




## Faculty Details Proforma



Title	Mr.	First Name	Govind	Last Name	Singh	Photograph
Designation	Assistant Professor					
Address	Department of Mathematics, Shaheed Bhagat Singh College (University of Delhi) New Delhi-110017					
Date of Birth	29-09-1999					
Phone No Office	--					
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Email	<a href="mailto:govindsingh@sbs.du.ac.in">govindsingh@sbs.du.ac.in</a> <a href="mailto:govindkmc99@gmail.com">govindkmc99@gmail.com</a>					
Web-Page	<a href="https://sites.google.com/view/govindsingh99/home">https://sites.google.com/view/govindsingh99/home</a>					
<b>Educational Qualifications</b>						
Degree	Institution				Year	
Ph. D. Mathematics	Department of Mathematics, Faculty of Mathematical Sciences, University of Delhi				Pursuing	
M.Sc. Mathematics	Indian Institute of Technology Delhi				2022	
B.Sc.(H) Mathematics	Kirori Mal College, University of Delhi				2020	
<b>Career Profile</b>						
<ul style="list-style-type: none"> <li>Assistant Professor on Permanent basis at Shaheed Bhagat Singh College from 15-04-2023 to present.</li> <li>Assistant Professor on Guest basis at Shaheed Bhagat Singh College from 24 -11-2022 to 14-04-2023.</li> </ul>						
<b>Areas of Interest / Specialization</b>						
Nonlinear Dynamical Systems and Chaos Theory.						
<b>Papers Taught</b>						
<ul style="list-style-type: none"> <li>Algebra</li> <li>Probability and Statistics</li> <li>Ring Theory and Linear Algebra-II</li> <li>Calculus</li> </ul>						

- Linear Algebra
- Analytics/computing with Python
- IT Skills and Data Analysis-I
- IT Skills and Data Analysis-II
- Discrete Mathematics
- Abstract Algebra
- Number Theory
- Riemann Integration
- Vedic Mathematics II
- Introduction to Mathematical Modeling
- Research Methodology

#### Technical Skills:

- R
- HTML
- C
- LaTeX
- Mathematica
- MATLAB
- Python
- Microsoft Excel
- Microsoft Word

#### Publications Profile

##### Research Publications

Article Name	Publication Type (UGC Care/ Scopus/ Web of Science etc)	Journal Name	ISSN No	Volume	Year	URL	DOI
Chaos Synchronization of a New	ESCI	Differential Equations and Dynamical	0974-6870	33	2023	<a href="https://doi.org/10.1007/s12591-023-00635-0">https://doi.org/10.1007/s12591-023-</a>	10.1007/s12591-023-00635-0

Chaotic System Having Exponential Term Via Adaptive and Sliding Mode Control		Systems				<a href="#">00635-0</a>	
Triple Compound Combination Synchronization of Eleven dimensional Chaotic Systems	ESCI	International Journal of Dynamics and Control	2195-2698	11	2023	<a href="https://doi.org/10.1007/s40435-023-01140-6">https://doi.org/10.1007/s40435-023-01140-6</a>	10.1007/s40435-023-01140-6
Anti-difference quadratic compound synchronization of Lorenz, Rossler,	SCIE	Indian Journal of Physics	0974-9845	98	2023	<a href="https://doi.org/10.1007/s12648-023-02893-8">https://doi.org/10.1007/s12648-023-02893-8</a>	10.1007/s12648-023-02893-8

Modified Finance, and Shimizu Morioka chaotic systems							
Qualitative analysis of a novel 4D hyperchaotic system and its chaos synchronization via active, adaptive, and sliding mode control	SCIE	Indian Journal of Physics	0974-9845	98	2024	<a href="https://doi.org/10.1007/s12648-024-03140-4">https://doi.org/10.1007/s12648-024-03140-4</a>	10.1007/s12648-024-03140-4
Dual quadratic compound multistitching anti-synchronization of	SCIE	European Physical Journal B	1434-6036	98	2025	<a href="https://doi.org/10.1140/epjb/s10051-024-00855-5">https://doi.org/10.1140/epjb/s10051-024-00855-5</a>	10.1140/epjb/s10051-024-00855-5

Lorenz, Rössler, L u, and Chen chaotic systems							
Chaotic Analysis of a New 3D System with Exponenti al Nonlineari ty and its Dual Compoun d Combinati on Multiswitc hing Synchroni zation using Nonlinear Control	SCOPUS	International Journal of Applied and Computational Mathematics	2199- 5796	11	2025	<a href="https://doi.org/10.1007/s40819-025-01901-1">https://doi.org/10.1007/s40819-025-01901-1</a>	10.1007/s40819-025-01901-1

Conference/ workshop Organized
<ul style="list-style-type: none"> <li>Member of the Organizing Committee for the International G20 Conference on “<b>Resilient Approaches for New World Order &amp; Viksit Bharat</b>” held on 25th September 2023 at Dr. Ambedkar International Centre, New Delhi, organized by Shaheed Bhagat Singh College, University of Delhi.</li> </ul>
Awards and Distinctions
<ul style="list-style-type: none"> <li>Qualified <b>CSIR-UGC NET JRF 2022</b> (Mathematical Sciences).</li> <li>Qualified for <b>GATE 2022</b> (Mathematics) organized by IIT Kharagpur.</li> <li>Qualified <b>JAM 2020</b> (Mathematics) organized by IIT Kanpur.</li> <li>Secured <b>2nd position</b> in <b>Kirori Mal College</b> in B.Sc. (Hons) Mathematics, academic session 2017-2020.</li> <li>Secured <b>1st position</b> at the <b>University of Delhi</b> in the third year of a B.Sc. (Hons) in Mathematics, academic session 2019-2020.</li> </ul>
Other Activities
<ul style="list-style-type: none"> <li>Served as the <b>Convener</b> of the Departmental Workload and Timetable Committee at Shaheed Bhagat Singh College, University of Delhi, for the academic year 2024–25.</li> <li>Served as the Departmental <b>Coordinator</b> for the National Institutional Ranking Framework (<b>NIRF</b>) at Shaheed Bhagat Singh College, University of Delhi (Academic Year 2024–25).</li> <li>Successfully completed a <b>Two-Week UGC-Sponsored Online Refresher Course in Mathematical Sciences</b> (Mathematics / Statistics / Operational Research / Computer Sciences) organized by the Centre for Professional Development in Higher Education (CPDHE), Malaviya Mission Teacher Training Centre (UGC-MM-TTC), <b>University of Delhi</b>, from 18th September 2024 to 1st October 2024, and obtained Grade <b>A+</b>.</li> <li>Participated in a <b>Five Days Online Faculty Development Programme on LaTeX</b>, organized by the Department of Applied Sciences, Meerut Institute of Engineering and Technology, Meerut, held on 9th, 23rd, 30th November &amp; 7th, 14th December 2024.</li> <li>Participated in a one-day seminar on the Awareness Campaign of “New Criminal Law” organized by the Internal Quality Assurance Cell (IQAC), <b>Atma Ram Sanatan Dharma College, University of Delhi</b>, on 18<sup>th</sup> June 2024.</li> <li>Successfully completed the <b>NEP 2020 Orientation &amp; Sensitization Programme</b> under the Malaviya Mission Teacher Training Programme (MM-TTP) of the University Grants Commission (UGC) Organized by the <b>Centre for Professional Development in Higher Education (UGC-MMTTC), University of Delhi</b> from 16th July 2024 – 26th July 2024.</li> <li>Successfully completed the <b>NEP 2020 Orientation &amp; Sensitization Programme</b> under the Malaviya Mission Teacher Training Programme (MM-TTP) of the University Grants Commission (UGC) Organized by the <b>Centre for Professional Development in Higher Education (UGC-MMTTC), University of Delhi</b> from 20th February 2024 – 29th February 2024.</li> <li><b>Presented a research paper</b> titled “Anti-difference quadratic compound synchronization</li> </ul>

of Lorenz, Rossler, Modified Finance, and Shimizu Morioka chaotic systems” at the International Conference on Pure and Applied Mathematics (ICPAM 2024) organized by the Department of Mathematics, Janki Devi Memorial College, **University of Delhi** held during February 22-23, 2024.

- Worked as a member of the central admission committee of the Shaheed Bhagat Singh College, University of Delhi.
- Participated in the International G20 Conference on “**Resilient Approaches for New World Order & Viksit Bharat**” organized by Shaheed Bhagat Singh College, University of Delhi held on September 25, 2023 at Dr. Ambedkar International Centre, New Delhi, India.
- Participated in an online user awareness program to demonstrate the accessibility of Springer Nature eBooks and Journals for DU researchers and faculties organized by Springer Nature in collaboration with Central Library, **University of Delhi**.
- Successfully completed a **Four-Week Faculty Induction/Orientation Programme** for “Faculty in Universities/Colleges/Institutes of Higher Education” organized by the Teaching Learning Centre Ramanujan College, **University of Delhi** in collaboration with the Army Institute of Education (AIE) Affiliated to Guru Gobind Singh Indraprastha University, Delhi under the aegis of Ministry of Education **Pandit Madan Mohan Malaviya National Mission** on Teachers and Teaching, from May 23 – June 21, 2023 and obtained Grade A+.
- Successfully completed the **Two-Week Refresher Course** in *Mathematics* organized by the Teaching Learning Center, Ramanujan College, **University of Delhi**, from April 29 – May 13, 2023, with a grade of A+.
- Participated in One-Week Online National Workshop on “**Mathematical Modeling with Simulation in Applied Sciences**” sponsored by DST-SERB and organized by the Department of Mathematics, **Central University of Haryana**, Mahendergarh, India, from May 22- May 26, 2023.
- Successfully completed a project titled “**Quadratic Fields**” under Dr. Ekata Saha's supervision at **IIT Delhi** from June 2021–Dec 2021. Worked on basic Algebraic number theory, Quadratic fields, and some interesting Real and Imaginary quadratic field results. Studied Units in Real and Imaginary quadratic fields, Rings of integers of some specific fields, etc.
- Participated in the **E-Mathematics Quiz**, organized by the Department of Mathematics, Government College, Manawar, and scored 95%.
- Participated in workshop on “**Read and Publish**” & “**Author’s Publishing Journey**” by Cambridge University Press at **IIT Delhi**.
- Participated in a workshop on “**Gender, Masculinities, and Relationships**” jointly organized by **IGES-IIT Delhi**, NSS, and the YP Foundation.