

## Academic Activities

| Sl.No | Students Name     | USN        | Event participated  | Date (DD/MM/YY)          | Name Of the Organizers   | Achievement /Remarks  |
|-------|-------------------|------------|---|--------------------------|--|-----------------------|
| 1     | Krishika Ponnamma | 1NC14EC047 | Student satellite training program  | 05/07/2016 to 08/07/2016 | NMIT   | Participated          |
| 2     | Ms.Shwetha V      | 1NC14EC06  | Paper presentation  | 03/05/2017 to 04/05/2017 | SJCIT Chickballapur  | Participated          |
| 3     | Ms.Sirisha C A    | 1NC14EC017 | National conference on emerging trends in communication & ...                           | 03/05/2017 to 04/05/2017 | SJCIT Chickballapur  | Participated          |
| 4     | Suhas Shetty NS   | 1NC13EC077 | Participated in Technical quiz  | 24/03/2017 to 25/03/2017 | NCET   | 2nd place             |
| 5     | Krishika Ponnamma | 1NC14EC047 | Participated in startup INDIA competition   | 19/04/2017               | NCET   | Participated          |
| 6     | AmodAman          | 1NC11EC018 | Vocational training   | 13/02/2017               | BSNL   | Participated          |
| 7     | Ms.Sirisha C A    | 1NC14EC017 | Participated in Mini project Exhibition   | 24/03/2017 to 25/03/2017 | NCET   | Participated          |
| 8     | Ms.Sirisha C A    | 1NC14EC017 | Participated in startup India   | 19/04/2017               | NCET   | Participated          |
| 9     | Ms.Kavya Shree B  | 1NC14EC044 | Participated in braintech championship  | 13/04/2017               | Azure skynet solutions   | Participated          |
| 10    | Ms.Divya R.N      | 1NC14EC023 | Participated in Mini project  | 24/03/2017 to 25/03/2017 | NCET   | Participated          |
| 11    | Ms.Divya R.N      | 1NC14EC023 | Participated in braitech championship   | 07/10/2016 to 08/10/2016 | NCET   | Participated          |
| 12    | Mr. Ravikiran G   | 1NC13EC063 | Participated in IOT   | 01/04/2016 to 02/04/2016 | NCET   | participated          |
| 13    | Mr. Manohar. N    | 1NC13EC040 | Internship "Storage monitoring for ware house"  | 01/07/2016 to 31/07/2016 | NCET   | Participated          |
| 14    | Mr. Ravikiran G   | 1NC13EC063 | Participated in summer internship program on MEMS                                       | 01/07/2016 to 31/07/2016 | NCET   | Participated          |
| 15    | Ms.Sirisha C A    | 1NC14EC017 | Paper presentation  | 04/11/2016               | NCET   | 1 <sup>st</sup> place |
| 16    | Ms. Sirisha C A   | 1NC14EC017 | Participated in climate science quiz  | 27/09/2016               | NCET   | Participated          |
| 17    | Ms. Sirisha C A   | 1NC14EC017 | Participated in STUDSAT2  | 05/07/2016 to 08/07/2016 | NMIT   | Participated          |
| 18    | Ms.ZaibaKouser    | 1NC13EC089 | Summer internship on photonics  | 01/07/2016 to 31/07/2016 | NCET   | Participated          |
| 19    | Ms. Likhitha      | 1NC12EC042 | National students project "Establishment of communication link for STUDSAT2 satellite". | 14/05/2016               | Alpha College of Engineering, Bangalore, in association with AICTE, New Delhi. | 3 <sup>rd</sup> Prize |
| 20    | Mr. Abhishek      | 1NC14EC00  |   |                          |  |                       |
| 21    | Mr.Vishwanath M.H | 1NC12EC105 |   |                          |  |                       |
| 22    | Mr.K.Vinay        | 1NC13EC028 | Fame Lab TALKING SCIENCE  | 27/11/2016 to 29/11/2016 | Science Communication workshop at University of Kerala.                        | Participated          |
| 23    | Ms.Shilpa .G      | 1NC13EC022 | Content writing internship  | 01/11/2016 to 15/12/2016 | Fan four solutions Pvt Ltd Mumbai  | Participated          |

## Graduation Day



# Nagarjuna College of Engineering & Technology, Bangalore

## Vision

Leadership and Excellence in Education

## Mission

To fulfill the vision by imparting total quality education replete with the philosophy of blending human values and academic professionalism.

Department of Electronics & Communication Engineering  
Presents

# TARANGA

Edition 3

Sep 2017



## Department of Electronics & Communication Engineering

The Department of Electronics & Communication Engineering is focuses on technologies that underpin VLSI Design and Embedded systems, data communication, etc. with special emphasis on research and development. The department offers UG and PG Programs which encompass technical, research and soft skills reflecting the realities of modern day advancement and in turn making the graduates employable. The college is engaged in research leading to Ph D in Electronics & Communication Engineering and undertakes funded research projects.

UG & PG students are encouraged to take up interdisciplinary research in various domains and students are placed in reputed companies like Infosys, HCL, TCS, SONY, Bosch etc. The department has MOU with Texas Instruments and National Instruments.

Department of E&C have spacious classrooms well equipped laboratories and well qualified and experienced faculty members. The department has also introduced virtual lab experiments for Basic Electrical Engineering and Basic Electronics courses. The department aims at imparting excellent training to UG & PG students. Faculty members, apart from teaching and guiding projects also involve themselves in research work. The dept has got permanent affiliation from VTU and is accredited by NBA. The department is recognized as research centre and got research grant from VTU. Department has conducted workshop and seminars such as "Analog Design using Cadence Tool" sponsored by VTU under faculty development program. Eight faculty members have registered for Ph.D. Faculty from the department have published about 60 papers in international / national conference/journals.

## Vision & Mission of the Department

### Vision

- To impart quality education & research capabilities in the field of Electronics & Communication Engineering".

### Mission

- To develop students with strong fundamentals and enable them to be life-long learners.
- To educate, guide, motivate and prepare students to meet the real-world challenges.
- To have suitable mechanisms to enhance understanding and application of theoretical concepts in practice.
- To facilitate students in enhancing communication skills, leadership, teamwork ability and moral values
- To enhance research capabilities through industry and research organization collaborations.

## Staff of the Electronics & Communication Dept.



## Support staff of the E & C Dept.



## Staff Achievements

- NCET has won the RL Jalappa faculty cricket trophy held on 23/10/2016. Total 20 engineering college were in the hunt.



- NCET has won the RL Jalappa faculty cricket trophy during the first half of 2017. A total of 24 engineering college faculties fought for the cup.



Dr. Satheesha T.Y., has been awarded the "Research Excellence Award-2017" for his paper submitted the on the 3D Reconstruction of Dermoscopic Skin Lesion Classification.



## UG Toppers List - 2017

| Sl. No   | USN        | Name<br>1st YEAR               | Percentage/CGPA |
|----------|------------|--------------------------------|-----------------|
| 1        | INC16EC045 | MEGHANASHREE J.                | 9.673           |
| 2        | INC16EC099 | YERRAGUNTA VIJAYACHANDRA REDDY | 9.519           |
| 3        | INC16EC070 | SAREDDY JASWANTH REDDY         | 9.423           |
| 2nd YEAR |            |                                |                 |
| 1        | INC15EC085 | SIDDA RUSHITA                  | 9.74            |
| 2        | INC15EC010 | ARAB SIRISHA                   | 9.558           |
| 3        | INC15EC007 | ANIKET AMBIGAR                 | 9.462           |
| 3rd YEAR |            |                                |                 |
| 1        | INC14EC063 | N. ALEKYA                      | 82 %            |
| 2        | INC14EC004 | AKSHITHA K. V.                 | 81.5 %          |
| 3        | INC14EC018 | C. R. MEGHA SINDHU             | 80.1 %          |

## Activities in the Department

• Invited Talk on Gallium Nitride Devices (VLSI) by Dr. Digbijoy Nath, IISC, Bangalore on 26/09/2016.

• An awareness program on HAM (Amateur Radio) & Basic concepts of HAM by Mr. S. Sathyapal, Director, Indian Institute of HAM, Bangalore on 09/03/2017 and 04/04/2017.

• A Technical talk on "Embedded System and Image Processing applications" by Dr. Rathna G.N, IISC Bengaluru - 23rd September 2016.



• Industrial visit to Indian Institute of Astrophysics (IIAP), Gauribidanur, Karnataka on 04/05/2017.



• STUD SAT-II project carried out by the final year students in NMIT, Bengaluru.



## PRADHAN MANTRI KAUSHAL VIKAS YOJANA



• We at Nagarjuna believe in fostering the nation along with the development of the underprivileged students. That is when we have bagged the prestigious Pradhana Mantri Kaushal Vikas Yojana for E&C along with the Mechanical Department. At the E&C Department we have started educating the underprivileged starting from the year 2014 and continued our services in imparting knowledge through December 2016.

We have so far imparted knowledge onto 25 students under the skill-development program through the academic year 2016.

## Details of Publications

| Sl.No. | Name Of the faculty                  | Title of the paper  | Name of the Journal                                       | Volume No. /year/pp     | ISSN/ISBN No.     |
|--------|--------------------------------------|---|---|-------------------------|-------------------|
| 1      | Mr.Basavaraj G.M                     | Vision Based surveillance system for detection of human fall  | RTEICT  | 2017/1501-1505          | 978-1-5090-3704-9 |
| 2      | Dr. Nagesh K. N                      | Array Synthesis of Circular and Planar Antenna Arrays for Pattern Nulling Using Invasive Weed Optimization Algorithm. | International Journal of Control Theory and Applications. | Vol. 10 No.26 2017      | 09745572.         |
| 3      | Rohith S<br>Dr.Venkatesh Kumar H     | Analysis of universal asynchronous receiver & transmitter for reliable data transmission                              | IOSR-JVSP   | Vol. 6 Dec 2016 Pp65-69 | 2319-4200         |
| 4      | Mr.YaseenBasha<br>Dr.Venkatesh Kumar | Algorithm to design VGA controller on FPGA board  | IOSR-JVSP   | Vol. 6 Dec 2016 Pp82-86 | 2319-4200         |
| 5      | Dr.Venkatesh Kumar                   | Design of Booth multiplier using double gate MOSFET   | IJCA  | Jun 2016 Pp19-23        | 0975-8887         |
| 6      | Mr.YaseenBasha<br>Dr.Venkatesh Kumar | Design of sigma delta ADC using OTA   | IJERA   | Vol.7 May 2017 Pp11-16  | 2248-9622         |
| 7      | Rohith S<br>Dr.Venkatesh Kumar       | An efficient implementation of double error correction orthogonal latin square codes                                  | IJCA  | Vol.170 pp.21-24        | 2250-1797         |

## FDP / STTP attended by Faculties

| Sl. No | Name Of the faculty   | Designation | Title of FDP  | Dates From/To            | Duration (days) | Place Of FDP                  |
|--------|-----------------------|-------------|---|--------------------------|-----------------|-------------------------------|
| 1      | Dr. Nagesh K N        | Prof &Head  | IDA Connect Workshop at Didac India                 | 28.09.2016 To 30.09.2016 | 3               | Bangalore                     |
| 2      | Ms. Hemalatha B       | AP          | Workshop on R language                              | 18.02.2017 To 22.02.2017 | 5               | NCET                          |
| 3      | Ms. Hemalatha B       | AP          | FDP on SCILAB – AN open source programming language | 24.09.2016 To 28.09.2016 | 5               | NCET                          |
| 3      | Mr. Mahesh M R        | AP          | FDP on SCILAB – AN open source programming language | 24.09.2016 To 28.09.2016 | 5               | NCET                          |
| 4      | Dr. Satheesha T Y     | AP          | Digital Marketing Course                            | 03.02.2017 To 4.02.2017. | 2               | NCET                          |
| 5      | Mr. Yaseenbasha       | AP          | National teachers conference                        | 26.05.2017 To 28.05.2017 | 3               | Satya saigrama Muddenahalli.  |
| 6      | Mrs. Rekha K          | AP          | National teachers conference                        | 26.05.2017 To 28.05.2017 | 3               | Satya saigrama Muddenahalli.  |
| 7.     | Mr. Sunil Kumar BS    | AP          | National teachers conference                        | 26.05.2017 To 28.05.2017 | 3               | Satya saigrama Muddenahalli.  |
| 8      | Mr. Shashi Kiran      | AP          | IMAGE PROCESSING & ITS APPLICATIONS                 | 26.12.2016 To 30.12.2016 | 5               | SJCIT Cbpur                   |
| 9      | Mr. Shashi Kiran      | AP          | National teachers conference                        | 26.05.2017 To 28.05.2017 | 3               | Satya sai grama Muddenahalli. |
| 10     | Mr. Shashi Kiran R    | AP          | Workshop on R language                              | 18.02.2017 To 22.02.2017 | 5               | NCET                          |
| 11     | Mr. Harish V          | AP          | National teachers conference                        | 26.05.2017 To 28.05.2017 | 3               | Satya saigrama Muddenahalli.  |
| 12     | Mr. Harish V          | AP          | Workshop on R language                              | 18.02.2017 To 22.02.2017 | 5               | NCET                          |
| 13     | Ms. Souparnika Jadhav | AP          | National teachers conference                        | 26.05.2017 To 28.05.2017 | 3               | Satya saigrama Muddenahalli.  |

## Students Achievements

### Cultural Activities

| Sl. No | Students Name         | USN        | Name Of the Cultural Activity | Date (dd/mm/yy) | Name Of the Organizers | Achievement /Remarks  |
|--------|-----------------------|------------|-------------------------------|-----------------|------------------------|-----------------------|
| 1      | Ms.Divya R N          | INC14EC023 | Pencil Sketch                 | 26/03/2017      | NCET                   | 2 <sup>nd</sup> Place |
| 2      | Ms. Saniya            | INC14EC083 | Fashion show                  | 26/03/2017      | NCET                   | Participated          |
| 3      | Mr.Mohammed Bazed Ali | INC13EC058 | Fashion show                  | 26/03/2017      | NCET                   | Participated          |

### Sports Activities

| Sl.No | StudentsName         | USN        | Activity | Date                      | Organizers   | Achievement /Remarks |
|-------|----------------------|------------|----------|---------------------------|--|----------------------|
| 1     | Ms.Krishika Ponnamma | 1NC14EC047 | Chess    | 17/09/16 to 18/09/2016    | VEMAMA Institute of Technology                               | Runner-up            |
| 2     | Mr,Ravikiran G       | 1NC13EC063 | Athletic | 15/11/2016 to 18/11/ 2016 | Dr. T. Thimmaiah Instituite of Technology, K.G.F, Karnataka. | Participated         |



It is indeed a great pleasure for me that the department of Electronics & Communication Engineering has taken a good Initiative of showcasing the talents of its staff and students, by unveiling the first edition of newsletter “Taranga”. I hope that the department continues its good work by doing such activities, thus motivating the staff and student community.

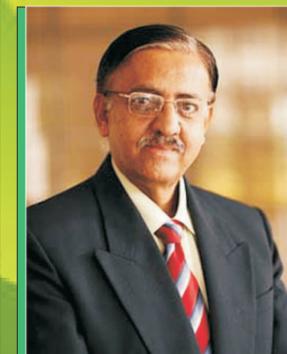
The newsletter should not only be limited to technical aspects, but should also contain information useful to the outside world. I wish the department all the best.

Sri. J. Chaithanya Varma CEO, NES

I have seen the department of Electronics & Communication. Engineering growing to a great height in the last fifteen years. The department keeps doing well in academic, co-curricular and extracurricular activities. Now, it is a pleasure on my part to know that the department exhibits the talents of staff and students by unveiling the first edition of its newsletter “Taranga” I wish the staff and students of the department a great success.



Dr. K.S. Deshikachar Director, NES



I am extremely happy to say that the department of Electronics & Communication Engineering is the pioneer among all engineering departments of NCET in releasing the newsletter. The department excels not only in academics, but also in other supporting activities, which are very much essential for the students in their overall development. I take this opportunity to congratulate the department by taking this initiative of exhibiting the talents of its staff and students by releasing the newsletter. I expect many more such activities from the department in future and wish the entire team of ECE all the best.

Dr. S. G. Gopalakrishna Principal, NCET

It gives me immense pleasure to congratulate students and staff of Electronics and Communication Engineering Department for their support in the publication of the department newsletter. It is believed to be the focus of departmental activities that is academics, students and faculty achievement as well as innovation occurring in the department. I hope we will continue to deliver our best to the department and college.



Dr. Nagesh K.N. Professor & HOD

## From the Editor's Desk



**Dr. T Y Satheesha**  
Associate Professor



**Dr. H Venkatesh Kumar**  
Professor & PG Co-ordinator

"Fall is one of the most exciting periods at a college because it's the start of something new for so many students."

The campus is filled with smart, inspired students ready to take advantage of NCET's breadth of offerings - both in the classroom and in the many extracurricular options of student life. A thought that has been enduring in mind when it becomes real; is truly an interesting and exciting experience. TARANGA was one such cherished work that had its roots in the persuasion. It would be a snapshot of the various activities and advancements for all associated with NCET. Proper communication plays a vital role in institution's development.

TARANGA will serve to reinforce and allow increased awareness, improved interaction and integration among all of us. Usually we fail to appreciate the good deeds of many people and activities that happen around us as we are engaged in irrelevant talks and assumptions. It could all change if we just pause to think of what is our contribution to the society from which we have been gifted with this blessed life.

The progress of the society is mainly depends on many people who are working behind the scenes, overtime round the clock planning things to the smallest. TARANGA will be a medium to provide proper acknowledgment and respect all of these efforts and its results.



**Ms. Roopa G**  
Assistant professor



**Mr. Harish V**  
Assistant professor



**Ms. Sunitha.M**  
Assistant professor



**Ms. Hemalatha B**  
Assistant professor



**Mr. Shashikiran R**  
Assistant professor



**Ms. Souparnika Jadhav**  
Assistant professor

## Pencil Art by the students

- Beautiful artwork by Ms. Varshini & Ms. Ashitha Jain of the E&C Department.



## Rangoli Competition - Glimpses



## Snippets from the fresher's day Celebrations



## Some of our Entrepreneurs

| Sl.No | Student Name      | USN        | Name of the Company & Details                                | Photo   |
|-------|-------------------|------------|--|---|
| 1     | Anvith Keremane   | INC07EC011 | Chipsapptechnology<br>9902882299                             |  |
| 2     | Vijayaraghavendra | INC10EC063 | Vidaya Technologies,<br>www.vidaya.com<br>9980869266         |  |
| 3     | Sanjay .C.H       | INC10LVS82 | Smart CAD Engineers<br>www.cadtechnologies.com<br>9738570645 |  |

## ★ Our Ph.D pursuing scholars ★



Mr. Rohith S



Mrs. Sendamarai.P



Mr. Basavaraj G.M



Mr. Nanda Kishore C.V



Mr. Harish V



Ms. Souparnika Jadhav

The entire staff and student wing of E&C Dept., wishes Dr. Venkatesh & Dr. Satheesha on the successful completion of their Ph.D



Dr. H Venkatesh Kumar



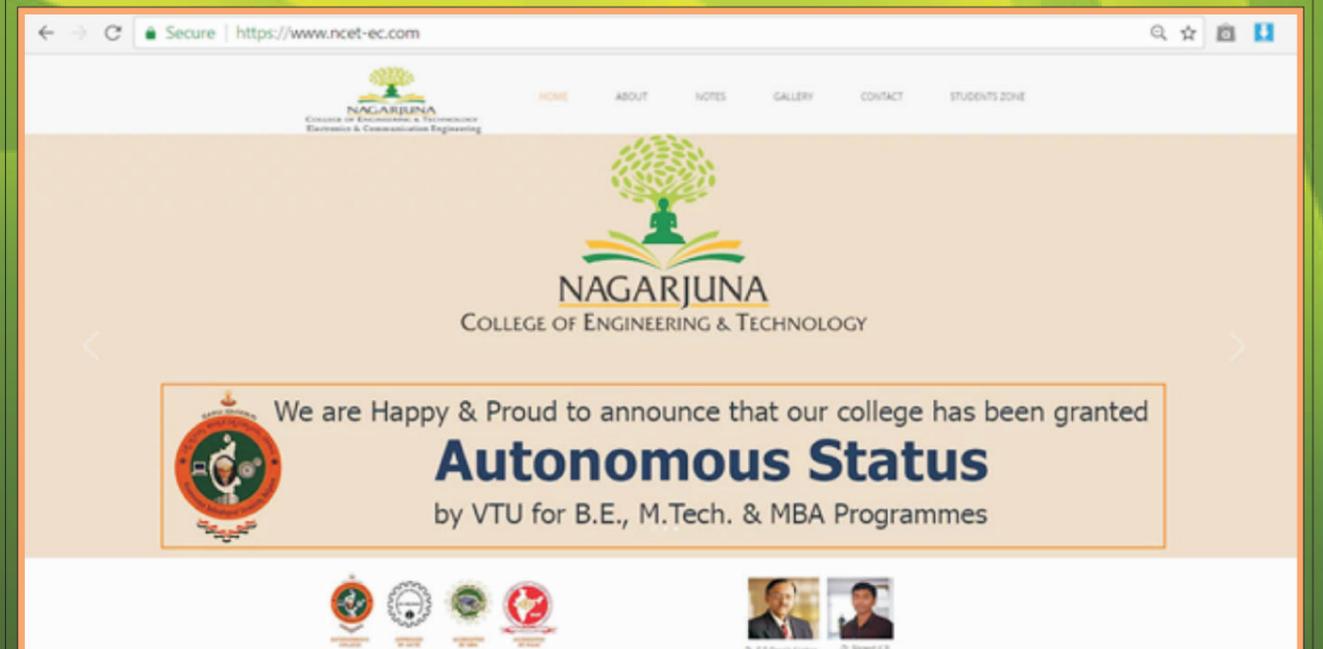
Dr. T Y Satheesha

## Session chair & Reviewer for IEEE Conference - 2016



• 2016 IEEE International Conference on Recent trends in Electronics, Information & Communication Technologies, held at Sri Venkateshwara College of Engineering, 2016, where Dr. Nagesh, Dr. Venkatesh Kumar and Dr. T.Y. Satheesh held the reviewers and the session chairs for the conference.

• Nagarjuna College is happy to announce the launch of our own website (visit us at [www.ncet.com](http://www.ncet.com)); with a separate section for the EC Department ([www.ncet-ec.com](http://www.ncet-ec.com)), which was created by our very own students at NCET during the academic year 2015-16 and during the academic year 2016-17, we have launched the cell phone app, which can be accessed on any android or I-phone devices.



71 students placed for the academic year 2016-17



Students placed at NTTData



Students placed at Prolifics



Students placed at TechMahindra



Students placed at Silver Peak

### Program Educational Objectives (PEOs)

PEO-1:

Graduates of Electronics and Communication engineering will be using the basic academic knowledge of design and analysis required in the industry for sustainable societal growth.

PEO-2:

Graduates of Electronics and Communication engineering will be trained in project based learning and team based learning through assessments.

PEO-3:

Graduates in Electronics and Communication engineering will demonstrate good communication skills, dynamic leadership qualities with concern for environmental protection.

PEO-4:

Electronics and Communication engineering graduates will be capable of pursuing higher studies, take up research and development work blended with ethics and human values.

PEO-5:

Electronics and Communication engineering graduates will have the ability to get employed and become entrepreneurs thereby switching over from responsive engineering to creative engineering.

### Program Specific Outcome

PSO1.

Graduate will be able to identify, analyze & solve the problems related to Electronics and Communication Engineering by applying the fundamental knowledge of Electronics and Communication.

PSO2.

Graduate will demonstrate an ability to investigate, design and develop both software and hardware using significant knowledge of modern tools in Electronics and Communication Engineering.

PSO3.

Graduate will be able to apply their knowledge to assess societal, environmental, health, safety issues with professional ethics and can also pursue higher studies, involve in research activities, be employable or entrepreneur.

## PROGRAM OUTCOMES (POs)

Graduates of the Electronics and communication Engineering Programme will be able to achieve the following Pos:

### PO1. Engineering knowledge:

Apply the knowledge of mathematics, science, engineering fundamentals, and electronics and communication engineering principles to the solution of complex problems in electronics and communication engineering.

### PO2. Problem analysis:

Identify, formulate, research literature, and analyze complex electronics and communication engineering problems reaching substantiated conclusions using first principles of mathematics, and engineering sciences.

### PO3. Design/development of solutions:

Design solutions for complex electronics and communication engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

### PO4. Conduct investigations of complex problems:

Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions related to electronics and communication engineering problems.

### Po5. Modern tool usage:

Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex electronics and communication engineering activities with an understanding of the limitations.

### PO6. The engineer and society:

Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional electronics and communication engineering practice.

### PO7. Environment and sustainability:

Understand the impact of the professional electronics and communication engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

### PO8. Ethics:

Apply ethical principles and commit to professional ethics and responsibilities and norms of the electronics and communication engineering practice.

### PO9. Individual and team work:

Function effectively as an individual, and as a member or leader in diverse teams, and in multi-disciplinary settings.

### PO10. Communication:

Communicate effectively on complex electronics and communication engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

### PO11. Project management and finance:

Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multi-disciplinary environments.

### Po12. Life-long learning:

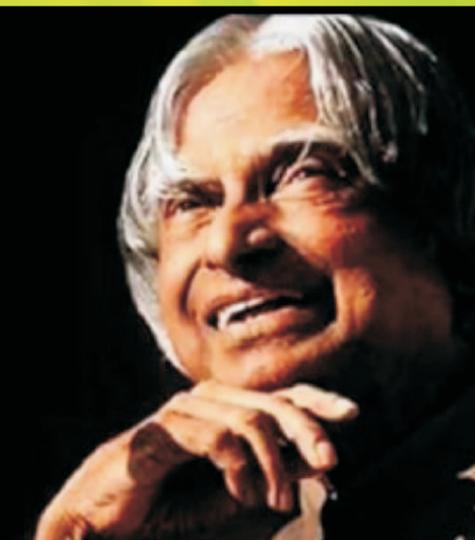
Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

## NCET-EC Helping Hands : 2016-17



**Dream is not the thing  
you see in sleep  
but is that thing that  
doesn't let you sleep**

**-A P J Abdul Kalam**



**Sir Mokshagundam Visvesvaraya  
once said :**

**“A man should do any work he  
undertakes methodically-that was  
firm faith”**

**Every man should understand  
his responsibility.**