



ESPARX

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*Newsletter by Department of ECE, GTEC, Vellore - 632102.
to the World*

Exploring Electronics

VISION and MISSION

Vision of the Department

To provide graduates with global standard in the field of Electronics and Communication Engineering to be competitive, techno-savvy, innovative and socio-ethically responsible for the promotion of economic and industrial growth.

Mission of the Department

To educate the students with the state of art technologies to meet the growing challenges of the industry.

To provide high quality education through effective teaching – learning process for their placements and higher educations.

About the department

The department of electronic and communication first started in the year 2000 with 60 students intake and increased to 120 in 2006, is presently located in “Mahaveer block”. The dept offers UG and PG programs taking into consideration the ever growing need of man power trained in the field of ECE. Over the years, the dept has built up laboratories in the area of electronic device and circuits, digital and logic design, microprocessor and micro controllers, networks and communication including microwave and optical communication, computer communication and VLSI. The M.E program in “Computer communication engineering” was started in the 2007, with strength of 18. The teaching program contains a proper blend of basic concepts and advances in technology. The faculty has succeeded in keeping a lively atmosphere among the students with timely up gradation in the curriculum and innovative teaching techniques. The teaching is closely coupled with the video-conferencing EDUSAT by Anna University Chennai. The dept is having well equipped Electronic, computer and internet labs with the latest hardware and software. Our dept also offers value added courses like CISCO.

A Training Programme on Skill development for housekeeping female staff

Department of ECE in association with women welfare committee GTEC organizes A Training Programme on Skill development for housekeeping female staff on 30-01-2016.



Student Members of WWC giving training



House Keeping Workers

A Training Programme on Skill development for housekeeping female staff was conducted on 30/1/16 between 10.00 am to 11.00 am at Graduation Hall (Mahaveer Block) in GTEC. All the housekeeping female staff members with a total up to 35 members participated in this programme. The programme was convened by Prof. A.

Manimegalai, HOD/ECE and presided by Dr.R.Varatharajan, Principal, GTEC. Prof.A.Manimegalai, HOD/ECE gave welcome address to the gathering. In her speech, she explained about Women welfare committee .She also insisted, if any problem arises, they can contact these committee members to get it solved. Our Principal Dr.R.Varatharajan presided over the function. In his address, he appreciated the workers for their best performance for keeping the campus clean and green so that a good hygienic environment is maintained everywhere. Student coordinators and faculty coordinators gave training on how to fill up the bank challan and how to use ATM cards and also how to put their signature. Finally, Prof.A.Manimegalai, HOD/ECE proposed Vote of thanks.

Seminar on “Stress Management”

ECE department has conducted seminar on “Stress **Management** “on 02-02-16. to manage the stress level of students.



Chief Guest Dr.Manjuladevi, MBBS, DPM, Professional Counselor addressing the gathering

A Seminar on “**Stress Management**” was conducted on 2/2/16 between 9.30 am to 10.30 am at Graduation Hall (Mahaveer Block) in GTEC. All the female staff members and girl students with .a total up to 300 members participated in this programme. The programme was convened by Prof. A. Manimegalai, HOD/ECE and presided by Dr.R.Varatharajan, Principal, and GTEC. Dr.Manjuladevi, MBBS, DPM, and Professional Counselor & Psychiatrist was the resource person. **Prof.A.Manimegalai, HOD/ECE** gave welcome address to the gathering.



Students attended the programme

Our Principal **Dr.R.Varatharajan** presided over the function. In his address, he appreciated the ladies for their positive attitude. **Dr.Manjuladevi, MBBS, DPM**, gave a power point presentation on Stress Management in detail which was useful to everyone in day-to-day life. Finally, **Prof.A.Manimegalai**, HOD/ECE Proposed Vote of thanks.



Students attended the programme

Women's Day Celebration

ECE Department in association with GTEC-Women Welfare Committee & IEEE Women in Engineering jointly conducted Women's Day Celebration on **07.03.2016**. **Chief Guest:** Mrs. Thangaprakash M.A, M.Ed., Principal & Correspondent, Sunbeam Matric & CBSE Schools, Vellore & Chennai. All the girl students of GTEC and all of the women faculties and staff came for celebration.



Chief Guest: Mrs. Thangaprakash M.A, M.Ed., Principal & Correspondent, Sunbeam Matric & CBSE Schools, Vellore & Chennai.



Women faculties, staff and students attending the function

Chief Guest: Mrs. Thangaprakash M.A, M.Ed., Principal & Correspondent, Sunbeam Matric & CBSE Schools, Vellore & Chennai. All the girl students of GTEC and all of the women faculties and staff came for celebration.

IETE INSTALLATION OF OFFICE BEARERS FOR THE YEAR 2016

ECE Department in association with IETE organized the inauguration of IETE student Branch on 12-03-2016.



IETE INSTALLATION OF OFFICE BEARER



IETE installation of office bearer published in Tamil news paper

To motivate the students to participate more on IETE activities, Department of ECE in association with IETE started the IETE student's branch on 12-03-2016. Student's membership cards are distributed to the students.

Inaugurations of YOGA CLUB & ENGLISH CLUB

Department of ECE inaugurated yoga club & English club on 12-03-2016.

English Club

Objectives:

- To enable students to develop confidence in using English and make them enjoy the learning process.
- To engage the students and faculty to use English in a casual setting by conducting fun games, skits, reading etc...
- Nurturing a sense of leadership, team spirit, cooperation and voluntary services among the members which will help them better perform in their career in future.



During English club activity

Coordinator Prof. A. Manimegalai	Student Coordinators Ms. P.Kalaivani (III A) Ms. S. Haritha (III A) Mr. K. Gowtham (III B) Ms. V. Manjula (III B) Ms. S. Sivaranjani (III C) Ms. Smithi (III C) Ms. K. Kalaivani (II A) Ms. M. Gomathi (II A) Mr. C. Dinesh (II B) Ms. P. Shilpa (II B)
Faculty Members Mrs. A. Rathna Mrs. L. Ezhilarasi Mrs. K. S. Shanthamathi Mr. P. Sridhar Mrs. P. Iswarya Mr. S. Nafees Ahmed Mrs. R. Sarjila Mrs. B. Bakkiyalakshmi	



During club activities

Yoga Club

Objectives:

- To enable the student to have good health.
- To improve mind ability.
- To possess emotional stability.
- To integrate moral values.
- To attain higher level of perception.

Coordinator Prof. A. Manimegalai	Student Coordinators Ms. Devi (III A) Ms. V. Gayathri (III A) Ms. Keerthana (III B) Mr. Sairam (III B) Ms. S. Sowndarya (III C) Ms. V. Sharmila (III C) Mr. Mohamad Rafi (II A) Mr. P. Ajith Kumar (II A) Mr. S. Sangeetharajan (II B) Mr. Rajath Jain (II B)
Faculty Members Mrs. D. Santhoshkumari Mrs. B. Thenral Mr. C. Kumar Mrs. T. Sudha Mr. J. Sivaguru Mr. R. G. Venkatesan Mr. K. Arthi Mr. M. V. Kumar Mrs. V. Sangeetha	

Workshop on kaya kalpa yoga

Yoga club of ECE department conducted workshop on kaya kalpa yoga on 19-03-2016 for GTEC students, in association with World Community Center (WCC), Azhiyar. To encourage the students to participate in yoga and to get the benefits.



Inaugural function of kaya kalpa



During yoga activity

To make the students to get the essence of yoga ECE department yoga club in association with World Community Center, Azhiyar conducted workshop on kaya kalpa on 19-03-2016 at graduation all of Mahaveer Block.

Workshop on “Arduino Based Designs”

ECE department organized two days workshop on “Arduino Based Designs” on 11th & 12th of March 2016.



Chief Guest V.Gopi M.E, CEO of SKM Training Institute, during the session



Students and Faculties of ECE attending the workshop

Two days workshop on “Arduino Based Designs ” on **11th & 12th of March 2016**, organized by HOD/ECE and all the faculty members and third year students participated the workshop. Starting from the basics up to the current trends in arduino based designs are explained during the seminar.

Guest Lecture on VLSI Design

ECE department has Conducted Guest Lecture on VLSI Design on 02-04-2016.



Dr.Jannadha Naidu.K from VIT taking class



Inaugural program of Guest lecture

ECE Department Conducted Guest Lecture on VLSI Design by Dr.Jannadha Naidu.K from VIT University on 02.04.2016 for 3rd Year students, all the faculties and students attended the guest lecture. All the concepts of VLSI design explained on this guest lecture.

Special Guest Lecture on VLSI Design

ECE department conducted Guest Lecture on VLSI Design by Dr.S.Vijaya Kumar from SITAM on 10.05.2016. ECE department conducted Guest Lecture on VLSI Design by Dr.S.Vijaya Kumar from SITAM on 10.05.2016 for 3rd Year students. All the units in the syllabus of III year ECE were explained during this guest lecture.

Details of journals published, papers presented in conferences, attended work shop and Faculty Development Programs of ECE faculties.

Details of Journals Published by Faculties

S.No	Name of the Faculty	Journal Published
1	Manimegalai A	1. Tapering Photonic Crystal Fibers for Generating Self-Similar Pulses at 1550 nm,” Optical Engineering – Optical Engineering, Vol.55, issue 6, PP.067108-07 June 2016. Thamson Reuters, Scopus indexed 2. Generation of a Train of Ultrashort Pulses using Periodic Waves in

		<p>Tapered Photonic Crystal Fibers, Journal of modern Optics, Vol. , pp. 1-13, June 2016. Thamson Reuters, Scopus indexed</p> <p>3. "Eradication of Selfish Node in MANET Using CSNA Mechanism" International Journal of Engineering Development and Research (IJEDR), Volume 4 Issue 1, February 2016.</p> <p>4. Investigate the Characteristics of Ultrashort pulses in OCDMA System", International Journal of Innovative Research in Science Engineering and Technology (IJIRSET) ISSN: 2347-6710 Vol. 5, Issue 5, and May 2016.</p> <p>5. "Analysis of PAPR Reduction in Alternative OFDM using Conventional SLM and Class-III SLM Methods", International Journal Of Innovative Trends In Engineering (IJITE) Journal Volume 4 Issue 1, March 2016.</p> <p>6. An Efficient Multicast Routing Protocol Using Angle between Forwarding Nodes in Wireless Mesh Networks", International Journal of Engineering Development and Research (IJEDR), ISSN: 2321-9939, Vol.4, Issue 1, pp.459-464, March 2016.</p>
2	Santhosh Kumari D	<p>1. IMPROVED COOPERATIVE SPECTRUM USAGE INCOGNITIVE RADIO NETWORKS THROUGH MODULATION, published in IRJET, Volume-3, Issue-6.</p> <p>2. "A hybrid multicast routing algorithm for Networks-On-Chip for Improving Connectivity", International Journal of Innovative Trends in Engineering (IJITE), Vol. 6, 2395-2946, 2016.</p> <p>3.D.Santhosh Kumari & E.Janani,"Eradication of Selfish Node in MANET Using CSNA Mechanism" "International Journal of engineering Research and Development(IJEDR),Volume 4,Issue 1,February 2016.ISSN 2321-9939.</p>
3	Thendral B	<p>1. "An Efficient multicast routing protocol using angle between forwarding nodes in wireless networks "International Journal of engineering Research and Development(IJEDR),Volume 4,Issue 1,March 2016.ISSN 2321-9939</p> <p>2. "A hybrid multicast routing algorithm for Networks-On-Chip for Improving Connectivity", International Journal of Innovative Trends in Engineering (IJITE), Vol. 6, 2395-2946, 2016</p> <p>3. IMPROVED COOPERATIVE SPECTRUM USAGE INCOGNITIVE RADIO NETWORKS THROUGH MODULATION, published in IRJET, Volume-3, Issue-6.</p>

		<p>4. A FLEXIBLE CRYPTOGRAPHIC INFRASTRUCTURE OF HIGH SECURITY SDR BASED SYSTEMS published in IRJET, Volume-3, Issue-6</p> <p>5. TO IMPROVE THE PERFORMANCE OF RF TO DC ENERGY HARVESTING USING ULTRA THIN CAPACITOR published in IRJET, Volume-3, and Issue-6.</p>
4	Sudha T	"Green heterogeneous femto-cell networks for reducing the co2 and electromagnetic pollution of mobile communications" ,international research journal in advanced engineering and technology (IRJAET) e - issn : 2454-4752 p - issn : 2454-4744 vol 2 issue 1 (2016) pages 450-455,2016
5	Kumar C	<p>1. "Comparative Analysis of Interpolation/Decimation FIR Filter Structures for WLAN-b and WLAN-g Applications" IJIRST –International Journal for Innovative Research in Science & Technology Volume 2 Issue 12 May 2016 ISSN (online): 2349-6010</p> <p>2. "ESTIMATION OF FAST FADING CHANNEL IN MIMO OFDM USING RANDOM WALK KALMAN FILTER" INTERNATIONAL RESEARCH JOURNAL IN ADVANCED ENGINEERING AND TECHNOLOGY (IRJAET) E - ISSN : 2454-4752 P - ISSN : 2454-4744 VOL 2 ISSUE 1 (2016) PAGES 431-439 RECEIVED : 21/01/2016. PUBLISHED : 29/01/2016</p> <p>3. "Efficient Paper Reduction in OFDM Efficient Paper Reduction in OFDM Using Segmental Partial Transmit Sequence Technique Segmental Partial Transmit Sequence Technique Segmental Partial Transmit Sequence" INTERNATIONAL JOURNAL OF INNOVATIVE TRENDS IN ENGINEERING (IJITE) INTERNATIONAL JOURNAL OF INNOVATIVE TRENDS IN ENGINEERING (IJITE) ISSN: 2395-2946, Vol 14, No-2 Feb 2016</p> <p>4. "Analysis of PAPR Reduction in Alternative OFDM using Conventional SLM and Class-III SLM Methods" International Journal of Engineering Development and Research, Volume 4, Issue 1 ISSN: 2321-9939, Vol 4 Issue 1, March 2016</p>
6	Sarjila. R	IMPROVED COOPERATIVE SPECTRUM USAGE INCOGNITIVE RADIO NETWORKS THROUGH MODULATION, published in IRJET, Volume-3, Issue-6.
7	Shanthamathi K. S.	A FLEXIBLE CRYPTOGRAPHIC INFRASTRUCTURE OF HIGH SECURITY SDR BASED SYSTEMS published in IRJET, Volume-3, and Issue-6.

8	Bakkiya Lakshmi B.	TO IMPROVE THE PERFORMANCE OF RF TO DC ENERGY HARVESTING USING ULTRA THIN CAPACITOR published in IRJET, Volume-3, and Issue-6.
9	Kumar M. V.	A FLEXIBLE CRYPTOGRAPHIC INFRASTRUCTURE OF HIGH SECURITY SDR BASED SYSTEMS published in IRJET, Volume-3, and Issue-6.
10	Venkatesan R G	A FLEXIBLE CRYPTOGRAPHIC INFRASTRUCTURE OF HIGH SECURITY SDR BASED SYSTEMS published in IRJET, Volume-3, and Issue-6.
11	Ms.Arthi.K	TO IMPROVE THE PERFORMANCE OF RF TO DC ENERGY HARVESTING USING ULTRA THIN CAPACITOR, published in IRJET, Volume-3, and Issue-6.
12	Iswarya P.	TO IMPROVE THE PERFORMANCE OF RF TO DC ENERGY HARVESTING USING ULTRA THIN CAPACITOR, published in IRJET, Volume-3, and Issue-6.
13	Sivaguru	IMPROVED COOPERATIVE SPECTRUM USAGE INCOGNITIVE RADIO NETWORKS THROUGH MODULATION, published in IRJET, Volume-3, Issue-6.

Details of Conference attended by faculties

Name of the Faculty	Conference Attended
Manimegalai A	<p>1.Presented paper on Generation of ultra short pulses using tapered photonic crystal fiber with the effect of 3rd order dispersion in “ National Conference on Emerging Trends in Wireless Communication and Signal Processing (NCWCSP), at Arunai Engineering College, Tiruvannamalai on 26th February 2016</p> <p>2. Presented paper on.“Design and Implementation of Different Half band Filter (HBF) Structure for GSM Applications,” International Conference on Electrical, Electronics and Computer Engineering, (ICEECE’16), March 22nd and 23rd, 2016, Namakkal, India.</p> <p>3.Presented paper on “Design and Performance Scrutiny of Sixteen Users OCDMA Encoding System using Ultra short pulses”, National Conference on</p>

	Emerging Trends in Wireless Communication and Signal Processing (NCWCSP), February 26th 2016, Thiruvannamalai.
Santhosh Kumari D	1. Presented paper "Deletion of Misbehaving Nodes in MANET by using DSR Routing Mechanism to Prevent Security Attacks" at Arunai Engineering College, Tiruvannamalai.
Thendral B	1. Presented paper "An Optimized Multicast Routing Algorithm to Reduce Delay in Wireless Mesh Networks", at Arunai Engineering College, Tiruvannamalai. 2. Presented paper "Energy coherence of angle based multicast routing algorithm in wireless mesh networks" at japeiyyar Engineering College on 30-03-2016, to be published at IEEE Digital library.
Sudha T	Presented paper on "Reduction of Electromagnetic Pollution using Horn Antenna in Femto cell network" at Arunai Engineering College, Tiruvannamalai

Details of Workshop attended by faculties

Name of the Faculty	work shop
Thendral B	Participated in workshop on Innovations & Best Practices at Auxilium College, Katpadi on 06-04-2016.
Rathna. A	One Day Workshop on Recent Trends in Antenna Design-VIT University-22.04.2016
Ezhilarasi L.	One Day Workshop on Recent Trends in Antenna Design-VIT University-22.04.2016
Shanthamathi K. S.	One Day Workshop on Recent Trends in Antenna Design-VIT University-22.04.2016
Bakkiya Lakshmi B.	One Day Workshop on Recent Trends in Antenna

	Design-VIT University-22.04.2016
Venkatesan R G	One Day Workshop on Recent Trends in Antenna Design-VIT University-22.04.2016

Details of FDP attended by faculties

Name of the Faculty	FDP
Santhosh Kumari D	Two Days Faculty Development Programme on EC 6502 - Principles of Digital Signal Processing, Rajalakshmi Institute of Technology, Chennai, June 9-10, 2016
Thendral B	Two Days Faculty Development Programme on EC 6502 - Principles of Digital Signal Processing, Rajalakshmi Institute of Technology, Chennai, June 9-10, 2016
Sudha T	Two Days Faculty Development Programme on EC 6502 - Principles of Digital Signal Processing, Rajalakshmi Institute of Technology, Chennai, June 9-10, 2016
Sarjila. R	Two Days Faculty Development Programme on EC 6502 - Principles of Digital Signal Processing, Rajalakshmi Institute of Technology, Chennai, June 9-10, 2016
Ezhilarasi L.	Two Days Faculty Development Programme on EC 6502 - Principles of Digital Signal Processing, Rajalakshmi Institute of Technology, Chennai, June 9-10, 2016
Shanthamathi K. S.	Two Days Faculty Development Programme on EC 6502 - Principles of Digital Signal Processing, Rajalakshmi Institute of Technology, Chennai, June 9-10, 2016

Bakkiya Lakshmi B.	Two Days Faculty Development Programme on EC 6502 - Principles of Digital Signal Processing, Rajalakshmi Institute of Technology, Chennai, June 9-10, 2016
Kumar M. V.	Two Days Faculty Development Programme on EC 6502 - Principles of Digital Signal Processing, Rajalakshmi Institute of Technology, Chennai, June 9-10, 2016
Nafees Ahmed	Two Days Faculty Development Programme on EC 6502 - Principles of Digital Signal Processing, Rajalakshmi Institute of Technology, Chennai, June 9-10, 2016
Venkatesan R G	Two Days Faculty Development Programme on EC 6502 - Principles of Digital Signal Processing, Rajalakshmi Institute of Technology, Chennai, June 9-10, 2016
Ms.Arthi.K	Seven days Faculty Development Programme on EC6303-Signals and Systems, S.A Engineering College, Chennai. June 6-June 13,2016
Iswarya P.	Two Days Faculty Development Programme on EC 6502 - Principles of Digital Signal Processing, Rajalakshmi Institute of Technology, Chennai, June 9-10,2016
Sivaguru	Two Days Faculty Development Programme on EC 6502 - Principles of Digital Signal Processing, Rajalakshmi Institute of Technology, Chennai, June 9-10, 2016

Co-curricular activities of the students

1. Seven students of M.E Communication and Networking presented paper in national conference at Arunai Engineering College, Thiruvannamalai.
2. Divakaran of IV ECE Participated project competition “Hackathon” at Bangalore from 06-02-16 to 07-02-16
3. 7 students from ECE department attended internship program at Chennai, from 07-03-2016 to 14-03-2016.
4. 25 students of second year ECE attended workshop at VIT from 04-03-2016 to 05-03-2016.
5. 8 students from second year ECE attended workshop at SITAMS, chittoor from 03-03-2016 to 04-03-2016.
6. 32 students from third year ECE attended VIT consortium training program on 12-03-2016.

Chief Editor

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&
Faculty members

