

## Dr. Hemant Kumar Gupta



**Qualification :** B.E. M.Tech Ph.D. (Electronics Engineering) (Banasthali University, Banasthali)

**Experience:** 13 Years

**Area of Interest:** Linear Integrated Circuits, Digital Signal Processing, Biomedical Signal Processing, Analog Electronics, MATLAB, MULTISIM , TINA PRO E, Filter Designing

**Subjects Taught:** Analog Electronics, Linear Integrated Circuits, Digital Signal Processing

### Research Publications:

1. Hemant Kumar Gupta, Ritu Vijay, Neetu Gupta, "The Designing of a FIR Low Pass Filter and Amplifier for Small Voltage Signals using Kaiser Window", International Journal of Computer Application, New York, U.S.A., ISBN : 973-93-80876-36-7, Vol.74,number 6, pp. 21-26, Digital Library URI : <http://www.ijcaonline.org/archives/volume74/number6/12889-9798> with impact factor 2.3.
2. Hemant Kumar Gupta, Ritu Vijay, Neetu Gupta, "Designing and Implementation of Algorithms on MATLAB for Adaptive Noise Cancellation from ECG Signal", International Journal of Computer Application, New York, U.S.A., ISBN : 973-93-80876-36-7, Vol.71, number 5, pp. 1-8, Digital Library URI: <http://www.ijcaonline.org/archives/volume71/number5/12351-8652> with impact factor 2.3.
3. Hemant Kumar Gupta, Ritu Vijay, "Designing of algorithm for calculation of signal to noise ratio for paralytic patients performing various activities", International journal on recent and innovation trends in computing and communication, Vol. 4, Issue 4, pp.280-287, April 2016, Thomson Reuter Indexed Journal Research ID: A-9769-2016,ISSN: 2321-8169, DOI: 10.17762/ijritcc2321-8169/
4. Hemant Kumar Gupta, Ritu Vijay, "Calculation of rejection ratio for EMG signal for paralytic patients using windowing method", International journal on innovations in engineering and technology, Vol. 6, Issue 4, pp.126-136, April 2016, Thomson Reuters Indexed Journal, impact factor 0.672, Research ID: P-8165-2015,ISSN: 2319-1058, [www.ijiet.com/wp-content/uploads/2016/04/20.pdf](http://www.ijiet.com/wp-content/uploads/2016/04/20.pdf)
5. Hemant Kumar Gupta, Ritu Vijay, "Analysis of power to apparent power ratio in EMG signal using windowing method for paralytic patients", International journal of latest trends in engineering and technology, Vol. 7, Issue 1, pp.666-676, May 2016, Thomson Reuters Indexed Journal, impact factor 0.685, Research ID: P-8024-2015,e-ISSN: 2278-621x, p-ISSN: 2319-3777, [www.ijltet.org/journal/146475363895.pdf](http://www.ijltet.org/journal/146475363895.pdf), DOI: <http://dx.doi.org/10.21172/1.71.095>
6. Hemant Kumar Gupta, Manvendra Singh, "Face Recognition using biometric system algorithms" Journal of Engineering, Science & Management Technology ISSN 2231-1521, 2231-1521 Vol issue 3, pp. 47-52
7. Hemant Kumar Gupta, Abhineet Mishra, Manvendra Singh, "Simulation on a Position and Trajectory- Tracking Control of the 3 DOF Robot Arm.", Journal of Engineering, Science & Management Technology ISSN 2231-1521, Vol 1 issue 2, pp. 32-39
8. Hemant Kumar Gupta, Manish Jain, "Time and Frequency domain representation of EMG signals" IEEE National conference on Recent advancements in communication and Electronics Engineering

Proceeding pp 76-80

9. Hemant Kumar Gupta, Arun Varshney, “Ion-Sensitive Field-Effect Transistor and its Applications”, IEEE National conference on advancement in electronic engineering.
10. Hemant Kumar Gupta, Manish Jain, “Designing of Low Pass FIR filter for Processing Low frequency & Low Power Signals using Standard DSP Processor”, IEEE sponsored International conference on Recent advancement in Electronic applications, Proceeding pp 120-127.
11. Deepak Kumar, Prof. Hemant Kumar Gupta, Prof. Rahul Shrivastava, “A Review of ECG signal for Human Emotion Detection”, International journal on recent and innovation trends in computing and communication, Vol. 5, Issue 7, pp. 72-76, July 2017, Thomson Reuters Indexed Journal Research ID: A-9769-2016, ISSN: 2321-8169.
12. Dhansri Kansal, Hemant Kumar Gupta, Rahul Srivastava, “Comparative Analysis Of Image Compression Using Wavelet Transform”, International journal of advanced research, Vol. 5, Issue 7, pp.72-76, July 2017, Article DOI:10.21474/IJAR01/xxx DOI URL <http://dx.doi.org/10.21474/IJAR01/xxx>, ISSN: 2320-5407.
13. Chavi Saxena, P D Murarka, Hemant Kumar Gupta, “Noise Reduction in ECG Signals Using Notch Filter”, International Journal of Computer Sciences and Engineering, Vol.5, Issue.8, pp.147-150 Aug-2017, <https://doi.org/10.26438/ijcse/v5i8.156169>.

#### No of Projects guided:

UG	PG
50 +	6

#### Workshops/Seminars/FDP's Organized:

1. Organized a national workshop on Digital Signal Processing “*NWDSP-2009*”.
2. Organized one month training on “*DSP using Matlab & Simulink*” for the final year Students at AIET Alwar.

#### Workshops/Seminars/FDP's Attended:

1. Attended an IEEE sponsored National workshop on “*Communication & Electronics Engineering*” at IET Alwar in March 09.
2. Attended a Workshop at NIT, Hamirpur on “*Advances in Optical & Wireless Communication*” a TEQIP program Dec 08.
3. Participated in Workshop on “*MIC, MMIC & MEMS*” sponsored by IEEE in I.E.T, Alwar from 18-19 Oct. 2008.
4. Participated in Workshop on “*Modernizing Microwave Education by Introducing Microstrip & Microwave Integrated Circuits*” sponsored by IEEE in GIT, Udaipur from 5 Oct. 2007 to 1 Oct. 2007.
5. Attended a Five days seminar on “*Inclusive Education for Disabled*” organized by NITTTR, Chandigarh from 28 July 2008 to 1 Aug. 2008.
6. Attended the national workshop on ‘*VLSI & Embedded Systems*’.
7. Attended a Workshop on “*Embedded System and VLSI design in Robotics*” organized by I<sup>2</sup>IT Pune from 22 Feb 2007 to 23 Feb. 2007.
8. Attended an AICTE recognized short term course on “*Open Source Multimedia Tools through ICT*” organized by NITTTR Chandigarh from 27 Oct. 2014 to 31 Oct. 2014.
9. Attended an AICTE recognized short term course on “*Circuit Simulation Using Multisim through ICT*” organized by NITTTR Chandigarh from 9 March 2015 to 13 March 2015.
10. Attended an AICTE recognized short term course on “*Fiber Optics Technology: Developments & applications Through ICT*” organized by NITTTR Chandigarh from 5 Jan. 2015 to 9 Jan. 2015.

11. Attended an IEEE sponsored National workshop on “*Emerging Microwave Technologies*” at IET Alwar in Dec.2009.
12. Attended an AICTE recognized short term course on “Technical Teachers Role, Self Esteem, Motivation and Professionalism Development Through ICT” organized by NITTTR Chandigarh from 8 Jun. 2015 to 12 Jun. 2015.
13. Attended an AICTE recognized short term course on “Animation & Graphics” organized by NITTTR Chandigarh from 16 Feb. 2015 to 20 Feb. 2015.
14. Attended a workshop in Rajasthan Technical University Kota on “ DSP and CMOS Layout” organized by Cranes Software Bangalore from 19-21 Dec. 2008.
15. Attended a FDP on “Research Methodology” at IET Alwar from 27-28 June 2010.
16. Attended an AICTE sponsored staff development program on “ Electronic Design Automation Tools” from 2-15 July 2009.
17. Attended a Faculty Development program at Arya College of Engg. & I.T. Jaipur on “Analog System Design” Organized by Texas Instruments USA.

### **Conferences Attended:**

1. Attended an International Conference on “*IEEE MTT-S*” in Dec 09 at IET Alwar.
2. Attended an International Conference on “Advance Trends in Engg. & Technology (ICATET-2015)” as Session Chair.
3. Attended an IEEE sponsored national conference on “Recent trends in communication and electronic Design” on 7 march 2009.

### **Achievements:**

1. Established labs for all the semesters of Electronics & Communication Engg. at A.I.E.T. Alwar .
2. All the Experimental kits being used in EDC lab at A.I.E.T. Alwar have been designed and fabricated under my supervision.
3. These have been commercially product ionized and marketed to various Engineering institutions.
4. Recipient of first **M.Tech** degree in Digital Communication from Rajasthan Technical University, I
5. Active Member of “*Mission-10x Learning Approach*” and attended a “Five Days Workshop” on “*High Impact Teaching Skills*” organized by Wipro.
6. Represented the complete team of “students of ECE Dept. AIET, Alwar” in the “*Industrial Visit*” to the “*Instrumentation Ltd., Kota*” in May 09.
7. Represented the complete team of “students of ECE Dept. AIET, Alwar” in the “*Industrial Visit*” to the “*Kota Thermal Power Plant, Kota*” in May 09.

**I was the responsible person of committee related of NBA and NAAC accreditation in JECRC College of Engineering Jaipur and Arya College of Engineering & I.T. Jaipur Rajasthan.**