

Department of Electronics and Communication Engineering

Sai Vidya Institute of Technology

Rajanukunte, Bangalore-560064



(August 2016-July 2017)

Vision

To become a center of academic excellence with innovations to make a significant contribution to the society in the field of Electronics and Communication Engineering

Mission

- ❖ To Educate and Empower the students with state-of-art knowledge and innovation in Electronics & Communication Engineering to meet the global challenges
- ❖ To imbibe the professional competency and ethics congenial to the society through training

Program Educational Objectives (PEOs)

PEO1: Design & Develop Innovative electronic systems.

PEO2: Effectively communicate technical information, successfully lead and participate in a multi-disciplinary team environment.

PEO3: Engage in lifelong learning through continuing education and industrial practice.

PEO4: Demonstrate professional ethics and social awareness.

Program Specific Outcomes (PSOs)

Graduates will be able to:

PSO1:Design and simulate Electronics and Communication systems using concepts and tools of electronic circuits, signal processing, VLSI technology and communication.

PSO2:Architect, partition and select appropriate technologies for implementation of a specified electronics & communication system.

Director's Message



I am delighted to note that Department of Electronics and Communication Engineering, SVIT is bringing out Department Newsletter. I appreciate the enthusiasm of eminent members of the Department who have contributed to the Newsletter. Department newsletter definitely provides a platform to showcase the activities and achievements of the students and staff such as: conferences attended by staff members and students, competitions won by students, innovative projects carried out by students with the guidance of staff, among others. I wish the students and staff of Department of Electronics and Communication Engineering, all success.

-Prof. M R Holla

Director, SVIT

Principal's Message



I am extremely happy to know that the Department of Electronics and Communication Engineering, SVIT is bringing out newsletter for the academic year 2018-19 and this is an ongoing process portraying the various Departmental activities. It is great to find a considerable number of achievements in academic and non-academic activities which certainly prove that our staff and students are adequately equipped and possess necessary skill-sets to bring laurels to the institution. I wish that this number may grow in the years to come. My Congratulations to ECE team.

Dr. H S Ramesh Babu

Principal, SVIT

HOD's Message

Dear Students.

On behalf of entire Department of ECE, I welcome you all. I hope you will enjoy your stay in our Department. I am very sure after the end of fours year you will come out with flying colors professionally qualified. Our Department has outstanding teachers such as Prof. Y Jayasimha, Prof. Sateesh Kumar HC among others. Department of ECE has done tremendous achievements in the field of research and developments and the department is catalyzed supported by Vision Group on Science and Technology (Dept. of IT, BT & ST Govt. of Karnataka). The department is constantly encouraging and supporting the students to present their work in top international conference held abroad including USA and Europe, to meet the changing requirement of the industry

-Dr. Chitra Kiran N

Professor and Head Department of ECE,

Editorial Board

Chief Editor: Dr. Chitra Kiran N

Editorial Board Member : Prof. Sandeep S Naik

Student Member: Ms. Shilpa Singh, Dept of ECE

Faculty

Prof. Y Jayasimha, Dean Academics & Associate

Professor

Dr. Narayan K ,Dean R&D, Professor

Dr. Chitra Kiran N, Professor, Head, Dept. of ECE

Dr.Sateesh Kumar H C, Associate Professor

Dr. Mukesh Kumar Singh, Associate Professor

Mr. Venkatesha M, Assistant Professor

Mr. Suryanarayana N K, Assistant Professor

Ms. Asha K, Assistant Professor

Ms. Pavithra G S, Assistant Professor

Mr. Pavan Kumar E , Assistant Professor

Ms. Nayana K, Assistant Professor

Mr. Prashanth N, Assistant Professor

Mr. Darshan R V, Assistant Professor

Mr. Sandeep S N, Assistant Professor

Mrs. Shwetha M, Assistant Professor

Ms. Mallika C. S, Assistant Professor

Ms. Pravalika, Asssitant Professor

Ms. Prabha K, Assistant Professor

Ms. Chaya B M, Assistant Professor

Mr. Rajesh G N, Assistant Professor

Ms. RoopaNanjaiah, Assistant Professor

Mr. Mahesh Kumar, Assistant Professor

Ms. Shilpa M B, Assistant Professor

Ms. Yashaswini K J, Assistant Professor

Ms. Tanuja G, Assistant Professor

Ms. RoshiniSupriya B N, Assistant Professor

Ms. Bindushree A, Assistant Professor

Advisory Board Members

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Associate Professor, Department of ECE, Indian Institute of Science, Bangalore.

Dr. Ravi Shankar C V

Professor, and Head, Dept. of ECE, Sambram Institute of Technology.

Mr. Venkatesh

Sales Manager, New Products, IEEE, Bangalore.

Mr. Vijay Bhaskar

General Manager, Operations, XORAIL.

Mr. Raju K

Designated Partner- Technical Lead, CYRAS Technologies.

Mr. JNN Prasad

Vice President, Siemens, Bangalore

Ms. ManeeshaPattanshetti

Alumni, Working at Mainframe, CapGemini, Software Engineer.

Mr. V VPattenshetti

Parent, AdditionalDirector CPRI.

Events / Workshops Conducted

❖IEEE Blended Learning on Logic Design

Dr. Chitra Kiran. N (Prof & HOD, Department of ECE, SVIT,) Organised the event. Sunil, Ms. Sowmya ,RV VLSI Design center, Jayanagar 4th T Block, Bangalore – 560041is the resource person . Dr. Narayan K is the convener of the Workshop that was held on the date 9th July 2016..

Around 50 students are actively participated and conducted the hands on section in the design of VLSI circuits. Trainer also concentrated on the importance of VLSI basics and the opportunities in designing chip for mobile industry to another devices are covered.





Photography of the Hands on sessions in IEEE Blended learning Program

Ethical Hacking & Information Security

Dr. Chitra Kiran. N (Prof & HOD, Department of ECE, SVIT,) Organised and coordinated the even in association with IEEE Photonics Society. The resource person were from Tech Bharath Consulting that was held on the date 1st April 2017.

The workshop is conducted to train students to design, deliver information about information security. 220 students actively participated in this workshop.

In this workshop the students were able to gain basic knowledge about security threats to the computer and on Cyber security and mobile hacking.



Addressing by our Principal Dr. Ramesh Babu H S about the workshop

Toppers Meet

The Management, Principal and Staff of Department of Electronics and Communication congratulated the toppers and conducted 'Toppers Meet' on December 2016, Dr.H.S Ramesh Babu, Principal of our institution graced the occasion with his presence. Dr.Chitra Kiran N ,Professor and Head Department of Electronics and Communication Engineering and the faculties of Department of electronics and communication engineering worked as a team to make the event a grand success. All the students from second year, third year and final year of the Department of ECE participated in the event along with the toppers.

Final Year Students:

Class Toppers	Name	USN	Marks
1	Shwetha G	1VA13EC081	79.44%
2	Anusha K	1VA13EC006	78.66%
3	Ananya N	1VA13EC005	78%
4	Swathi S	1VA13EC093	77.11%

Third Year Students:

Class Toppers	Name	USN	Marks
1	AkshayUppin	1VA14EC044	78.33
2	NeduriShruthi	1VA14EC063	76.77%
3	Dhanush S	1VA14EC022	74.66%
4	Shilpa Singh	1VA14EC092	74.44%

Second Year Students:

Class Toppers	Name	USN	Marks (in SGPA)
1	Jeevitha J R	1VA15EC032	8.64
2	Kokila N	1VA15EC038	8.29
3	Vishali C	1VA15EC105	8.29
4	ChitapartyAkilkumarreddy	1VA15EC014	8.14

Student Publications

Electronics & Communication Engineering Academic Year 2016-17

S.No.	USN	Student	Title of the paper	Name of the Journal/Confe rence	Publication details (Vol, Issue, page number, year, place)	ISBN/ISS N/DOI
1	1VA13EC005	Ananya N	Improved light extraction efficiency of organic LED using crystals	5th International conference on Photonics, PHOTOPTIC S-2017	Porto, Portugal, 27 Feb to 1 March 2017, SCITEPRESS	10.5220/00 061539025 60259.
2	1VA13EC003	Akshatha	Design and	3 rd National		
3	1VA13EC006	Anusha K	analysis of microfluidic channel	Conference on Recent Trends	Global	
4	1VA13EC008	Arpitha K	for Dielectrophoretic	in Electronics	Academy of Technology,	Paper presented
5	1VA13EC086	Sowmya B	separation in Biomedical application	Communicati on NCRTC- 2017	Bangalore. 12 th May 2017	presented
6	1VA13EC018	Devika Rani C				
7	1VA13EC022	HarshiniPoorn asindu J	Li-Fi based intelligent device	πCES International Journal-2017 Perspectives in communicatio n, embedded- systems & signal processing	Volume 1, Issue 2 May 2017	
8	1VA13EC026	Hazel Varghese				
9	1VA13EC049	Monica S	switching			2566-932X
10	1VA13EC010	Asha N H		πCES International	Volume 1, Issue 2 May 2017	
11	1VA13EC013	Ashwini A		Journal-2017 Perspectives		
12	1VA13EC024	Harshitha A S	Oculography: A review paper	in communicatio		2566-932X
13	1VA13EC106	DeepthiChenga ppa N C		n, embedded- systems & signal processing		
14	1VA13EC021	H Surekha	Design and	IEEE_DSCE		
15	1VA13EC014	Bharath Kumar M R	Mach-Zehnder k Interfero meter c	students branch in coordination with IEEE	1 st -2 nd June 2017	Paper presented
16	1VA13EC090	Suhas S	for Bio-Sensing application	Bangalore		

17	1VA13EC105	Poojashri S S				
18	1VA12EC025	Pavan Kumar				ISSN:2230
19	1VA13EC001	Adarsh H V G	Real time multi- model sensory	International journal of	Volume 8,	- 7109(onlin
20	1VA13EC029	Jayanth P	data for prosthetic hand control	electronics & communication technology.	issue 2 June 2017	e) ISSN:2230 - 9543(print)
21	1VA13EC004	Amar HanumanthKu mashi	Autism disorder analysis spectra	TIATM	L 9017	ISSN:2320
22	1VA13EC015	BhuvanTeja	with EEG	IJAIM	June 2017	-5121
23	1VA13EC037	Likhitha K	assessment			
24	1VA13EC046	Meghana J				
25	1VA13EC007	Anusha L		3 rd National Conference on	Clobal	
26	1VA13EC011	Asha Rani A	Modeling and analysis of band	Recent Trends in Electronics	I Acadamy of	Paper presented
27	1VA13EC041	Madhuri T	structure for			
28	1VA13EC027	Hemalatha S P		on NCRTC-		
29	1VA13EC030	Kanchan Kumari	Photonic crystal- based ring	OSR Journals	June 2017	ID D73 086
30	1VA13EC044	MatadaSushma	resonator for temperature and			
31	1VA13EC050	Monica N	pressure			
32	1VA13EC063	Priyadarshini B S	measurement			
33	1VA13EC023	Harshith Kumar M	A Novel design of algorithm for the control of artificial face	IJAIM	June 2017	ISSN:2320
34	1VA13EC040	Madan H R	with gesture		June 2017	-5121
35	1VA13EC053	Nandini C	recognition technology			
36	1VA13EC054	Nandini V				
37	1VA13EC002	Akarsh S M				
38	1VA13EC009	Arun Kumar S	Design and Analysis of BOT	IOSR Journals		ID D73088
39	1VA13EC033	Krishna B				

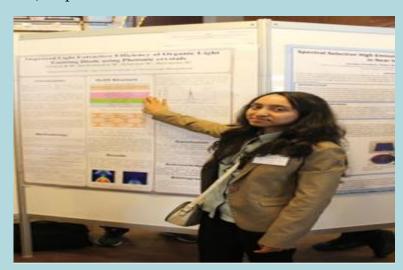
40	1VA13EC077	Sangeetha Yadav B N	Design and analysis of step index waveguide	3 rd National Conference on Knowledge Discovery in Information	Brindavan College of	Paper
41	1VA13EC081	Shwetha G	for average power and	Technology	Engineering.	presented
42	1VA13EC084	Sindhu R Hegde	effective mode index	and Communicati on Engineering	17 th may 2017	
43	1VA13EC060	Pooja N				
44	1VA13EC072	Rashmitha T H	A novel approach			
45	1VA13EC095	Tejaswini C H	towards the design and implementation	IJAIM	June 2017	ISSN:2320 -5121
46	1VA13EC096	Vaishnavi B	of weed drones			
47	1VA11EC096	Sushma	Modelling and	3rd National Conference on Recent Trends in Electronics and Communicati on NCRTC- 2017	Global Academy of Technology, Bangalore. 12 th May 2017	Paper presented
48	1VA12EC095	Sankeerthana V	simulation of Fabry-Perot cavity as			
49	1VA13EC085	Sindhu Shree G N	resonator for sensor applications			presented
50	1VA13EC091	Suma R	аррисалоно			
51	1VA13EC016	Chaitra S		3 rd National		
52	1VA13EC071	Rashmi K V	Modelling and	Conference on Recent Trends	Global	
53	1VA13EC082	Shyamala R	analysis of quality factor for	in Electronics	Academy of Technology,	Paper
54	1VA13EC102	Y N Prathyusha	photonics crystal cavity	and Communicati on NCRTC- 2017	Bangalore. 12 th May 2017	presented
55	1VA12EC414	Rakesh V	Android Based	3 rd National Conference on	_	
56	1VA11EC106	Veeraj	Android Based Monitoring and Smart Planning of Urban Solid Waste management	Recent Trends in Electronics and	ls Global	Paper presented
57	1VA11EC070	Rajashekar		Communicati on NCRTC- 2017	Bangalore. 12 th May 2017	presented
58	1VA13EC043	Manasi A Gokaran	Mine Detection Robot by using	3 rd National Conference on	Global Academy of	Paper presented

60 1VA13EC074 Sagar M N 3rd National	
61 1VA13EC098 Varun H N Implementation Conference on Recent Trends	
62 IVA14EC400 Chandan P of solar in in Floatronics Academ	
automated metro train using arm cortex Gurunath K automated metro train using arm cortex and Communicati on NCRTC-2017 Technological Parameter of train using arm cortex	ology, presented
64 1VA13EC064 Priyanka Dhusia The design of	
65 1VA13EC065 Pruthvi B mobile control car security IOSR journal June 20	017 ID D73102
66 1VA13EC068 Raksha J system using arm controller	
67 1VA12EC086 Subhashree	
68 1VA13EC055 Navyatha C V International	
69 1VA13EC070 Ranjitha S A new approach to road detection conference on signal	ID 104
70 1VA13EC092 Supriya K in challenging outdoor processing, communicatio of the 7th outdoor	
71 IVA13EC097 Varsha P Shetty Varsha P Shetty 2017 automation (ICSIPCA-2017)	Journal,
72 1VA12EC404 Karthik B M Rapid entire 3rd National conference on of Tech	nical
73 1VA12EC024 Charith H C body postural Advancement Education	tion. Paper
74 IVA13EC405 Mohan Kumar H U analysis assessment Information Technology May 19 2017)th-20th
75 1VA13EC056 Nithil N	ISSN:2230
76 1VA13EC059 Nithin D R Antennas and Photovoltaic panels: Toward a lectronics & issue 2	e 8, 7109(onlin
77 1VA14EC404 Nagapati M green communication n technology.	017 ISSN:2230
78 1VA13EC062 Pramod V	9543(print)
79 1VA13EC020 Gowthami D IICES	
80 1VA13EC032 Kavitha P R An Image Processing Processing Perspectives Issue 2	The state of the s
81 1VA13EC035 Lavanya algorithm for silkworm egg in communicatio May 20	017
82 1VA13EC045 Megha G V counting n, embedded-systems &	2566-932X

83	1VA14EC005	AkshayUppin	Security Assessment of Computer Networks-on Ethical Hacker's	NCRTEC- 2017 Global Academy of Technology	12 th May 2017	Paper presented
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Students Achievements

- ❖ Ms. Swekrithi Shetty Department of Electronics and Communication Engineering have participated in the event International Level Sweden-Indi Nobel Memorial Quiz 2016-17 held at R V College of Engineering Bangalore on the date 19th August 2016
- ❖ Ms. Kusuma S Department of Electronics and Communication Engineering have participated in the event BMSIT Auto Expo held at BMSIT, Bangalore on the dates 23rd and 24th September 2016 and she won the second Prize.
- ❖ Mr. AkshayUppin(VI SEM), participated in State Level Jnana Tantrajnana -Vijnana- Mela-2017, Project exhibition held on 20th and 21st Feb 2017 at Sri KshetraAdichunchanagiri.
- ❖ Ms. Ananya N, of 8th semester have presented the paper at PHOTOPTICS 2017, Porto Portugal, Proceedings of the 5th International Conference on Photonics, Optics and Laser Technology Volume 1: PHOTOPTICS, 256-259, Under the guidance of Dr.Narayan.K, Professor, Head and Prof. Chaya B M, Department of ECE.



Ms Ananya N attended the Photoptics 2017 at Porto- Portugal Europe.

Students sponsored / received grants from IEEE to visit Conferences held Abroad



Ms. Ananya N Department of ECE is one the active student member of IEEE and IEEE photonics and EMBS chapters. She is the Recipient of Rs 10,000/- Travel Grant from College and Rs 15,000/- support from Dr. Narayan .K , Dean R & D and Professor from his personal funds to attend one of the top conference PHOTOPTICS ,March 2017 held in Porto- Portugal, Europe.

Project Exhibition

Sai Vidya Institute of Technology had conducted project exhibition for students of final year of all the branches. Exhibition was conducted on 18th May 2017.

List of Best Projects of the Batch 2016-17

SL.No	USN	Name of the Students	Title of the Project
1.	1VA13EC069	Rakshith G N	
	1VA13EC075	Sandeep G	Design and Implementation of electric Kudal for Agricultural
	1VA13EC078	Shivaraj Kumar N	Application
	1VA13EC088	Suchith Kumar M	
2.	1VA13EC002	Akarsh M	Yielding of more crops from
	1VA13EC009	Arun Kumar S	plants by adding appropriate
	1VA13EC033	Krishna B	Nitrogen
3	1VA13EC074	Sagar M N	
	1VA13EC098	Varun H N	Implementation of Solar system
	1VA14EC400	Chandan P	in an automated metro train using ARM Controller
	1VA14EC402	Gurunath K	

Glimpses of Project Exhibition



FDP/ Workshops attended by Faculty

S1. No.	Name of the Faculty	Name of the FDP/ Workshop	Place	No. of Days
1	Dr. Narayan K	Summer school in optics and Photonics	IISc, Bengaluru	5 Days
2	Mr. Suryanarayana N K	Recent trends in Wireless sensor Networks with hands on session using NS-2	SVIT, Bangalore	3 Days
3	Mr. Suryanarayana N K	Contemporary Classroom Management Techniques	SVIT, Bangalore	3 Days
4	Ms. Asha K	Summer school in optics and Photonics	IISc, Bengaluru	5 Days
5	Ms. Asha K	Matrix Laboratory for Teaching and Research	Reva University	2 Days
6	Mr. Venkatesha M	Summer school in optics and Photonics	VGST & KSTEPS, Bengaluru	2 Days

7	Ms. Chaya B M	Research Methodology	Cambridge Institute of Technology	2 Days
8	Ms. Chaya B M	Summer school in optics and Photonics	IISc, Bengaluru	5 Days
9	Ms. Pavithra G S	NS-3 and its Usage	Global Academy of Technology	2 Days
10	Ms. Shwetha M	Summer school in optics and Photonics	IISc, Bangalore	5 Days
11	Mr. Pavan Kumar E	Pattern Recognition, soft Computing & Audio, Video Processing using DSP Processor	PES Institute of Technology	5 days
12	Mr. Pavan Kumar E	Contemporary Classroom Management Techniques	SVIT, Bangalore	2 days
13	Ms. Nayana K	Recent trends in Wireless sensor Networks with hands on session using NS-2	SVIT, Bangalore	3 Days

MOOC Certification by Faculties

Sl.No	Faculty Name	Course	Organization / University
1	Ms. Asha K	Optical Communication	NPTEL

Faculty Publications

Dr.Narayan K

- ➤ Improved Light Extraction Efficiency of Organic Light Emitting Diode using Photonic crystals.Conf. Conf.PHOTOPTICS May 2017, ScopusDOI: 10.5220/0006153902560259
- ➤ Effect of Moth eye Anti reflective coatings in extraction of Far field Intensity of an Organic Light Emitting Diode. Conference IEEE WRAP 2017 Scopus DOI:10.1109/WRAP.2017.8468556
- ➤ A Ring Resonator with Liquid Crystal for Bio-sensing Application. Conf. IEEE WRAP April 2017 **Scopus** DOI: <u>10.1109/WRAP.2017.8468552</u>

- Single Mode Graphene based Waveguide for Integrated Optical Biosensors at Visible Wavelength. Conf. OSA TechnicalDigest December 2016, Scopus DOI:https://doi.org/10.1364/PHOTONICS.2016.Th3A.17
- Effects of 2D Photonic Crystals in light extraction efficiency of an Organic Light Emitting Diode. Conf. OSA Technical
 Digest December 2016,

Scopus.DOI:https://doi.org/10.1364/PHOTONICS.2016.Tu4A.45

- Analysis of SOI based MEMS Actuated Waveguide Bragg Grating for Sensing and Communication Applications. Conf. OSA TechnicalDigest December 2016, ScopusDOI:https://doi.org/10.1364/PHOTONICS.2016.Th3A.11
- ▶ Mach-Zehnder interferometer for separation of platelets from red blood cells using dielectrophoretics. AIP Conf. Proc. September 2016, Scopus DOI: http://dx.doi.org/10.1063/1.4942750

Prof. Venkatesha M

- ➤ Improved Light Extraction Efficiency of Organic Light Emitting Diode using Photonic crystals.Conf. Conf.PHOTOPTICS May 2017, ScopusDOI: 10.5220/0006153902560259
- ➤ Effect of Moth eye Anti reflective coatings in extraction of Far field Intensity of an Organic Light Emitting Diode. Conference IEEE WRAP 2017 **Scopus** DOI:10.1109/WRAP.2017.8468556
- Single Mode Graphene based Waveguide for Integrated Optical Biosensors at Visible Wavelength. Conf. OSA TechnicalDigest December 2016, Scopus DOI:https://doi.org/10.1364/PHOTONICS.2016.Th3A.17
- ➤ Effects of 2D Photonic Crystals in light extraction efficiency of an Organic Light Emitting Diode. Conf. OSA Technical Digest December 2016, Scopus.DOI:https://doi.org/10.1364/PHOTONICS.2016.Tu4A.45

Prof.Shwetha M

- ➤ A Ring Resonator with Liquid Crystal for Bio-sensing Application. Conf. IEEE WRAP April 2017 **Scopus** DOI: <u>10.1109/WRAP.2017.8468552</u>
- ➤ Mach-Zehnder interferometer for separation of platelets from red blood cells using dielectrophoretics. AIP Conf. Proc. September 2016, Scopus DOI: http://dx.doi.org/10.1063/1.4942750

Prof. Pavan Kumar E

➤ A Novel Approach towards Design and Implementation of an Semi-Autonomous

- Drone for Rescue from Bees PAPERID:icsipca183, International conference on Signal, Image Processing, Communication & Samp; Automation (ICSIPCA-2017).
- ➤ New Approach to Road Detection in Challenging Outdoor Environment for Vehicles.PAPERID:icsipca184, International conference on Signal, Image Processing, Communication & Automation (ICSIPCA-2017).
- Design and Analysis of BOT, IOSR Journals, ID D73088, June 2017
- ➤ A Novel design of algorithm for the control of artificial face with gesture recognition technology, IJAIM, ISSN:2320-512, June 2017

Prof. Chaya B M

- ➤ Improved Light Extraction Efficiency of Organic Light Emitting Diode using Photonic crystals.Conf. Conf.PHOTOPTICS May 2017, ScopusDOI: 10.5220/0006153902560259
- ➤ Effect of Moth eye Anti reflective coatings in extraction of Far field Intensity of an Organic Light Emitting Diode. Conference IEEE WRAP 2017 **Scopus** DOI:10.1109/WRAP.2017.8468556
- Single Mode Graphene based Waveguide for Integrated Optical Biosensors at Visible Wavelength. Conf. OSA TechnicalDigest December 2016, Scopus DOI:https://doi.org/10.1364/PHOTONICS.2016.Th3A.17
- ➤ Effects of 2D Photonic Crystals in light extraction efficiency of an Organic Light Emitting Diode. Conf. OSA Technical Digest December 2016, Scopus.DOI:https://doi.org/10.1364/PHOTONICS.2016.Tu4A.45

Graduation Day-2019 Best Outgoing student – 2018-19



Ms. Ananya N receiving award "Best Outgoing student" of Department of ECE and College from Dr. Narayan K, Dean R &D and Professor



Graduation Day Photo of ECE A section -2013-2017 Batch



Graduation Day Photo of ECE B section -2013-2017 Batch