

# CURRICULUM - VITAE



**Dr. Ram Chandra Singh Chauhan**  
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## OBJECTIVE:

To provide a common platform to human kind to explore the direction for happiness and peace by right efforts and better research work.

## CURRENT POSITION:

Working As Associate Professor in Electronics Engineering Department of Institute of Engineering & Technology, Lucknow since August 24, 2017 onwards.

As Program Convener of B.Tech in Electronics and Instrumentation Engineering, IET Lucknow.

## MY LINKS:

Google Scholar: <http://scholar.google.co.in/citations?user=j86DKogAAAAJ&hl=en>

Linkedin: <https://www.linkedin.com/pub/ram-chandra-chauhan/14/5b3/80b>

Research ID: <http://orcid.org/0000-0003-0817-4163>

Facebook Page: <https://www.facebook.com/ram.c.chauhan>

## AWARDS, MEMBERSHIP, FELLOWSHIP & ACHIEVEMENTS:

1. Have gotten Teacher-Fellowship awarded by U.P.Technical University Lucknow during July 10, 2007 to July 9, 2012.
2. Being provided the Best paper award at an IEEE international conference ICCIC - 2010, Coimbatore during 28 – 29 December 2010.
3. Delivered a seminar on “Optical Orthogonal Codes” on 18<sup>th</sup> January 2011, at Electrical Engineering Department of I.I.T. Kanpur.
4. Program Committee member of following IEEE International Conferences

- a. CSNT – 2011, at Jammu during June 2011
  - b. CICN – 2011, at Gwalior during Oct 2011
  - c. WICT – 2011, at Mumbai during Dec 2011
  - d. SPRToS – 2011, at HBTI, Kanpur during March 2011
  - e. CSNT – 2012, at Gwalior during June 2012
  - f. CICN – 2012, at Roeekee during Oct 2012
  - g. AEICT – 2014, at PSIT, Kanpur during April 12-13, 2014,  
as Organizing Committee Member
  - h. AEICT – 2015, at PSIT, Kanpur during April 11-12, 2015, as Convener
  - i. ICDST 2019, at IET Lucknow during Aug 23-25, 2019 as Convener.
5. Professional Member of IEEE, SM-IETE
  6. Member of Value Education Cell, AKTU Lucknow.
  7. Reviewer of International Journal IET Communication and IEEE International Conferences like CSNT-2011, CICN-2011, WICT-2011, SPRToS-2011 (National), CSNT-2012, CICN-2012. CSNT-2013, CICN-2013, AEICT-2014, CSNT-2014, CICN-2014.
  8. Coordinated one week short term course on “DSP algorithms and their implementation” during 3-8, July 2013 by Electronics & Communication Engineering department of PSIT Kanpur.
  9. Coordinated two day workshop on “Effective Use of Brihaspati 3 – The Virtual Classroom” on July 27-28, 2013 by Electronics & Communication Engineering department of PSIT Kanpur.
  10. Organized two day National conference on Advances in Electrical & Information Communication Technology, AEICT-2014, on April 12-13, 2014, by Electronics & Communication Engineering department, PSIT Kanpur.
  11. Organized 8 days international workshop on Human Values & Professional Ethics, during December 13-20, 2013, conducted by Value Education Cell, UPTU Lucknow at PSIT Kanpur.
  12. Organized two day National Conference on Advances in Electrical & Information

Communication Technology, AEICT-2015, on April 11-12, 2015, by Electronics & Communication Engineering department of PSIT Kanpur

13. Organized two days 44<sup>th</sup> Mid Term Symposium with IETE Kanpur Center on Internet of Everything " IETE – MTS (IOET-2017), on April 8-9, 2017, by Electronics & Communication Engineering department of PSIT Kanpur
14. Organized 8 days workshop on Human Values & Professional Ethics, during December 13-20, 2017 conducted by Value Education Cell, IET Lucknow in support of VE Cell AKTU Lucknow.
15. Organized 8 days workshop on Human Values & Professional Ethics, during July 10-17, 2018 conducted by Value Education Cell, IET Lucknow in support of VE Cell AKTU Lucknow.
16. Organized National Conference on Human Values in Higher Education at IET Lucknow on July 6-8, 2018
17. Organized International Conference on Defence and Space Technologies, ICDST 2019 at IET Lucknow on Aug 23-25, 2019
18. Organized silver jubilee the convergence 2017, 2018 and 2019 for 1992, 1993 and 1994 graduated IETians in the month of November 2017, 2018, 2019 respectively at IET Lucknow.
19. Organizing online IET Lecture Series on every Saturday on Jan 9 to March 31, 2021 by IEEE student branch IET Lucknow as Branch Counselor.

#### **PAST EXPERIENCE:**

1. Having teaching and research experience as Associate Professor in Electronics & Communication Engineering department of PSIT Kanpur since July 10, 2012 to August 23, 2017 along with Head of Department for PG Program (M.Tech in Electronics and Communication) at PSIT Kanpur and member of Research and Development Committee at PSIT Kanpur
2. Having teaching and research experience as Teacher-Fellow in Electronics Engineering department of H.B.T.I. Kanpur since July 10, 2007 to July 9, 2012 on AICTE recommended Lecturer scale under teacher-fellowship scheme of U.P. Technical University Lucknow.

3. Having teaching experience as Lecturer in Electronics & Communication Engineering department of U.I.E.T., C.S.J.M. University Kanpur since January 1, 2004 to July 10, 2007.

4. Having teaching experience as Guest Lecturer in Electronics & Communication Engineering department of United College of Engineering & Research, Naini, Alahabad since January 15, 2003 to December 31, 2003.

#### **TEACHING EXPERINCE:**

More than **Seventeen years** continuously have been passed in teaching and research with Engineering graduates and post-graduate students.

#### **PROJECTS/CONSULTANCY:**

1. As Principle Investigator of consultancy project on **M2M/IOT Wireless Protocol for Smart Building Automation using IEEE802.16** for One year of 10lakh budget from INTERCRAFT IOT Solutions Pvt. Ltd.

**PH.D. GUIDED:** 03 (ongoing since 2017)

#### **M.TECH GUIDED:**

**Two** M.Tech (EC) completed and **five** ongoing these work at IET Lucknow  
**Six** M.Tech (EC) Students completed their final theses to HBTI, Kanpur.  
**Nine** M.Tech (EC) Students completed their final theses to AKTU Lucknow under my supervision at PSIT Kanpur.

#### **B.TECH PROJECT GUIDED:**

**Five** B.Tech Projects in Electronics & Communication Engineering IET Lucknow has been completed under my supervision during Aug 2017 to July 2020

**Six** B.Tech Projects in Electronics & Communication Engineering had been completed under my supervision during 2004 – 2007 at **UIET, CSJM University Kanpur**.

**Nine** B.Tech Projects in Electronics Engineering had been completed under my supervision during 2007 – 2012 at **HBTI Kanpur**

**Ten** B.Tech Projects in Electronics & Communication Engineering has been completed under my supervision in the session 2012-17 at **PSIT Kanpur**.

Out of these Five Projects at PSIT Kanpur have been selected and funded by Innovation and Entrepreneurship Development Centre (IEDC) of Department of Science & Technology, MHRD, Government of India.

## PH.D. RESEARCH WORK:

Have finished Ph.D. research work on the topic “**Design of Unipolar (Optical) Orthogonal Codes and Their Maximal Clique Sets**” under supervision of **Dr. Y.N.Singh**, Professor, Electrical Engineering Department, **I.I.T. Kanpur**, and **Dr. Rachna Asthana**, Associate Professor, Electronics Engineering Department, **H.B.T.I. Kanpur**, registered in U.P.T.U. (now AKTU) Lucknow since July 2007 to July 2012 under Teacher-Fellowship scheme of U.P.T.U. Lucknow (now AKTU) .

## M.TECH THESIS WORK:

On the topic “Code Division Multiple Access implementation on TMS320c50 DSP”, thesis was written under guidance of **Dr. V.K.Srivastava**, then Assistant Professor, Electronics & Communication Engineering Department, **M.N.N.I.T. Allahabad**.

## B.TECH PROJECT WORK :

“Implementation of Direct Sequence - Code Division Multiple Access scheme in software language C” under the supervision of **Dr. Neelam Srivastava**, then Assistant Professor, Electronics Engineering, **I.E.T. Lucknow**.

## QUALIFICATION:

Ph.D.	Optical-Digital Communication,	UPTU (AKTU) Lucknow	2015	First
M.Tech	Digital System (EC)	MNNIT Allahabad	2003	First
B.Tech	Electronics Engineering	IET Lucknow	2001	First
12 <sup>th</sup> std.	Physics, Chemistry, Maths	U.P. Board	1996	First
10 <sup>th</sup> std.	Science -2, Maths-2	U.P. board	1994	First
GATE	Electronics Engineering	IIT Kanpur	2001	AIR-454

## FIELDS OF INTEREST:

1. Digital Communication
2. Principles of Communication
3. Information and Coding Theory
4. Multiplexing and Multiple Access Schemes
5. Optical Communication
6. Digital Signal Processing
7. Signal & System
8. Basic Electronics Engineering

9. Digital Electronics
10. Electro-Magnetic Field Theory
11. Digital Image Processing

**LIST OF PUBLICATIONS:**

Sr.No.	Title	Authors	Journal/ Conferences	Year of Publication
1.	Performance Analysis of Tree Based Inter-leaver with IDMA Systems using Optimum Power Allocation Algorithm	Manoj Shukla, R.C.S. Chauhan, V.K. Srivastava, Sudarshan Tiwari	IEEE International Conference on Internet Multimedia Systems Architecture and	2009
2.	Performance Analysis of Tree Based Inter-leaver with Iterative IDMA Receivers using Optimum Power Allocation Algorithm	M. Shukla, R.C.S. Chauhan, Ruchir Gupta, V.K. Srivastava, Sudarshan Tiwari	First UK-India International Workshop on Cognitive Wireless Systems held in IIT,	2009
3.	Uni-polar Orthogonal Codes : Design, Analysis and Applications	R.C.S.Chauhan, Rachna Asthana, Y.N.Singh	IEEE International Conference on High Performance Computing HiPC-2010, Goa, India	2010
4.	Prime Number Based Inter-leaver for Multi-user Iterative IDMA system	Ruchir Gupta, RCS Chauhan, BK Kanaugia, M.K.Shukla	IEEE International Conference on Computational Intelligence and Communication Networks,CICN-2010 Bhopal, India on 26-28 Nov, 2010	2010
5.	A General Algorithm to design all possible sets of one dimensional unipolar orthogonal codes of same length and weight	R.C.S. Chauhan, Rachna Asthana, Y.N.Singh	IEEE International Conference on Computational Intelligence Computing Research, ICCIC-2010	2010 (provided best paper award)

6.	Representation and Calculation of Correlation Constraints of One Dimensional Unipolar Orthogonal Codes (1-D UOC)	R.C.S. Chauhan, Rachna Asthana, M. Shukla.	IEEE International Conference on Communication Systems and Network Technologies, CSNT – 2011, Jammu, during 3 – 5 June	2011
7.	Proposal for One Dimensional Optical Orthogonal Codes : Design Analysis & Algorithm	R.C.S. Chauhan, Ratinesh Kumar, M.K.Shukla, G.P.Bagaria.	IEEE International Conference on Communication Systems and Network Technologies, CSNT – 2011, Jammu, during 3 – 5 June 2011	2011
8.	A Search Algorithm to Find Multiple Sets of One Dimensional Unipolar Orthogonal Codes of Same Code-length and low-weight	R.C.S. Chauhan, Y.N. Singh, Rachna Asthana,	Journal of Computing Technologies	Sep. 2013
9.	Design of Two Dimensional Unipolar (Optical) Orthogonal Codes through One Dimensional Unipolar (Optical) Orthogonal Codes	R.C.S. Chauhan, Y.N. Singh, Rachna Asthana,	Journal of Computing Technologies	Sep. 2013
10.	Design of Minimum Correlated Maximal Clique Sets of One Dimensional Unipolar (Optical)	R.C.S. Chauhan, Rachna Asthana, Y.N. Singh.	Arxiv.org	Sep, 2013
11.	A Survey to the Optical CDMA Systems - Part I: Optical Orthogonal Encoding	R.C.S. Chauhan, Rachna Asthana, Y.N. Singh	Journal of Computing Technologies	May 2016
12.	A Survey to the Optical CDMA Systems - Part II: Performance Improvement Schemes	R.C.S. Chauhan, Rachna Asthana, Y.N. Singh	Journal of Computing Technologies	May 2016
13	Realization of optimized CORDIC core for implementing sine and cosine operators	Priyanka Shakya, RCS Chauhan	International Journal of Engineering and Advanced Technology	Dec 2019
14	A review on Inter satellite links free space optical communication	Gaytri Tiwari, RCS Chauhan	Indian Journal of Science and Technology	Feb 2020

15	Optical Orthogonal Code generation scheme and grouping of codes for optical cdma systems	RCS Chauhan, Prateek RajGautam	International Journal of System Assurance Engineering and Management	June 2020
16	An Assessment on delay and power in sequential circuits and efficient designing architectures	Jitesh Singh, RCS Chauhan	International Journal of Emerging Technologies and Innovative Research	Sep 2020
17	Quantitative analysis of factors affecting the optical burst switching through fuzzy multi criteria decision making AHP technique	Gaytri Tiwari, RCS Chauhan	International journal of Advanced Science and Technology	Aug 2020
18	FPGA implementation of Universal Biquadratic Filter	Rahul Gupta, RCS Chauhan	International Journal of Emerging Technologies and Innovative Research	Nov 2020
19	Power Efficient universal biquadratic filter designing using OTA	RCS Chauhan, Rahul Gupta	Indian Journal of Science and Technology	Accepted and Dec 2020
20.	High Speed Power efficient reset able true single phase clock based flip-flop for counter applications	Jitesh Singh Chauhan, RCS Chauhan	Microprocessors and Microsystems, Elsevier Journal	Submitted Sep 2020
21	True single phase clock based UP-Down counter using GDI cell for low power applications	Jitesh Singh Chauhan, RCS Chauhan	International Journal of Computing and Digital Systems	Accepted and Nov 2020
22	A study of Different SRAM Cell Designs	Aparna, RCS Chauhan	Walailak Journal of Science and Technology	Submitted and Nov 2020
23.	Performance analysis of heterogeneous network using relay diversities in high speed vehicular communication	M.J. Khan, RCS Chauhan	Telecommunication Systems, Elsevier Journal	Submitted Jan 2021



24.	General Algorithms to Design Multiple Sets of All Possible One Dimensional Unipolar Orthogonal Codes of Same Code-length and	R.C.S. Chauhan, Rachna Asthana, Y.N. Singh,		Under Preparation
25.	General Algorithms to Design Multiple Sets of All Possible Two Dimensional Unipolar Orthogonal Codes of Same Matrix Dimensions	R.C.S. Chauhan, Rachna Asthana, Y.N. Singh,		Under Preparation
26.	Representation and Calculation of Correlation Constraints of Two Dimensional Unipolar Orthogonal Codes (2-D UOC)	R.C.S. Chauhan, Rachna Asthana, Y.N. Singh.		Under Preparation

### PERSONAL BIO-DATA

Father's Name: Shri Kailash Narain Singh  
 Mother's Name: Smt. Nirmala Singh  
**Date of Birth: January 15, 1980**  
 Address: 27, Shivnagar (Ramnagar), Mandhana, Kanpur (209217)  
 Nationality: Indian  
**Thought: Honesty is the best policy for happy Life**  
 Hobbies: To work for Jeevan Vidya or Human Values in Society

### EXTRA-ACTIVITIES:

1. participation and organizing activities for alumni of IET Lucknow
2. Participation and organizing social activities related human values and professional ethics.

### REFERENCES :

1. Dr. Y. N. Singh, Professor, Electrical Engineering, IIT, Kanpur.
2. Dr. Rajeev Tripathi, Professor, Electronics Engineering, MNNIT, Allahabad.
3. Dr. Neelam Shrivastava, Professor, ECE, IET Lucknow
4. Dr. Rachna Asthana, Professor, Electronics Engineering, HBTU Kanpur.
5. Dr. Manoj Kumar Shukla, Professor, Electronics Engineering, HBTU Kanpur.

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