital Image Processing – Issues, Challenges and Research Avenues" was jointly organized by Department of Electronics & Telecommunication Engineering and Department of Electronics Engineering from 04 June 2018– 08 June 2018 at Finolex Academy of Management & Technology, Ratnagiri. The STTP was organized as an attempt to bring academicians and researchers possessing image processing interests under one roof and thus creating a knowledge pool.

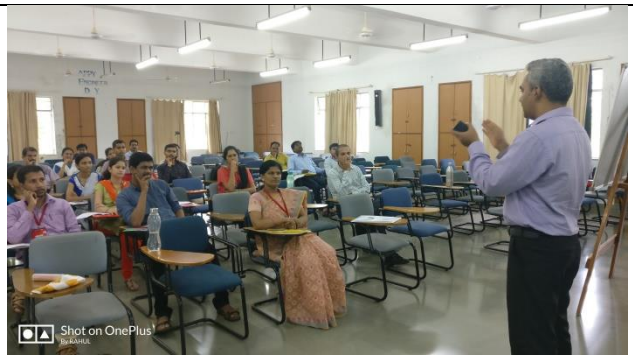
The STTP was conducted over a span of five consecutive days and was divided into four sessions per day. The following were some of the important objectives of the STTP.

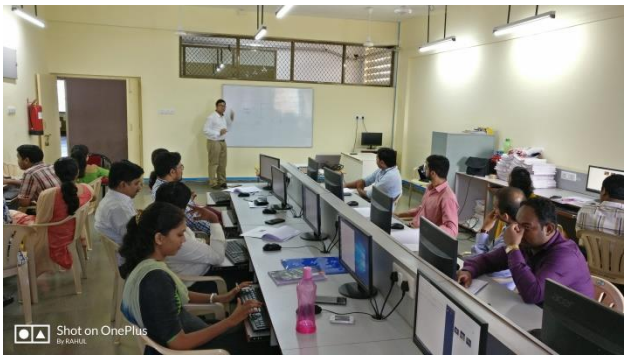
- To provide theoretical & practical knowledge from fundamentals to advanced level in the digital image processing domain.
- To explore the research potential in the field of digital image processing to the aspiring researchers.

There were total 25 participants constituting 09 faculty members from various disciplines of nearby engineering colleges along with 16 in-house FAMT faculties.

Inaugural speech by Dr. Mrs. S. V. Chougule

(L:R, . Dr. S.V. Chougule, Mr.. A.B. Vartak, Dr. V.A. Bharadi, Mr. G.G. Bhide, Principal, Dr. Kaushal Prasad, Dr. Terrence Johnson, Mr. S.D. Mainkar)

Dr. Terence Johnson- HOD MCA and Associate Professor,FAMT Ratnagiri **Topics**: Introduction to Image Processing and basics of Image operations, Image morphology issues and challenges, Hands-on session on Image processing using Java programming, Research avenues in digital image processing	
	**Dr. Vinayak A. Bharad**i- Associate Professor, IT, FAMT Ratnagiri **Topic:** Hardware interfacing for biometric.
Dr. S. D. Lokhande- Principal SCOE Vadgaon Pune **Topic:** Inspirational talk highlighting need of research in academics.	
	**Dr. Mrs. S. S. Lokhande**- Professor, E&TC, SCOE, Vadgaon, Pune **Topic:** Gabor Transform as a research tool in image processing.

Dr. R. B. Dhumale- Assistant Professor, E&TC, SCOE, Vadgaon, Pune **Topic:** Artificial Neural Network and Fuzzy logic in image processing	
Dr. Y. H. Dandawate-Professor, E&TC, VIIT Pune **Topic**: Computer Vision applications and machine learning	
Dr. H. Y. Patil-Assistant Professor, E&TC, R. H. Sapat College Of Engineering, Management Studies And Research, Nashik **Topics**: Hands-on session on introduction to Python programming, Hands-on session on image processing using python and OpenCV, Demonstration on facial part detection using OpenCV	

VALEDICTORY SESSION:

The STTP was concluded with valedictory function on 8th June, 2018. In the valedictory function few participants expressed their views regarding STTP. The valedictory speech focusing on highlights of one week STTP was delivered by Dr. Mrs. S. V. Chougule. She congratulated the entire organizing team for successful coordination and conduction of STTP.

Finally, the Vote of thanks was delivered by Dr. Mrs. S. V. Chougule (Convener, STTP). She showed her gratitude towards management (Hope Foundation) for financial support and Dr. Kaushal Prasad (Principal, FAMT Ratnagiri) for motivation, mentoring and continuous support throughout the event. She highlighted the immense contribution by organizing team and convened thanks to all of them. Lastly, she gave wholehearted thanks to all participating candidates for making the STTP successful.

Social Events by the Department

1] Mahesh Tutorial's Student on Educational Visit to FAMT

An Educational Visit was organized at Finolex Academy of Management and Technology, Ratnagiri on 17th April, 2018 for 11th standard students from Mahesh Tutorial, Ratnagiri. Total 38 Students visited the campus. The purpose of the visit was to give an exposure to the students about practical insights of Engineering and Applications of Science and Technology. In the evening session, the students visited laboratories of Electrical, Electronics and Electronics and Telecommunication Engineering departments where various projects like Remote controlled Robot, Voice controlled Robot, Electronic Dice, Street Light Controller, automated well unit etc. were demonstrated. The visit ended with student feedback session and interaction with Principal Dr. Kaushal Prasad.

Student Visit to Microprocessor Lab of Electronics Engineering Department

2] Donation to Deaf and Dumb School

The Department of Electronics Engineering celebrated the Founder's day in the memory of Founder President, Late Shri Pralhad P. Chhabria on 24 February, 2018. It was organized by Elecronics

Student's Association – ESTA wherein they donated a gift set of stationery to 45 students of Late Keshav Parashuram Abhyankar School for Deaf and Dumb.

The representatives of 'ESTA', namely Ms. Divya Pawar, Mr. Akshay Salgaonkar, Mr. Nagesh Karambelkar, Mr. Shubham Bhatlekar, Mr. Vivek Surve, Ms. Reshma Mukadam and Ms. Mrunal More along with ESTA Incharge, Prof. Sandeep Nalage, Prof. Vrishali Nimbalkar, Prof, Girish Bhide (HoD) and Mr. Paresh Sambare also accompanied the students on this noble cause. The head master of the school Mrs. A. M. Tatke and teacher Mr. G.T. Rajput gave useful information about the working of the school, their activities and the skill sets acquired by the students and training imparted by the expert teachers. The ESTA team of FAMT was impressed by the discipline of the students and the hospitality offered.

Mrs. A. M. Tatke and FAMT Electronics Department interacting with students

Faculty Achievements

1] Prof. Suraj A. Shete , Prof. Rahulkumar P. Tivarekar , Prof. Bhakti Y. Sathe "BIT ERROR RATE PERFORMANCE OF OFDM - QAM MODULATION AND WHT OFDM -QAM MODULATION USING RAYLEIGH AND RICIAN CHANNEL" (IJMTER) volume. 5, Issue (1), January 2018

2] Prof. Suraj A. Shete "Audio Based Bird Species Recognition using Naïve Bays Algorithm", IJMTER, volume 5, issue (1), Jan, 2018

2] NPTEL On-Line Training

Name of the faculty	Achievement
Prof. V. V. Nimbalkar	Successfully completed the NPTEL course on "Basic Electronics" with Elite grade and stood in Top 5%
Prof. M. A. Jadhav	Successfully completed the NPTEL course on "Basic Electronics" with Elite grade
Prof. A. R. Sutar	Successfully completed the NPTEL course on "Analog Circuits" with Elite grade

Student's Achievements

Sr. No.	Name of Students	Details
1	Nikita Bhosale, Punita Jadhav B.E. (Electronics)	Won third prize for project "Biometric Attendance Monitoring System" at "M-exhibit 2K18", a state level UG project competition.
2	Vaibhav Arde, Omkar Rahate	First prize in National Level Project competition "Brainwaves2K18" for project "Automatic Medicine Dispenser"
3	Tabish Patvi T.E. (Electronics)	Secured 67 points out of 72 for Microsoft Python Mock Test
4	Sheya Naik B.E. (Electronics)	Cleared AFCAT Exam of Indian Air Force 2017-18 with a valid score of 168

PUBLISHER

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