

## **EVALUATIVE REPORT OF THE DEPARTMENT**



# **Department of Electronics and Instrumentation Engineering**



1. **Name of the Department** : **Electronics and Instrumentation Engineering**
2. **Year of Establishment** : Department of Electronics and Instrumentation Engineering was established in the year 1995 in St.Peter's Engineering College which was declared as deemed to be university in the year 2008.

3. **Is the Department part of a School / Faculty of the University :**

Department of the University

4. **Names of the Programmes offered (UG, PG, Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt etc.)**

- B.E (Electronics and Instrumentation Engineering) Suspendend
- M.E (Instrumentation Engineering) Suspended
- PhD

5. **Interdisciplinary programmes and departments involved:**

S. No	Interdisciplinary courses	Year/ Sem	Departments
<b>UG Programme B.E. (EIE)</b>			
1.	113EHT01-Technical English-I	I/I	English
2.	113MAT02-Mathematics-I	I/I	Maths
3.	113PHT03-Engineering Physics-I	I/I	Physics
4.	113CYT04-Engineering Chemistry-I	I/I	Chemistry
5.	113EGT06-Engineering Graphics	I/I	Mechanical
6.	113CPT05-Computer Programming	I/I	CSE
7.	313MAT01-Transforms and Partial Differential equations I	II/III	Maths
8.	313EIT02-Environmental Scieince and Engineering	II/III	Civil

9.	413EIT01-Numerical Methods	II/IV	Maths
10.	413EIT01-Object Oriented Programming	II/IV	Information Technology
11.	413EIT05-Electrical Machines	II/IV	EEE
12.	413EIT06-Applied thermodynamics And Fluid dynamics	II/IV	Mechanical
13.	513EIP03-Communication and Soft skills lab	III/V	English
14.	413EIP02-Electrical Machines Lab	II/IV	EEE
<b>PG Programme M.E. (Instrumentation)</b>			
15.	112IEPT01-Applied Mathematics	I/I	Maths

**6. Courses in collaboration with other universities, industries foreign institutions, etc.**

Nil

**7. Details of programmes discontinued , if any, with reasons:**

Nil

**8. Examination System : Annual/Semester/Trimester/Choice based Credit System**

Semester system and Choice Based Credit System (CBCS)

**9. Participation of the department in the courses offered by other departments.**

<b>S. No</b>	<b>Interdisciplinary courses for B.E./B.Tech students</b>	<b>Year/Sem</b>	<b>Departments</b>
1	712MET02- Mechatronics	IV/VII	Mechanical Engineering
2	408EIT06- Electronics and Microprocessors	II/IV	Mechanical Engineering
3	508MET06- Applied Hydraulics and Pneumatics	III/V	Mechanical Engineering
4	712MEP02-Mechatronics Lab	IV/VII	Mechanical Engineering

**10. Number of teaching posts sanctioned , filled and actual ( Professors / Associate Professors / Asst. Professors / Others )**

	<b>Sanctioned</b>	<b>Filled</b>	<b>Actual ( including CAS &amp; MPS )</b>
Professors	-	-	-
Associate Professors	-	-	-
Asst. Professors	2	2	2

**11. Faculty profile with name, qualification, designation, area of specialisation, experience and research under guidance.**

<b>Name</b>	<b>Qualification</b>	<b>Designation</b>	<b>Specialization</b>	<b>No. of Years of Experience</b>	<b>No.of Ph.D ./ M.Phil Students guided for the last 4 years.</b>
Dr.G.J. Srinivasan	M.Sc., Ph.D.	Senior Professor	Molecular force, Field Instrumentation	47 yrs	6
P.Balaji	M.E	Asst. Professor	Embedded system	7 yrs	-
R.Raja	M.E	Asst. Professor	Control and Instrumentation	7 Months	-

**12. List of senior Visiting Fellows, adjunct faculty, emeritus professors.**

Nil

**13. Percentage of classes taken by temporary faculty – Programmes - wise information.**

Nil

**14. Programmes-wise Student : Staff Ratio:**

S. No	Program	Sanctioned strength	Student Teacher
1	B.E(EIE)	30 ( 30*1 )	15:1
2	M.E(IE)	15 ( 24*2 )	12:1

**15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual.**

	Sanctioned	Filled	Actual (incl. CAS &MPS)
Support Staff (Technical)	01	01	01
Administrative staff	01	01	01

**16. Research thrust areas as recognized by major funding agencies.**

The research interest of Electronics and Instrumentation Engineering Department spans a wide range from abstract theory to down-to-earth problems of immediate interest to industry and social relevance in the field of Water, Food, Health Care and Energy.

- Process Control
- Bio Medical -Image Processing
- Micro Electro Mechanical Systems

**17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.**

Nil

**18. Inter-institutional collaborative projects and associated grants received**

a) National collaboration                      b) International collaboration

Nil

**19. Departmental projects funded by DST-FIST, UGC-SAP/CAS, DP; DBT, ICSSR, AICTE, etc; total grants received.**

Details of departmental projects funded and completed

S. No	Name of the Investigator	Funding Agency	Title	Total Grant In lacks	Status
1	Dr.R.Rani Hemamalin i	AICTE/RPS	An Expert system based systematic heat transfer measurement for multi phase flow	6.75	Completed
2	Dr.R.Rani Hemamalin i	AICTE / MODROBS	An Expert system based process simulation Lab	8.00	Completed
3	Dr.R.Rani Hemamalin i	AICTE/ FASTERACK	Temperature and Pressure control valve and pipe in series	12.00	Completed

**20. Research facility / centre with**

- State recognition                      - Nil
- National recognition                - Nil
- International recognition          - Nil
- Others

S. No	Softwares available
1	LabVIEW
2	MATLAB
3	FluidSIM-P
4	IAR Embedded Workbench

S. No	Equipment/Hardware Kits available
1	Labview workbench and Models
2	Pneumatic trainer Kit
3	Hydraulic trainer Kit
4	ARM Processor

**21. Special research laboratories sponsored by / created by industry or corporate bodies.**

Two – phase temperature and flow control loop was created by the principal investigator of the funded project –DST

**22. Publications**

**a. Number of papers published in peer reviewed journals (National / international)**

Year	International Journal	National Journal	International Conference	National Conference	Total
2015	01	-	02	-	03
2014	02	-	-	-	02
2013	03	-	-	01	04

2012	03	-	-	01	04
2011	01	-	-	-	01
2010	01	-	08	02	11
2009	05	-	-	07	12

### PUBLICATIONS IN INTERNATIONAL JOURNALS

<b>2015</b>	
1	Akash Kumar Bhoi, <b>Pradeep Kumar Mallick</b> , S.Saravana Kumar and karma Sonam Sherpa, “Brain Tumor Dectection: A Comparative Analysis of Edge Detection Techniques” International Journal of Applied Engineering Research ISSN 0973-4562 Volume 10, Number 44 (2015) SCOPUS(IF:2.0653)
<b>2014</b>	
2	Asha.S, <b>R.Rani Hema Malini</b> , “Optimization of logarithmic converter using evolutionary algorithm”, International Journal of scientific research, Vol-3,Issue-12,Dec’2014,(Impact Factor:3.2416)
3	P.Nirmala and <b>R.Rani Hema Malini</b> , “Multi objective optimization of IIR Filters ”, International journal of Applied Engg Research, Vol-9, 20189-20200, Nov’2014, (Impact Factor :2.0653)
<b>2013</b>	
4	V. Gopi and <b>E. Logashanmugam</b> , “Fault Analysis in AES-CBC Algorithm using Hamming Code for Space Applications”, European Journal of Scientific Research, Vol 105 No 3, 2013. SCOPUS(Impact factor:0.74)
5	<b>G.J.Srinivasan</b> , Paul T.Jayaprakash,”Skull sutures: Changing morphologyduring preadolescent growth and its implications inforensic identification”, Forensic Science International journal, 229(2013)166e1-166e13 SciVerse ScienceDirect Elseiver
6	Akash Kumar Bhoi, <b>Pradeep Kumar Mallick</b> , S.Saravana Kumar and karma Sonam Sherpa,”Brain Tumor Dectection: A Comparative Analysis of Edge Detection Techniques” International Journal of Applied Engineering Research ISSN 0973-4562 Volume 10, Number 44 (2015) SCOPUS,(Impact Factor :2.0653)
<b>2012</b>	
7	P.G.Kuppusamy and <b>R.Rani Hemamalini</b> , “An Iterative and Adaptive “Pixel Wise Maximum Absolute Difference (PMAD)” Based Image Filter for Impulse Noise Removal” European Journal



	of Scientific Research, Vol. 89, No. 3, pp.422-429, October-2012 (Impact factor:0.74)
8	H.Prasad Raju, Dr.P.Partheeban and <b>Dr.R.Rani Hemamalini</b> “ Urban Mobile Air Quality monitoring using GIS,GPS, Sensors and Internet” International Journal of Environmental Science and Development Vol. 3, No. 4, pp. 323-327 August 2012(IF:0.00)
9	S.Sumathi and <b>R.Rani Hema Malini</b> , “ Multi algorithm approach for face Recognition using average half face”, Journal of computer application, Vol-5,Issue-4, ISSN: 0974-1925,,2012,(Imapct Factor:3.12)
<b>2011</b>	
10	Kamal Basha M., <b>Rani Hemamalini R.</b> , Anuja Berkath Banu K “Analysis of physically informed parametric synthesis of sound effects” technology Today Journal, ISSN:2180-0987,Vol.3, No.1, January 2011(IF:0.00)
<b>2010</b>	
11	Persis Urbana Ivy, B and <b>R.Rani Hema Malini</b> , “ Modern Pulsometer for Traditional Indian Medicine”, International Journal of Computer Applications, 9(3):19–23,19–23, November 2010.Impact factor :0.715
<b>2009</b>	
12	Helen Patrick, <b>R.Rani Hema Malini</b> , R.Sureshababu,”A Method of Image Processing Based IRIS recognition for biometric application: , International Journal of Engineering Research and Industrial applications, ISSN 0974-1518, Vol:2, No:IV, 2009; pp 257-267, (IF:0.435)
13	<b>R.Rani Hema Malini</b> and R.Suresh Babu, “A New Method And Design Of Integrating RFID Applications Towards Mobile Business, International Journal of Engg. Research and Indu. Appls. (IJERIA), ISSN:0974-1518, Vol.2, No.IV, pp 281-290, 2009. (IF:1.69)
14	R, M. Suresh,, <b>G.J.Srinivasan</b> and Rani Hemamalini.R, “Integrated Fuzzy Logic Based Intelligent Control of Three Tank System” Serbian Journal of Electrical Engineering, Vol 6, No 1, May 2009.(IF:0.00)
15	Maruthai Suresh, Ranganathan, <b>R.Rani Hemamalini</b> , Gunna Jeersamy Srinivasan, “Fuzzy Logic Based Set-Point Weighting Controller Tuning for an Internal Model Control Based PID Controller”, Sensors & Transducers Journal, Vol. 109, Issue 10, pp. 29-42, October 2009. (IF:0.705)

16	N. R. Shanker, S. S. Ramakrishanan, P. G. Kuppasamy & <b>R. Rani Hemamalini</b> , "Radon Transformation in Identification of Linear Feature Extraction pages", International Journal of Computer Engineering, Volume 1, Number 1, pp.135-137, January-June 2009. (IF:1.0425)
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### PUBLICATIONS IN INTERNATIONAL CONFERENCES

2015	
1.	<b>P.Balaji</b> , "VLSI implementation of low power FIR filter design using APC-OMS algorithm", 2 <sup>nd</sup> international conference on sensing, signal processing and security, May 6-8, 2015
2.	<b>P.Balaji</b> , "Different segmentation techniques for identification of tumor cells in Brain and its comparision Paper -id -80" 2 <sup>nd</sup> International conference on Green technologies for power generation, Communication and Instrumentation,26-27 feb'2015
2010	
3.	Grace Kanmani, P. and <b>R. Rani Hemamalini</b> , "A Survey on Soft Computing Techniques in Epileptic Seizure Detection "International Conference on Emerging Trends in Robotics and Communication Technologies (INTERACT-2010), December 03-05, 2010,
4.	Persis Urbana and <b>R.Rani Hemamalini</b> , "Traditional Indian medicine", 2nd International Conference on Advanced Computer Control(ICACC), 27-29,March 2010.
5.	S.Sumathy, <b>R.Rani Hemamalini</b> , "Face Recognition - Average-Half-Face Using Wavelets" IPCV'10, July 12-15, 2010.
6.	S.Sumathy, <b>R.Rani Hemamalini</b> ," Face Recognition system to enhance E-Health", International Conference on E-health networking digital ecosystems and technologies, April 17-18, 2010
7.	<b>K.Mathew</b> ," Position control of dc motor using advanced soft computing technique", International conference on Signal processing communication and VLSI design, 7-8 May 2010
8.	V. Vijayaraja, <b>R. Rani Hemamalini</b> ," Congestion in Wireless Sensor Networks and Various Techniques for Mitigating Congestion", IEEE International Conference on Computational Intelligence and Computing Research (ICCIC), December 28 & 29, 2010
9.	<b>Matthew K.</b> , M. Prabhu, and R. Saravanakumar" Control of Sample Collector Manipulator through Fuzzy Logic Algorithm" International Conference on System Dynamic and Control, 19th – 22nd August, page no.66-SDC-347-ISBN: 97893-80578-58-3-2010
10.	<b>Matthew K.</b> , M. Prabhu, and R. Saravanakumar "Position Control of DC Motor using BFOA", International Conference on System Dynamic and Control, 19th – 22nd August 2010, Proceeding page no.67-SDC-348- ISBN: 97893-80578-58-3-2010-

**PUBLICATIONS IN NATIONAL CONFERENCES**

<b>2013</b>	
<b>1.</b>	<b>P.Balaji,</b> ” Monitoring of Nitrate concentration using Wireless sensor networks with energy harvesting”, 3 <sup>rd</sup> National Conference on Recent Trends In Eletrical And Electronics Engineering, 3 <sup>rd</sup> MAY2013
<b>2012</b>	
<b>2.</b>	<b>K.P.Indira,R.Rani Hemamalini</b> “A Novel Method For Contrast Correction And Enhancement For Medical Images Using Wavelet Fusion”. National Conference on Information Processing, Security and Communications, 2nd & 3rd March’ 12
<b>2010</b>	
<b>3.</b>	<b>S. N. Deepa S.N., N. Seetharaman, K. Matthew, R. Saravanakumar, and M. Prabhu,</b> “Mine Detection in the War Field Using Manipulator Arm Control” National Conference on Recent Trends in Instrumentation & Control Engineering (RTIC - 2010) ,11th – 12th March 2010, Proceeding page no: 88-90
<b>4.</b>	<b>Dhivya M., K. Matthew, M. Prabhu, and R. Saravanakumar</b> “Position Control of DC Motor Using Advanced Soft Computing Techniques” Seventh National Conference on Signal Processing, Communications and VLSI Design (NCSCV’ 10) May 7th & 8th 2010,Proceeding page no: 111
<b>2009</b>	
<b>5.</b>	<b>Deepa S.N., R. Manikandan, R. Saravanakumar and K. Matthew,</b> “An Advanced Optimization Approach for Tuning of Bio-reactors,” National Conference on Modern Trends n Power Engineering & Power Plants,(NAPEC – 09), 8th - 9th October 2009, Proceeding page no: 221-230
<b>6.</b>	<b>Matthew K., R. Manikandan, M. Prabhu and R. Saravanakumar,</b> “A Novel Approach of Distillation Column,” National Control Instrumentation & Control System Conference (CISCON - 2009) 6th – 7th November 2009, Proceeding page no: 220-222
<b>7.</b>	<b>Grace Kanmani P., R.Rani Hemamalini,</b> “Review of methods for pre-detection and detection of Epileptic Seizure Using Analysis Of EEG Signals”, Third National Conference on ‘Advanced Techniques in Instrumentation, Control & Communication Engineering’. on 22-23 July2009
<b>8.</b>	<b>Nirmala P and R.Rani Hemamalini,</b> Self-Structuring Antenna Design, Third national Conference on ‘Advanced Techniques in Instrumentation, Control & Communication Engineering’. . on 22-23 July 2009
<b>9.</b>	<b>Jovin John and R.Rani Hemamalini,</b> Double Switch Resonant

	converter fed Induction heater Third national Conference on 'Advanced Techniques in Instrumentation, Control & Communication Engineering'. on 22-23 July 2009
<b>10.</b>	Persis Urbana Ivy B., <b>R.Rani Hemamalini</b> , "Modern Methods In Indian Traditional Medicine, 3rd National Conference on Advanced Techniques in Instrumentation, Control & Communication Engineering" July 22-24, 2009, Feb5, 6, 2009
<b>11.</b>	Kesavan R., <b>R.Rani Hemamalini</b> , "Implementation of Genetic Algorithm In On Demand Multicast Routing Protocol for MANET, National Conference on Advanced Techniques in Instrumentation, Control & Communication Engineering" July 22-24, 2009

- b. Chapters in Books - Nil**
- c. Edited Books - Nil**
- d. Books with ISBN with details of publishers - Nil**
- e. Number listed in International Database ( For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database – International Social Sciences Directory , EBSCO host, etc ) - Nil**
- f. Citation Index – range / average - Nil**
- g. SNIP - Nil**
- h. SJR - Nil**
- i. Impact Factor – range / average - 0.715-3.2416**
- j. h-index - Nil**

**23. Details of Patents and income generated :**

Nil

**24. Areas of consultancy and income generated :**

Central Instrumentation is doing calibration for instruments for various labs of the university.

<b>S. No.</b>	<b>Area of Consultancy</b>	<b>Institution</b>	<b>Period</b>	<b>Amount generated (in Rs.)</b>
<b>1.</b>	Calibration - Digital Multi meter for ECE	SPU and SPCET	2014-15	-
<b>2</b>	Calibration -CRO for ECE		2014-15	-
<b>3</b>	Calibration - Function generator for ECE		2014-15	-
<b>4</b>	Calibration – Power Supply for ECE,EEE		2014-2015	-

**25. Faculty selected nationally / internationally to visit other laboratories / institutions / industries in India and abroad**

Nil

**26. Faculty serving in**

- a) National committees    b) International committees c) Editorial Boards d) any other ( please specify )

Nil

**27. Faculty recharging strategies ( UGC, ASC, Refresher / orientation programs , workshops training programs and similar programs.**

<b>Year</b>	<b>FDP</b>	<b>Training Prog.</b>	<b>Workshops</b>	<b>Seminars</b>
2015	-	-	-	-
2014	-	-	1	-
2013	1	2	2	-
2012	-	-	-	-
2011	-	-	-	1
2010	-	1	1	-

Workshops / training program details are given in table below

S. No	Name of the Author	Name of the event	Title	Period	Organized By
1.	K.Mathew	Workshop on MATLAB programming	MATLAB programming	22.10.10 to 24.10.10	Madras Institute of Technology
2.	K.Mathew	Training programme	Advanced process control	22.12.10 to 24.12.10	Madras Institute of Technology
3.	P.Balaji	ICMR sponsored National Seminar	Technology Advances On Bio-medical engg	06.01.11 to 07.01.11	St.Peters University
4.	P.Balaji	Seminar	SEIMENS EDUCATION DAY	12.09.13	SEIMENS and VI Microsystems Pvt Ltd
5.	P.Balaji	Educators Day	Educators Day	02.09.13	National Instruments
6.	P.Balaji	TEQUIP sponsored workshop	R&D proposals to national and international funding for researchers – Approach & Preparation	16.08.13 to 17.08.13	NIT Trichy
7.	P.Balaji	TEQUIP sponsored workshop	Research methods and LaTeX	20.09.13 to 21.09.13	NIT Trichy
8.	P.Balaji	Faculty development programme	School of Information and Computing technology	29.04.13 to 30.04.13	Vel tech University

9.	P.Balaji	Workshop	Recent trends Mechatronics for manufacturing automation	18.07.14	VIT
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**28. Student projects**

- **percentage of students who have done in – house projects including inter-departmental projects**
- **percentage of students doing projects in collaboration with other universities / industry / institute**

<b>Year</b>	<b>% of In-house Projects</b>	<b>% of project in collaboration with other University / Industry / Institute</b>
<b>B.E (EIE)</b>		
2011 - 2015	100%	-
2010 - 2014	100%	-
2009 - 2013	60%	40%
2008 – 2012	75%	25%
<b>M.E (IE)</b>		
2013 - 2015	100%	-
2012 - 2014	100%	-
2011 - 2013	85%	15%
2010 – 2012	80%	20%
2009 - 2011	100%	-

**29. Awards / recognition received at the national and international level by**

- a. Faculty : Nil
- b. Doctoral / Post doctoral fellows: Nil
- c. Students : Nil
- d.

**30. Seminars / Conferences/ Workshops organized and the source of funding (national / international with details of outstanding participants, if any**

Academic Year	Seminars	Conferences	Workshops
2010-2011	01	-	-
2011-2012	-	-	-
2012-2013	-	-	-
2013-2014	-	-	-
2014-2015	-	01	-
Total	01	01	-



S.No	Title of the program and period	Convenor/Co-ordinator	National/International	Funding agency/Oragnized by
1.	National Seminar on Technology advances in Bio-medical Engineering 6.1.2011 to 7.1.2011	Mrs.Anuja Berketh Banu, Lect/EIE	National	St.Peter's University ICMR Sponsored
2.	International conference on Green Technologies for power generation, communication, Instrumentation 26 <sup>th</sup> & 27 <sup>th</sup> April 2015	Dr.G.P.Ramesh, Professor, ECE	International	St. Peter's University Conducted by ECE, EEE & EIE

**31. Code of ethics for research followed by the departments**

- Researchers must respect the rights, and dignity of participants and related persons in research
- The confidentiality of information supplied by research participants and any agreement to grant anonymity to respondents should be respected
- Research is to be undertaken subject to the principle of academic independence. Where any conflicts of interest or partiality arise, these must be clearly stated prior to ethical approval being obtained
- Being conscious of multiple roles.
- Both the design of research and its conduct should ensure integrity and quality.

**32. Students profile programmes-wise.**

Name of the Programme (refer to question no.4)	Applications received	Selected		Pass Percentage	
		Male	Female	Male	Female
<b>B.E (EIE)</b>					
BE-EIE(2008-2012)	37	25	12	100%	100%
BE-EIE(2009-2013)	11	09	02	100%	100%
BE-EIE(2010-2014)	03	03	-	100%	-
BE-EIE(2011-2015)	01	01		100%	-
<b>M.E (IE)</b>					
ME-IE(2009-2011)	08	04	04	100%	100%
ME-IE(2010-2012)	14	08	06	87.5%	100%
ME-IE(2011-2013)	13	08	05	100%	100%
ME-IE(2012-2014)	06	04	02	100%	100%

**33. Diversity of students :**

Name of the Programme ( refer to question no. 4)	% of students from the same university	% of students from other universities within the state	% of students from universities outside the state	% of students from other countries
BE-EIE (2011-2015)	Nil	01 – (100%)	Nil	Nil
M.E	Nil	Nil	Nil	Nil

**34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations?. Give details category-wise.**

S.No.	Name of the student	Programme & Batch	Competitive Exams details
1	PANKAJ SAXENA	BE 2008-2012	GATE EXAM Cleared on 2012 & 2013
2	SURYA CHANDRA PRAKASH	BE 2008-2012	GATE EXAM Cleared on 2012 & 2013

**35. Student Progression:**

Student progression	Percentage against enrolled				
	2010-11	2011-12	2012-13	2013-14	2014-15
UG to PG	-	-	-	5.2%	5.2%
PG to M.Phil.	-	--	-	-	-
PG to Ph.D.	-	-	-	-	-
Ph.D to post -Doctoral	-	-	-	-	-
Employed	-	-	-	-	-
• Campus selection	-	15.38%	-	-	-
• Other than campus recruitment	-	-	-	-	-

**36. Diversity of staff**

Percentage of faculty who are graduates	
of the same university	Nil
from other universities within the state	50%
from universities from other states	Nil
from universities outside the country	Nil

**37. Number of faculty who are awarded M.Phil., Ph.D., D.Sc., and D.Litt. during the assessment period.**

Nil

**38. Present details of departmental infrastructural facilities with regards to**

**a) Library**

Electronic Journals and magazines are subscribed for the student usage to enhance their knowledge confining to theory, practicals and research. In addition few on line journals are subscribed by the central library of our university for both faculty and students to read and collect information for both research and theoretical information. Reading materials are circulated to the students through group ID by the faculty who handle the subject. New books are procured based on the updated syllabus with recent editions. Text books available in the library cover all the contents in the syllabus

**b) Internet facilities for staff and students**

Computers are also available in the research as well as in project labs.

Electronic Resources

- Internet Facility : Yes
- Name of the Internet Provider : NKN + BSNL
- Available Bandwidth : 1 Gbps
- Computers are available in Digital Signal Processing lab. Students and staffs can access internet from the labs. The university has 1Gbps internet connectivity
- WEB OPAC : Yes
- CD : Yes

**c) Total number of class rooms**

Class rooms with ICT facility: 01

Total Number of class rooms: 05

**d) Students laboratories**

Excellent lab facilities with sufficient modern equipments are available to meet the need of students.

- Process control Lab
- Transducer Lab
- Mechatronics Lab
- Instrumentation lab

**e) Research laboratories**

Computer based Process control laboratory are equipped with research facilities such as SCADA,DCS.

**39. List of doctoral, post doctoral students and Research Associates**

**a) From the host institution / university.**

Nil

**b) From other institutions / universities.**

S.No	Reg No	Name of the PhD Scholar
1.	SP09EIDA30	Ms.K.Sudha

**40. Number of post graduate students getting financial assistance from the university.**

Nil

**41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.**

The methodology followed for development of New Programmes is as follows:

We collected inputs on market demand by

- Experts from Industries
- Expert from other Institution,
- Faculty members
- Alumni. The members of the Curriculum Development Cell are Professors, Associate Professors and Assistant Professors of the department.

The Department collects the feedback from every member regarding the content of course syllabus, need for modifying or correction, to introduce new courses in the curriculum etc.

The department decides the curriculum revamping which is submitted to the Board of Studies for approval and further changes.

**42. Does the department obtain feedback from**

**a) Faculty on curriculum as well as teaching –learning – evaluation? If yes, how does the department utilize the feedbacks?**

The department utilizes the feedback collected from the Faculty on curriculum to change the content of course syllabus, modification or correction and to introduce new course etc

**b) Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedbacks?.**

- The Student Feedback is administered in all classes at the University. In all classes, the students are asked to rate the overall quality of the faculty .The marking is done on point scale. Every faculty receives the student feedback scores for his / her course.
- Class Committee Meeting: The department constitutes a class committee for all the classes. The head of the department conducts the class committee meeting every month and collects the feedback about the conduction of course and content delivery. The grievances raised in the meeting will be addressed immediately.

**c) Alumni and employers on the programmes offered and how does the department utilize the feedbacks?.**

- An Alumni is made as part of the Board of Studies while the department revamps the syllabus of individual courses, every year. The Agenda notes is sent much ahead of the BoS meeting and Alumni takes part in reviewing and revamping activities of the curriculum.

**43. List the distinguished alumni of the department:**

Sl.No	Name of the Alumni	Batch	Company/ Institution	Position
1.	Venkatesh V	2012	Infosys	Testing Engineer
2	Sandeep Kumar Yadav	2012	Infosys	Testing Engineer
5	Gilbert Vinodraj Paul	2012	Sutherland	Analyst
6	Saranya A.M	2012	CSS CORP	Process consultant
7	Rahul Dev.R	2012	CSS CORP	Process consultant
8	Niranjan Sekar.S	2013	Cybernet slash support	Programmer

**44. Give details of student enrichment programmes (special lectures / workshops / seminar) including external experts.**

S.No.	Event Name	Event Date	External Experts
<b>SEMINARS ORGANIZED FROM 2010-2015</b>			
1	National seminar on Technology advances in Bio-medical Engineering ICMR sponsored	6.01.2011 to 7.01.2011	Mr.K.Subramanian Rtd Proffesor NI,Bangalore

PLACEMENT TRAINING ORGANIZED FROM 2010-2015			
1	Live Life Curriculum for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> year students	2012-2013	Dr. Kannan Girish Psychiatrist, Ms.Jennifer
2	Training on Analytical and communication skills for final year students	2012-2013	Smart Training Resources Pvt. Ltd, Chennai
3	Live Life Curriculum for 1 <sup>st</sup> year students	2013-2014	Dr. Kannan Girish Psychiatrist, Ms.Jennifer
4	Training on Analytical and communication skills for final year students	2013-2014	Smart Training Resources Pvt. Ltd, Chennai
5	Training on Analytical and communication skills for final year students	2014-2015	Smart Training Resources Pvt. Ltd, Chennai
6	Training on Analytical and communication skills for final year students	2015-2016	Smart Training Resources Pvt. Ltd, Chennai

**45. List the teaching methodology adopted by the faculty for different programmes.**

- The primary mode of content delivery in the classes is by the lecturing hours. The teacher prepares and delivers her/his lecture according to the teaching plan. The teacher delivers the lecture either using power point presentation/ OHP sheets/ board and chalk method.



- provide quality technical education in the field of Electronics , Instrumentation and control Engineering
- The University hosts a e-learning site which contains video lectures, learning materials that has been collected from various universities like MIT, Various IIT's etc. The students can use these to understand their subjects from different perspectives and get a feel of the educational standard in international, well reputed institutions

**46. How does the department ensure that programmes objective are constantly met and learning outcomes are monitored?.**

- Conducting Unit test and Model examination.
- Sending Progress report to parents
- Conducting Class committee meeting for every month
- Placement meeting
- Academic Results
- Entrepreneur

**47. Highlight the participation of students and faculty in extension activities.**

- Motivational initiatives
- Motivate students towards research projects
- In addition to academic activities, the department also supports activities such as blood group identification camps, body check up, orphanage visits, old aged home visits and so on.

**Students participated in extension activities like events conducted in symposium and workshops**

S.No.	Student Name & Class	Activity	Organized by	Period	Award Received
1	Ankur Chouhan	Fault diagnosis Event symposium	Aalim mohammed salegh College of Engineering	23.9.2014	Participated

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2	S.Niranjana	Yatra 2012 Microsofft Dreampark	SSN College of Engineering	25.8.2012	Participated
3	S.Niranjana	Product development workshop	SSN College of Engineering	25.8.2012	Participated
4	Melvin Vargees	National Level symposium- Power puller	Park College of Engineering	21.02.11 to 23.02.11	Participated
5	S.Goutham	National Level symposium- Amphibian power puller	Park College of Engineering	21.02.11 to 23.02.11	Participated
6	G.R.Praveen kumar	National Level symposium- Amphibian power puller	Park College of Engineering	21.02.11 to 23.02.11	Participated
7	Madhan Mohan.B	National Level symposium- Amphibian power puller	Park College of Engineering	21.02.11 to 23.02.11	Participated
8	Venketesh.V	National Level symposium- Amphibian power puller	Park College of Engineering	21.02.11 to 23.02.11	Participated
9	Vijay Subbiah P.L	National Level symposium- Amphibian power puller	Park College of Engineering	21.02.11 to 23.02.11	Participated
10.	Aadith.K	National Level symposium- Amphibian power puller	Park College of Engineering	21.02.11 to 23.02.11	Participated

**48. Give details of “beyond syllabus scholarly activities” of the department.**

- By providing hands-on training like Basic Electronics workshop, Embedded Workshop, LabVIEW. Students are enriched with adequate knowledge.
- In their Curriculum, Quality Assessments are provided in which they study and present the topics related to their subject which enhances their knowledge.
- The University has Anna University Edu Sat link through which students and faculty have access to the classes which are conducted once a week by senior Professors on selected subjects.

**INPLANT TRAINING/INTERNSHIP**

<b>S. No</b>	<b>Student Name</b>	<b>Company Name</b>	<b>Period</b>
1	Ankur Chouhan	Neyes Technologies	29.12.14 to 31.12.14
2	B.Mohammed Laloolal	Advanced Training Institute, Chennai	06.01.14 to 17.01.14
3	B.Mohammed Laloolal	Advanced Training Institute, Chennai	20.01.14 to 31.1.14
4	M.Shesha Chaitanya	U.N.I.Q Technologies	08.09.13 to 13.9.13
5	M.Shesha Chaitanya	Doordarshan Kendra	16.05.13 to 25.06.13
6	B.Mohammed Laloolal	Wiztech automation solutions pvt ltd	16.05.13 to 25.06.13
7	B.Mohammed Laloolal	U.N.I.Q Technologies	02.07.13 to 11.07.13
8	M.Shesha Chaitanya	Doordarshan Kendra	26.06.13 to 11.07.13

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9	K.C.Aditya	IEEE Madras section	13.08.13 to 9.9.2013
10	B.Mohammed Laloolal	Chennai Breweries Ltd	01.05.12 to 17.06.12
11	J.Paul Joshua	Chennai Petroleum Corporation Ltd	13.06.11 to 17.06.11
12	S.Niranjan	Chennai Petroleum Corporation Ltd	13.06.11 to 17.06.11
13	S.Vasumathi	Bharat Sanchar Nigam Ltd	27.12.10 to 31.12.10
14	S.Vinothini	Bharat Sanchar Nigam Ltd	27.12.10 To 31.12.10
15	Yuvashree.B	Bharat Sanchar Nigam Ltd	27.12.10 to 31.12.10
16	Balajee Naidu	South Eastern Railway Kharagpur	07.06.10 to 25.06.10
17	Aqeel ahemed	Nalco, Orissaa	15.05.10 to 14.06.10
18	C.H.Prithivi	ITC Ltd	04.06.10 to 18.06.10
19	Vasumathi.S	Heavy Vehicles Factory	24.05.10 to 05.06.10
20	S.Vinothini	Heavy Vehicles Factory	19.05.10 to 02.06.10
21	Rahuldev R	Neyveli Lignite Corporation Ltd	14.05.10 to 24.05.10
22	Prithivi CH	Neyveli Lignite Corporation Ltd	14.05.10 to 20.05.10
23	Manoharan.M	Neyveli Lignite Corporation Ltd	14.05.10 to

			20.05.10
24	S.Murali	Neyveli Lignite Corporation Ltd	05.05.10 to 17.05.10
25	S.Goutham	Neyveli Lignite Corporation Ltd	05.05.10 to 17.05.10
26	V.Venketesh	Neyveli Lignite Corporation Ltd	05.05.10 to 17.05.10
27	Vijay Subbiah	Neyveli Lignite Corporation Ltd	05.05.10 to 17.05.10

**49. State whether the programme / department is accredited / graded by other agencies? If yes, give details**

- An ISO-9001: 2000 certified by TUV.

**50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied**

- Making the students technically competent for industrial demands
- Provide quality technical education in the field of Electronics , Instrumentation and control Engineering

**51. Detail five major strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department**

**Strengths:**

- Well established infrastructure for in-house project work.
- Hands on training by faculties.
- Students are trained for employment in hardware sectors.

**Weakness:**

- No Major Funded Projects.
- Lack of Advanced Process control Stations.
- Less Journal publications.

**Opportunity:**

- More Employment opportunity due to rapid modernization and automation in all sectors and especially in petro-chemical, Power and Space science sectors.
- More avenues for inter disciplinary research.
- Possible to receive sponsored projects.

**Challenges:**

- Upgrading the lab to suit the pace of modernization and growing technology
- Upgrading skills of Faculty to match rapid growth of Industry
- Tie-up with major Industries
- To compete with other premier institutions
- To place the students in core companies

**52. Future plans of the department**

- The department has planned to establish Centre of excellence in Electronics & Instrumentation Engineering.
- Establishment of Research Labs in the field of Biomedical & Embedded system in collaboration with industrial houses is also being envisioned.
- Tie-up with MNCs and foreign University
- Setting up of Process Control Station
- Upgrade the qualification of Faculty and participate in Research & Developmental activities of providing solutions to real time problems

**PHOTO GALLERY**

Seminar on Technology Advances in Biomedical Engineering on  
06.01.11 to 07.01.11





## International Conference-ICGPC-APR2014

