



## **Making India a cashless economy**

### *Department Mission*

To develop Electronics & Telecommunication Engineers with patriotism and excellence to meet out the irresistible standards par locally and globally.

### *Department Vision*

The light of progressive knowledge and the brilliance of Electronics & Telecommunication Engineering is chasing the path towards Excellence for achieving an irreplaceable height in the global fraternity.

### *Objectives of the Institute*

- 1) To impart innovative teaching & learning.
- 2) To provide quality education with futuristic trends in Engineering & Technology.
- 3) To develop the institute as a research centre for academic excellence.
- 4) To ensure continual improvement in quality management system.
- 5) To inculcate social values, patriotism and professional ethics among the students.

### *Features*

- 1) Experienced & Qualified faculty members
- 2) Twice NBA Accredited
- 3) NAAC Accredited 2.91 CGPA B++
- 4) 12 Labs equipped with all state of art equipments
- 5) 2 PG & 1 UG Computer lab with latest configuration PCs
- 6) MATLAB, Xilinx, CC Studio etc. Software
- 7) NPTEL lectures
- 8) IETE Student Forum

Even as ordinary citizens queue up for cash and economists are busy estimating the extent to which economic growth will be hit because of the ongoing drive to replace high-value banknotes, there has been a lot of discussion on whether the government can use the current situation to push India towards a cashless future. Reducing Indian economy's dependence on cash is desirable for a variety of reasons. India has one of the highest cash to gross domestic product ratios in the world, and lubricating economic activity with paper has costs. According to a 2014 study by Tufts University, The Cost Of Cash In India, cash operations cost the Reserve Bank of India (RBI) and commercial banks about Rs21,000 crore annually. Also, a shift away from cash will make it more difficult for tax evaders to hide their income, a substantial benefit in a country that is fiscally constrained.

To be sure, the government on its part is working at various levels to reduce the dependence on cash. Opening bank accounts for the unbanked under the and adoption of direct benefit transfer is part of the overall idea to reduce usage of cash and increase transparency.

RBI has also issued licenses to open new-age small finance banks and payments banks which are expected to give a push to financial inclusion and bring innovative banking solutions. Things are also falling in place in terms of technology for India. The recently launched Unified Payments Interface by National Payments Corporation of India makes digital transactions as simple as sending a text message.

Shortage of cash has significantly increased the use of digital modes of payment, but the actual shift will only be visible after the cash crunch eases. It is possible that a section of people which has used electronic mode of payment for the first time due to the cash crunch will continue to transact through this medium, but there are still a number of hurdles in making India a cashless economy.

First, a large part of the population is still outside the banking net and not in a position to reduce its dependence on cash. According to a 2015 report by PricewaterhouseCoopers, India's unbanked population was at 233 million. Even for people with access to banking, the ability to use their debit or credit card is limited because there are only about 1.46 million points of sale which accept payments through cards.

Second, about 90% of the workforce, which produces nearly half of the output in the country, works in the unorganized sector. It will not be easy for the informal sector to become cashless, and this part of the economy is likely to be affected the most because of the ongoing currency swap. Third, there is a general preference for cash transactions in India. Merchants prefer not to keep records in order to avoid paying taxes and buyers find cash payments more convenient. Although cashless transactions have gone up in recent times, a meaningful transition will depend on a number of things such as awareness, technological developments and government intervention. For instance, mobile wallets have seen notable traction, and it is possible that a large number of Indians will move straight from cash to mobile wallets. A study by Boston Consulting Group and Google in July noted that wallet users have already surpassed the number of mobile banking users and are three times the number of credit card users.

However, as noted above, a material transition to a cashless economy will depend on a number of factors. First, the availability and quality of telecom network will play an important role. Presently, people face difficulties in making electronic payments even in metro cities because of poor network. Second, as one of the biggest beneficiaries of this transition, banks and related service providers will have to constantly invest in technology in order to improve security and ease of transaction. People will only shift when it's easier, certain and safe to make cashless transactions. Third, the government will also need to play its part. It will have to find ways to incentivize cashless transactions and discourage cash payments. Implementation of the goods and services tax, for example, should encourage businesses to go cashless. Government should also use this opportunity to revamp the tax administration, as more than taxes, small businesses fear tax inspectors.

The government will have to create conditions—not necessarily by creating cash shortages—to push cashless transactions to a threshold level after which the network effect will take over. India may not become a cashless economy in the foreseeable future, but it needs to reduce its unusually high dependence on cash to bring in much needed transparency and efficiency in the system.

### Demonetization of 1000 & 500 currency notes

On 8 November 2016, the Government of India announced the demonetisation of all ₹500 (US\$7.40) and ₹1,000 (US\$15) banknotes of the Mahatma Gandhi Series. The government claimed that the action would curtail the shadow economy and crack down on the use of illicit and counterfeit cash to fund illegal activity and terrorism. The sudden nature of the announcement—and the prolonged cash shortages in the weeks that followed—created significant disruption throughout the economy, threatening economic output. The move was heavily criticized as poorly planned and unfair, and was met with protests, litigation, and strikes.

Prime Minister of India Narendra Modi announced the demonetisation in an unscheduled live televised address at 20:00 Indian Standard Time (IST) on 8 November. In the announcement, Modi declared that use of all ₹500 and ₹1000 banknotes of the Mahatma Gandhi Series would be invalid past midnight, and announced the issuance of new ₹500 and ₹2000 banknotes of the Mahatma Gandhi New Series in exchange for the old banknotes.

The BSE SENSEX and NIFTY 50 stock indices fell over 6 percent on the very next day after the announcement. In the days following the demonetization, the country faced severe cash shortages with severe detrimental effects across the economy. People seeking to exchange their bank notes had to stand in lengthy queues, and several deaths were linked to the inconveniences caused due to the rush to exchange cash.

Initially, the move received support from several bankers as well as from some international commentators. It was heavily criticized by members of the opposition parties, leading to debates in both houses of parliament and triggering organized protests against the government in several places across India. The move is considered to have reduced the country's GDP and industrial production. As the cash shortages grew in the weeks following the move, the demonetization was heavily criticized by prominent economists and by world media.

### BHIM (Bharat Interface for Money)



Welcome to



Now send & receive money instantly using your mobile.

**BHIM** (Bharat Interface for Money) is a Mobile App developed by National Payments Corporation of India (NPCI), based on the Unified Payment Interface (UPI). It was launched by Narendra Modi, the Prime Minister of India, at a Digi Dhan programme at Talkatora Stadium in New Delhi on 30 December 2016. It has been named after Dr. Bhim Rao Ambedkar and is intended to facilitate e-payments directly through banks and as part of the 2016 Indian banknote demonetisation and drive towards cashless transactions. This UPI app supports all Indian banks which use that platform, which is built over the Immediate Payment Service infrastructure and allows the user to instantly transfer money between the bank accounts of any two parties. It can be used on all mobile devices. BHIM allow users to send or receive money to other UPI payment addresses or scanning QR code or account number with IFSC code or MMID (Mobile Money Identifier) Code to users who do not have a UPI-based bank account.

BHIM allows users to check current balance in their bank accounts and to choose which bank account to use for conducting transactions, although only one can be active at any time. Users can create their own QR code for a fixed amount of money, which is helpful in merchant — seller — buyer transactions. They can also have more than one payment address. If the 12-digit Aadhaar is listed as a payment ID on the BHIM app will not require any biometric authentication or prior registration with the bank or Unified Payment Interface (UPI). During Union Budget 2017, Union Finance minister Arun Jaitley said that Government will launch two new scheme to promote the use of the BHIM app. One will be referral payments for individuals, and the other will cashback for merchants who accept payments from BHIM.

## ETESA Events(Group Discussion for Final Year Students)



Group discussion event for final year (B.E.) students was held on 29th JULY 2016 at 02:45 to 04:45 P.M. in E & TC seminar hall. This event was organized by ETESA. 18 students of BE (A) division have participated in this event which is of far importance when considered in regard to the campus placement interviews, HR discussions in various Government Sector, PSUs and Private Sector companies for job prospective and achieving dynamic skills in their upcoming career.

A few topics for group discussion were as follows:

- |   |  |
|---|--|
| 1. Whether bollywood movies are making unnecessary collections? | 2. Biggest problem in India.                           |
| 3. Who is responsible for poor performance of India in Sports?  | 4. Whether Chinese products should be banned in India? |
| 5. Whether Government employees liable for 7th Pay commission   | 6. Whatsapp- useful or harmful.                        |

The students were judged on basis of their understanding, communication skill, behavior, and body language. After rigorous sessions, winners were declared.

### The winners were

- |  |   |
|--|---|
| 1. Ms. Shravika Khodre, B.E. (A), 01st Rank                | 2. Mr. Vaibhav Mahajan, B.E. (A), 02nd Rank |
| 3. Mr. Mandar Joshi & Ms. Sonu Makode, B.E. (A), 03rd Rank |   |

The event was coordinated by Mr. Kunal K Pandey & Mr. Yogesh Santwani, Assistant Professor, E & TC.

## Group Discussion for Third Year Students

Group discussion event for third year (T.E.) students was held on 29th JULY 2016 at 04:45 to 05:45 P.M. in E & TC seminar hall. This event was organized by ETESA. 12 students of TE (A) division have participated in this event which is of far importance when considered in regard to the campus placement interviews, HR discussions in various Government Sector, PSUs and Private Sector companies for job prospective and achieving dynamic skills in their upcoming career.

A few topics for group discussion were as follows:

1. Education system in India.
2. Can't we believe our leaders?
3. Social media : Good or Bad

The students were judged on basis of their understanding, communication skill, behavior and body language. After rigorous sessions, winners were declared.

### The winners were

- |  |   |
|--|---|
| 1. Mr. Arpit Pandey, T.E. (A), 01st Rank | 2. Ms. Prachi Jadavh, T.E. (A), 02nd Rank |
| 3. Ms. Lochana Rade, T.E. (A), 03rd Rank |   |

The event was coordinated by Mr. Kunal K Pandey & Mr. Yogesh Santwani, Assistant Professor, E & TC.



## ETESA Events

### Group Discussion for Third Year Students



### Group Discussion for Second Year Students



Group discussion event for second year (S.E.) students was held on 10th September 2016 at 04:45 to 05:45 P.M. in E & TC seminar hall. This event was organized by ETESA. 39 students of SE have participated in this event which is of far importance when considered in regard to the campus placement interviews, HR discussions in various Government Sector, PSUs and Private Sector companies for job prospective and achieving dynamic skills in their upcoming career.

A few topics for group discussion were as follows:

1. Whether bollywood movies are affecting Indian culture?
2. Which is better? Culture & tradition of Past India or Present India
3. Should Indian Education system be changed?
4. Should exams are essential?
5. Is reservation boon or curse?
6. Arrange Marriage or Love marriage?

The students were judged on basis of their understanding, communication skill, behavior and body language. After rigorous sessions, winners were declared.

#### The winners were

1. Ms. Priyanka Pawar, 01st Rank
3. Ms. Priya Mandal, 03rd Rank

2. Ms. Hemangi Patil, 02nd Rank

The event was coordinated by Mr. Kunal K Pandey & Mr. Yogesh Santwani, Assistant Professor, E & TC.

*“Working hard is important. But there is something that matters even more: believing in yourself.”*

**Harry Potter (J.K. Rowling)**



## ETESA Events (Tree Plantation Day)



Tree plantation Day was observed on the auspicious occasion of the birthday of the Chairman, Governing Body, SSBT'S COET, Hon. Raosahab Shekhawat on 14th August 2016 in the premises of the Institute. Principal, Dr. K.S. Wani inaugurated the event whose convener was Head, Dr. S.R. Suralkar. The students of final year and third year have participated in the event. Trees that were planted in the campus were Neem, Pelta Palm, Ashoka, Saptaparni, Mango, Peepal etc. Chetan Chaudhari of BE(B) was the student coordinator.

The faculty coordinators for the event were Mr. Kunal Pandey and Mr. Yogesh Santwani. Mr. N.M. Kazi, Mr. A.R. Bari and Mr. C.A. Patil were also present on the day of the event.



**ETESA Events (Seminar on Stop Cancer Mission)**

Keeping its glorious tradition intact, ETESA had organized an awareness seminar on Stop Cancer in Non A.C. Seminar Hall of E & TC Department on **19<sup>th</sup> October 2016** at **03:00 P.M.** **Mr. Nishant Bhaisare**, a counselor from **Stop Cancer Mission Multipurpose Society, Nagpur** was the speaker of the event. Due to unhealthy living style, enormous stress, variety of factors and lack of awareness, deaths occurring due to cancer have grown exponentially throughout this World as a result of which it becomes a matter of prime concern to raise a voice of awareness among our friend, family members and relatives to fight against the deadly disease as prevention is always better than cure.

The seminar lasted for 02 hours and in due course of this, the speaker had explained a variety of factors which are responsible for cancer, its stages, types and various measures which are utmost necessary to prevent it.

Dr.K.S.Wani, Honorable Principal, S.S.B.T's C.O.E.T had graced the event with his auspicious presence. The speaker had conveyed his gratitude to Dr.S.R.Suralkar, Head, E & TC and the Convener of the program for arranging this seminar for all the faculty members and staff of the institute. The seminar was listened by 61 attendees. The vote of thanks was given by ETESA faculty advisor.



In order to facilitate deeper understanding in the subject, a guest lecture on **“Innovative techniques and practices in Digital Image Processing”** was organized on 13<sup>th</sup> October 2016 in which **Dr. S. S. Musale**, Professor & Head, Department of Electronics & Telecommunication, Pune Vidyarthi Gruha's College of Engineering, Parvati, Pune had delivered a post lunch session from 02:00 P.M to 04:00 P.M. for the faculty members of E & TC Department.

The lecture was quite useful and interesting and his way of presentation was very conceptual. Dr. Musale had explained the basics of segmentation and clustering and how it could be made useful in context to image processing and pattern recognition. He demonstrated the practical tools which are necessary for carrying the performance analysis and system design set up using software like MATLAB. The faculty members were benefited from this guest lecture.

### Faculty participation in Seminar & Workshops

**Mr.N.M.Kazi** had attended a workshop on *Vidyarthi Kalyan* conducted by North Maharashtra University on 06th September 2016. **Mr.V.M.Deshmukh & Dr.P.H.Zope** had attended *STTP on Power Conditioning and Distributed Power Generation* conducted by SVNIT, Surat held during 26-30 December 2016. **Mr.A.H.Karode & Mr.A.C.Wani** had attended workshop on *Modeling and Implementation of Analog and Digital systems using EDA Tool* held during 26-30 December 2016 in MANIT, Bhopal. **Mr.D.U.Adokar , Mr.N.M.Kazi, Mr.S.K.Khode & Mr.A.R.Bari** had attended STTP on *Faculty Development Program* conducted by National Institute of Technical Teacher Training and Research, Bhopal held during 13-18 Oct 2016 in SSBT's COET Jalgaon. **Mr.S.P.Ramteke & Mr.S.K.Khode** had attended *STTP on Soft computing Techniques* conducted by JSPM Babasaheb Naik College of Engineering Pusad held during 26-30 Dec 2016 in Pusad. **Mr.Y.S.Santwani** had attended *STTP on Design Testing Performance Evaluation and Application of Microwave Antennae* 2016 conducted by VIIT Pune held during 21-26 Nov 2016 in Pune.

### Faculty publications in National/International Journals/International Conferences

**Dr.S.R.Suralkar & Mr.A.H.Karode** had published a paper entitled "*Implementation of Digital Watermarking System for Video Authentication using FPGA*" in International Conference on Global Trends in Signal Processing, Information Computing and Communication, IEEE Sponsored, Peer Reviewed held during 22-24 Dec 2016 at SSBT's COET, Bambhori, Jalgaon. **Dr.P.H.Zope** had published a paper entitled "*Design and Implementation of Messaging System Using Braille Code for Virtually Impaired Persons*" in International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering, Vol. 5, Issue 7, July 2016, ISSN (Print):2320 – 3765, ISSN (Online):2278 – 8875, DOI:10.15662/IJAREEIE.2016.0507001, Pp No. 5977-5984, Impact Factor: 6.621. **Mr.S.P.Ramteke** had published a paper entitled "*Automatic segmentation of Content & Non content based Marathi text document*" in International Conference on Global Trends in Signal Processing, Information Computing and Communication, IEEE Sponsored, Peer Reviewed held during 22-24 Dec 2016 at SSBT's COET, Bambhori, Jalgaon. **Mr.Y.S.Santwani & Mr.K.K.Pandey** had published a paper entitled "*Triangular Slot Antenna for Ultrawide Band Application*" in International Conference on Global Trends in Signal Processing, Information Computing and Communication, IEEE Sponsored, Peer Reviewed held during 22-24 Dec 2016 at SSBT's COET, Bambhori, Jalgaon.

### Editorial

Once upon a time a psychology professor walked around on a stage while teaching stress management principles to an auditorium filled with students. As she raised a glass of water, everyone expected they'd be asked the typical "glass half empty or glass half full" question. Instead, with a smile on her face, the professor asked, "How heavy is this glass of water I'm holding?"

Students shouted out answers ranging from eight ounces to a couple pounds.

She replied, "From my perspective, the absolute weight of this glass doesn't matter. It all depends on how long I hold it. If I hold it for a minute or two, it's fairly light. If I hold it for an hour straight, its weight might make my arm ache a little. If I hold it for a day straight, my arm will likely cramp up and feel completely numb and paralyzed, forcing me to drop the glass to the floor. In each case, the weight of the glass doesn't change, but the longer I hold it, the heavier it feels to me." As the class shook their heads in agreement, she continued, "Your stresses and worries in life are very much like this glass of water. Think about them for a while and nothing happens. Think about them a bit longer and you begin to ache a little. Think about them all day long, and you will feel completely numb and paralyzed – incapable of doing anything else until you drop them."

**The moral:** It's important to remember to let go of your stresses and worries. No matter what happens during the day, as early in the evening as you can, put all your burdens down. Don't carry them through the night and into the next day with you. If you still feel the weight of yesterday's stress, it's a strong sign that it's time to put the glass down.

## Student's Activities (UG Section)

## Result at Glance (Exam held during Nov Dec 2016)

## Final Year (A Division)

Hemant Mahale 1st	Harish Patil 2nd	Priyanka Bari 3rd
----------------------	---------------------	----------------------

## Final Year (B Division)

Gayatri Badgujar 1st (9.04 CGPA)	Surbhi Patil 2nd (8.86 CGPA)	Aakansha Agiwal 3rd (8.81 CGPA)
--	------------------------------------	---------------------------------------

## Third Year (A Division)

Ghule Mamta 1st (8.96 CGPA)	Lochana Rade 2nd (8.83 CGPA)	Rasika Baviskar 3rd (8.78 CGPA)
-----------------------------------	------------------------------------	---------------------------------------

## Third Year (B Division)

Dhanashri Gade 1st (8.78 CGPA)	Komal More 2nd (8.65 CGPA)	Puja Kharche 3rd (8.57 CGPA)
--------------------------------------	----------------------------------	------------------------------------

## Second Year (A Division)

Anagha Chaudhari 1st (9.22 CGPA)	Shivani Chaudhari 2nd (8.64 CGPA)	Chetan Sharma 3rd (8.49 CGPA)
--	---	-------------------------------------

## Second Year (B Division)

Patil Suvarna 1st (8.87 CGPA)	Mahajan Shubhangi 2nd (8.61 CGPA)	Patil Prajakta 3rd (8.39 CGPA)
-------------------------------------	---	--------------------------------------



*Heartiest congratulations to them on behalf of Head, faculty members and best wishes for their career.*

## Student's Participation

Ms.Komal J Birla, Ms.Sonali A Jagtap, Ms.Mokshada R Lokhande, Ms.Ashwini S Pawar, Ms.Dhanashree Gade & Ms.Yogeshwari Chaudhari had participated in the event "Techno Parv—2K16" organized by a forum of Akhil Bhartiya Vidyarthi Parishad at SSBT's COET Bambhori Jalgaon held on 20 September 2016.

Ms.Dhanashree Gade had participated in "Vedant 2K16" in the event Project Paper Presentation held at SNJB's KBJ College of Engineering Chandwad on 10th September 2016.

ICSPICC 2016  
(IEEE Conference)

Department of Information Technology with Department of Electronics & Telecommunication organized International Conference on Global trends in Signal Processing, Information Computing & Communication 2016 (ICSPICC) IEEE Conference from 22nd to 24th December 2016. This conference was a golden platform for all the aspirants to share their innovative ideas & related research work in front of the Global fraternity. ICSPICC provided a dynamic platform for all the stakeholders to cherish their innovative ideas with emphasis on fundamental and applied mathematics and maintain a logical reasoning that would help in converting systems logic and algorithm.

ICSPICC IEEE Conference was inaugurated by the Auspicious hands of **Dr. P. P. Patil**, Vice Chancellor at North Maharashtra University, Jalgaon. **Dr. Sartaj Sahani**, Distinguished Professor of Computer and Information Sciences and Engineering at the University of Florida was Key note Speaker for the same. During his speech he focused on latest trends in Sequential and parallel data structures and algorithms, Scheduling, Optimization, Computational geometry. In the conference total 95 papers in 16 Sessions and 31 posters in 2 sessions were presented on 22nd and 23rd December 2016. and on 24th December 2016 participants enjoyed the world famous Ajanta Caves.

**Dr. U.S. Bhadade**, Professor & Head, Information Technology and **Dr. S. R. Suralkar**, Professor & Head, Electronics & Telecommunication Engineering were Conference Chair and Mr. Aiyappan Pillai Dr. B. Satyanarayana were Representatives from IEEE Bombay Section for successful organization of the Conference. Mr.A.C.Wani had anchored the inaugural ceremony.



ICSPICC 2016 (The glimpses of IEEE Conference)





ICSPICC 2016 (The glimpses of IEEE Conference)





## NAAC Peer Team Visit

**Prof. Bipin Mehta** visited the Electronics & Telecommunication Engineering Department along with **Dr. Sumant Katiyal** as Members of the Peer Team of NAAC for institute accreditation during 29 to 31 August, 2016 in SSBT's College of Engineering and Technology, Jalgaon, Maharashtra. The rest of the delegates of the Peer Team were **Dr. N. Panchanatham** along with **Dr. D. N. Reddy** (Chairman-NAAC Peer Team).



(L to R) Dr. Sumant Katiyal, Dr. N. Panchanatham, Dr. Suralkar (Steering Committee Coordinator)-COET), Dr. K. S. Wani (Principal-COET), Dr. D. N. Reddy (Chairman-NAAC Peer Team), Prof. Bipin Mehta, Hon. Shri Raosahab Shekhawat (Chairman, Governing Body -SSBT), Shri Jayesh Rathore





## NAAC Peer Team Visit (Glimpses)





NAAC Peer Team Visit(Glimpses)







**Smt. Pratibhatai Patil**  
**Former**  
**President of India**  
**&**  
**Dr. D. R. Shekhawat**  
**Eminent Educationalist**



**Shri. Raosaheb Shekhawat**  
**Chairman, SB**



**Dr. K. S. Wani**  
**Principal**  
**SSBT's COET**



**Dr. S. R. Suralkar**  
**DoAd, Head (E & TC)**



*Designer & Editor*

**Mr. Kunal Kishore Pandey, Assistant Professor, E&TC**