



## Bhagini Nivedita College

### Faculty Details



Title	Dr.	First Name	Seema	Last Name	Gupta	
Designation		Assistant Professor (Ad-hoc)				
Address		Department of Mathematics Bhagini Nivedita College University of Delhi Kair-110043				
Phone No		Office				
		Residence				
		Mobile				
Email		<a href="mailto:Seema.gupta@bn.du.ac.in">Seema.gupta@bn.du.ac.in</a>				
Web-Page						
Educational Qualifications						
Degree		Institution			Year	
Ph.D.		Devi Ahilya University			2022	
M.Tech.(Systems Management)		Devi Ahilya University			2008	
M.Sc.(Mathematics)		Devi Ahilya University			2006	
B.Sc. (Computer Science)		Devi Ahilya University			2004	
Career Profile						
<ul style="list-style-type: none"> <li>• <b>Assistant Professor (Adhoc)</b> in Mathematics at <b>Bhagini Nivedita College, University of Delhi</b> from September, 2014 till date.</li> <li>• <b>Guest Faculty</b> in Mathematics at <b>University of Delhi</b> from January 2014 to May 2014.</li> <li>• <b>Assistant Professor</b> in Mathematics at <b>Amity University</b> Sector 125, Noida, U.P. from May 2012 to April 2013.</li> <li>• <b>Women Scientist-IPR (WOS-C)</b> at Patent Facilitating Centre (PFC), <b>TIFAC, Department of Science and Technology</b>, New Delhi from May 10, 2010 to May 9, 2011.</li> <li>• <b>IPR-on-Job Trainee</b> at Foundation for Innovation and Technology Transfer (FITT), <b>Indian Institute of Technology (IIT)</b>, New Delhi from June, 2011 to April, 2012.</li> <li>• <b>JRF Professional</b> in DST project "Development of decision support system for sustainable biomass production and carbon sequestration in forests of Malwa region of Madhya Pradesh" at School of Future Studies &amp; Planning (SFSP), <b>Devi Ahilya University (DAVV)</b>, Indore M. P. from October 2008 to May 2010</li> </ul>						
Administrative Assignments						
As assigned by the college from time to time.						
Areas of Interest / Specialization						
Mathematical Programming, Optimization Techniques, Mathematical Software- Lingo, Tora, Mathematica, R, etc., Artificial Intelligence						

Subjects Taught
<ol style="list-style-type: none"> <li>1. Calculus and Matrices</li> <li>2. Calculus and Geometry</li> <li>3. Algebra</li> <li>4. Real Analysis</li> <li>5. Differential Equations</li> <li>6. Numerical Methods</li> <li>7. LATEX and HTML</li> <li>8. Transportation and Network Flow Problems</li> <li>9. Statistical Software R</li> <li>10. Computer Algebra Systems (CAS)</li> <li>11. Analytical Geometry and Theory of Equations</li> <li>12. Linear Algebra</li> <li>13. Engineering Mathematics</li> </ol>
Research Guidance
<p><i>Project guidance and supervision to B.Sc. Students</i></p>
Publications Profile
<ol style="list-style-type: none"> <li>1. <b>Gupta Seema</b> and K. N. Rajeshwari, "<b>Understanding self and cross-efficiencies and their relations in Data Envelopment Analysis</b>", <i>Journal of Scientific Research of the Banaras Hindu University</i>, 65(5), ISSN: 0447-9483, 2021 313-318.</li> <li>2. <b>Gupta Seema</b> and K. N. Rajeshwari " <b>Dual Factor Role in Modeling of Data Envelopment Analysis.</b>" <i>Aryabhata Journal of Mathematics &amp; informatics</i>, ISSN (Print) : 0975-7139, ISSN (Online) : 2394-9309, 2019, Vol. 11(1), 43-52.</li> <li>3. <b>Seema Gupta</b> and Chandra Prakash Bhatt, "<b>Analysis of Different Domains of Artificial Intelligence</b>", <i>Engineering and Scientific International Journal(ESIJ)</i>, ISSN: 2394-7187(Online), ISSN: 2394-7197(Print), 2019, Vol. 6(1), 1-5.</li> <li>4. <b>Gupta Seema</b>, K. N. Rajeshwari, and P. C. Jha. "<b>Finding Efficiency in Data Envelopment Analysis Using Variable Reduction Technique.</b>" <i>Quality, IT and Business Operations</i>. Springer, Print ISBN 978-981-10-5576-8, Online ISBN 978-981-10-5577-5 , Singapore, 2018, 155-164.</li> <li>5. <b>Seema Gupta</b>, K. N. Rajeshwari, and P. C. Jha. "<b>A Goal Programming Approach to Self-Cross Best Evaluation for DEA Problem</b>", <i>Analytics in Operations/Supply Chain Management</i>, ISBN: 9789384588946, I.K. International Publishing House Pvt. Ltd. 2016, 218-232.</li> <li>6. <b>Seema Gupta</b>, K. N. Rajeshwari, and P. C. Jha. "<b>Fuzzy DEA Cross-Efficiency Model for</b></li> </ol>

**Ranking and Performance Evaluation Using Ideal and Anti-Ideal Decision Making Units**", *Recent Advances in Mathematics, Statistics and Computer Science*. World Scientific, 2016, ISBN: 978-981-4704-84-7 (ebook), 125-135.

7. **Seema Gupta** and Chandra Prakash Bhatt. "Evaluating Efficient Sustainable Performance of BRICS and Neighboring Countries using Data Envelopment Analysis", *BULMIM Journal of Management & Research* (ISSN: 2455-3298), 2016, vol. 1(2), 119-127.
8. Govindan, Kannan, Kiran Garg, **Seema Gupta**, and P. C. Jha. "Effect of product recovery and sustainability enhancing indicators on the location selection of manufacturing facility" *Ecological Indicators* (ISSN: 1470-160X), 2016, vol. 67, 517-532.
9. Li, Yongbo, Devika Kannan, Kiran Garg, **Seema Gupta**, Kanika Gandhi, and P. C. Jha. "Business orientation policy and process analysis evaluation for establishing third party providers of reverse logistics services." *Journal of Cleaner Production*(ISSN: 0959-6526) 182 (2018): 1033-1047.
10. Jyoti Dhingra Darbari and **Seema Gupta**, "Rough Set Theory Approach for Analysing the Global Retail Sales Performance " *National Conference on Advances in Computer and information Technology 2016 (NCACIT-2016)* ISBN: 978-93-5258-249-5, 2016, 39-44.
11. **Seema Gupta** and Chandra Prakash Bhatt, "Performance Assessment of 52 Countries Across the Globe in Retail Sector and Ranking Based on TOPSIS" *Retail Marketing in India Trends and Future Insights, Emerald Publishing*, ISBN: 978-1-7863541-0-5 , 2016, 130-143.
12. Uma Nijhawan and **Seema Gupta**, "Construction Industry to Combat Slowdown in Indian Economy", *Shodh: A Refereed Research Journal, Social Science & History*, Yr-37, Vol.105, Jan.2020 ISSN: 0970-1745.
13. **Seema Gupta**. "Technique for order preference by similarity to ideal solution (TOPSIS): method for performance evaluation and selection of supplier in supply chain management", *PARIPRESYA: A Research journal of New Thoughts (A Quarterly Published Refereed Journal)*, ISSN 2278-0602, 2014, vol. 11, 97-102.

Publications in the Last one year

1. **Gupta Seema** and K. N. Rajeshwari, **“Understanding self and cross-efficiencies and their relations in Data Envelopment Analysis”**, *Journal of Scientific Research of the Banaras Hindu University*, 65(5), 2021 313-318.

Conference Organization/ Presentations (in the last three years)

1. Presented a paper titled **“Climate Change and India’s Vision: A Policy Overview”** at *International Conference on Climate Change-An Imminent Global Emergency (ICCCIGE)-2021* held on 16-18 December 2021 Organised by Department of Environmental Studies, Zakir Husain Delhi College, University of Delhi, New Delhi.
2. Presented a paper titled **“From Crude Oil to Hydrogen: roadmap towards Sustainable Economy”** at *International Conference on Sustainable Development: Modeling and Optimization (ICSDMO)*, held on 16-17 February 2021, organized by Operational Research Society of India, Meerut Chapter with its academic partners Swami Vivekanand Subharti University, Meerut and Vardhaman college, Bijnor.
3. Presented a paper titled **“Mathematics and Artificial Intelligence: A Study of how Corporates using Mathematics for ruling the Business”** (ICHDM 2020) at *Online International Conference On “History and Development of Mathematics”*, held on 22 December 2020, organized by Department of Mathematics, Maharshi Dayanand University Rohtak through Online Platform (MDU Cisco Webex).
4. Presented a paper titled **“Analysis of Different Domains of Artificial Intelligence”** at *2<sup>nd</sup> National Seminar on the Dynamics of Data Analysis & Research Publications*, held on 28 September 2018, organized by Department of Information Systems Management, Alpha Arts and Science College, Chennai.
5. Presented a poster titled **“Artificial Intelligence: Technology Assessment and Forecasting”** at *Young Scientists’ Conference in India International Science Festival 2018* held on 05-06 October, 2018 at Lucknow.
6. Presented a paper titled **“Dual Factor Role in Modeling of Data Envelopment Analysis”** at *33<sup>rd</sup> Madhya Pradesh Young Scientist Congress*, held on 15-16 March, 2018 organized by M. P. Council of Science & Technology, Bhopal at Rani Durgawati Vishwavidyalaya, Jabalpur.
7. Presented a paper titled **“Performance Evaluation over Multi-time Period using Dynamic Data Envelopment Analysis”** at *National Conference on Advances in Operations Research and Mathematical Sciences (AORMS-2018)*, held on 24-25 March, 2018 organized by Department of Research and Post Graduate Studies in Mathematics and Department of Statistics, Vardhaman College, Bijnor(U.P.) in association with

Operational Research Society of India(ORSI) Meerut Chapter.

8. Presented a paper titled “**Demonetization: Basic and Beyond**” at *National Seminar on Emerging Dimensions of Indian Business and Economy: Pace and Pattern*, held on 23-24 February, 2018 organized by Department of Commerce, Sri Aurobindo College, University of Delhi, New Delhi.
9. **Delivered expert talk on “Creativity, Innovation and Entrepreneurship: Role of Mathematics and Intellectual Property Rights”** in *Two days Short Term Training Program on : Creativity & Innovation for Entrepreneurship through Science and Technology* held on 18-19 August 2020, by Department of Basic Science, Vishwavidyalaya Engineering College, Lakhanpur ,Bhilai under TEQIP-III Sponsership.
10. **Delivered expert talk on “Intellectual Property Rights and Indian Patent filing System”** in National Workshop on Intellectual Property Rights held on 01 December 2018 in School of Data Science and Forecasting, Devi Ahilya Univeristy Indore.
11. Delivered a talk on “**Optimizing the Covid-19 Lockdown time**” at Webinar organized by Department of Mathematics, Bhagini Nivedita College, University of Delhi, on 14 May 2020.
12. Attended 15 days Online Teacher’s Enrichment Workshop on “**Differential Equations and its Applications**” organized by *National Centre for Mathematics: A Joint Centre of TIFR and IIT Bombay* from March 15-28, 2021 hosted by Deshbandhu College, University of Delhi.
13. Attended 5 days National Webinar on “**Financial Mathematics: Pedagogy and Career Perspectives**” organized by Department of Mathematics, Lady Shri Ram College for Women, University of Delhi from 27-31 July, 2020 at Delhi.
14. Attended one week Faculty Development Programme on “**Transforming Teachers for a Sustainable Post COVID-19 World**” organized by (Institute of Information Technology and Management(IITM) from August 16-20, 2021.
15. Attended one week Faculty Development Programme on “**Emergence of Blockchain Technologies and Cryptocurrencies**” organized by (Institute of Information Technology and Management(IITM) from August 09-14, 2021.
16. Attended 6 days Teacher’s Enrichment Workshop on “**Algebra and its applications**” organized by *National Centre for Mathematics: A Joint Centre of TIFR and IIT Bombay* from May 06-11, 2019 at Shivaji College, University of Delhi.
17. Attended 6 days Teacher’s Enrichment Workshop on “**Differential Equations, Mathematical Modelling & Analysis**” organized by *National Centre for Mathematics: A Joint Centre of TIFR and IIT Bombay* from July 24-29, 2018 at Deshbandhu College, University of Delhi.
18. Attended 5 days Faculty Development Programme on “**Artificial Intelligence(AI) and Machine Learning**” conducted by IIT Rookee jointly organised by Electronics and ICT Academies through *National Knowledge Network by Ministry of Electronics and Information Technology(Meity)*, Government of India from 04-08 June, 2018 at C-DAC Noida.

Research Projects (Major Grants/Research Collaboration)
<ul style="list-style-type: none"> <li>• <b>JRF Professional</b> in DST project “Development of decision support system for sustainable biomass production and carbon sequestration in forests of Malwa region of Madhya Pradesh” at School of Future Studies &amp; Planning (SFSP), <b>Devi Ahilya University (DAVV)</b>, Indore M. P. from October 2008 to May 2010</li> </ul>
Awards and Distinctions
<ul style="list-style-type: none"> <li>• <b>Young Scientist Award</b> 2018 Under <b>Mathematical Sciences</b> by Madhya Pradesh Council of Science and Technology</li> <li>• <b>Women Scientist-IPR</b> 2011 through Department of Science &amp; Technology</li> <li>• <b>CSIR NET JRF(Mathematics)</b> JUNE 2009 qualified with 133<sup>rd</sup> Rank</li> <li>• <b>GATE(Mathematics)</b> 2006 qualified with AIR 135<sup>th</sup></li> <li>• <b>MPPSC-2012</b> qualified as <b>Deputy Superintendent of Police(DSP)</b> with 14<sup>th</sup> Rank</li> <li>• <b>Attended 45 days MTTs (Mathematics Training and Talent Search) program Level -II</b> held in Pune organized by <b>National Board for Higher Mathematics (NBHM)</b> in May 2005.</li> <li>• Secured Third position in the “<b>MEGHNATH SAHA OLYMPIAD</b>” 2003-2004 conducted by Department of Physics Government Ideal Autonomous Holkar Science College Indore.</li> </ul>
Association With Professional Bodies
<ul style="list-style-type: none"> <li>• <b>Women Scientist-IPR (WOS-C)</b> at Patent Facilitating Centre (PFC), <b>TIFAC, Department of Science and Technology</b>, New Delhi from May 10, 2010 to May 9, 2011.</li> <li>• <b>Registered patent agent.</b></li> </ul>
Other Activities
<ol style="list-style-type: none"> <li>1. <b>Coordinator of International Webinar Series on Sister Nivedita: - Lecture I-VIII</b>, Organized in Bhagini Nivedita College, University of Delhi from 06 January-17 February 2021.</li> <li>2. <b>Organized and conducted Yoga session for RWA Gurgaon Sector 21</b> in association with Ministry of AYUSH on International Yoga Day in 2016.</li> <li>3. Organized “<b>National Workshop on Advance Analytical Techniques in Research and Development</b>”, as a member, held on 20-21 December 2012, at Amity Institute of Applied Sciences, Amity University, Noida.</li> <li>4. Coordinator of <b>Gender Sensitization Cell</b> of Bhagini Nivedita College from 2019-2020 and organized various events and webinars.</li> <li>5. Coordinator of <b>Mathematical Society</b> at Bhagini Nivedita College and organized various events and seminars like mathematical quiz, visit, movie show, dumb-shiraz etc.</li> <li>6. <b>Active member</b> of <b>Azadi ka Amrut Mahotsav Committee, Admission Swatch Bharat Committee, Magazine Committee, Literary &amp; Debating society, Student Advisory committee</b></li> </ol>

**and Cultural committee** of Bhagini Nivedita College, University of Delhi.

7. **M.Tech. Major Project:** Undergone 4 months training in Engineering Services Department of **TATA INTERNATIONAL LTD**, Dewas from February 2008 to May 2008 and completed a project on *“A forecasting and statistical analysis of Leather industry & a WBS model for new footwear plant”* of TATA INTERNATIONAL LTD.
8. **M. Tech. Minor Projects:** *“Systems Dynamic Modeling of Manpower Hiring in ITES-BPO”* & *“modeling and simulation of Fish population in fresh pond”*.

Seema Gupta

Signature of Faculty Member

- You are also requested to also give your complete resume as a DOC or PDF file to be attached as a link on your faculty page.