

Name Nitin Goel
Designation Assistant Professor
Date of Joining Jan 10, 2007
Qualification B.Tech (Electrical Engg.)
M.Tech (Power System & Drives)
Ph.D (Pursuing, DCRUST Murthal)
Area of interest Power System, Renewable Energy
Teaching Experience 18 Years
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Publications:

International/National Journals:

1. Sunil Kumar, Nitin Goel, P.R. Sharma, "Investigation on Doubly Fed Induction Generator Steady State Parameters", *International Journal of Power System Operation and Energy Management (IJPSOEM)*, Volume-1, Issue-4, 2012, pp 19-21, 2012
<https://www.interscience.in/cgi/viewcontent.cgi?article=1064&context=ijpsoem>
2. Satvinder Singh, Nitin Goel, Pawan Kumar "Study and Analysis of Reactive Power in Wind Farm for Reducing Distribution Losses Using Genetic Algorithm," *International Journal of New Innovations in Engineering and Technology (IJNIET)*, Vol. 1 Issue 3, pp 67-75, February 2013. <http://ijniet.org/wp-content/uploads/2013/03/12.pdf>
3. Satvinder Singh, Nitin Goel, Pawan Kumar, "A Novel Approach for Reactive Power Output Optimization in Wind Farm for the Reduction of Distribution Losses using Genetic Algorithm" *International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering (IJAREEIE)*, Vol. 2, Issue 3, pp 1053-1059, March 2013. http://www.ijareeie.com/upload/march/13_A%20Novel%20Approach.pdf
4. Satvinder Singh, Nitin Goel, Pawan Kumar, "FACTS Technologies for the Developments of Future Transmission Systems," *International Journal of Emerging Trends in Engineering and Development(IJETED)*, Vol.2, Issue 3, pp 587-595 , March 2013. <https://rspublication.com/ijeted/march13/60.pdf>
5. Satvinder Singh, Nitin Goel, Atma Ram, Pawan Kumar. "Transient Stability Enhancement of Multi-Machine System using FACTS Controllers", *International Journal of Engineering Science and Innovative Technology(IJESIT)*, Vol.2, Issue 2, pp 1053-1059, April 2013 http://www.ijesit.com/Volume%202/Issue%202/IJESIT201302_40.pdf
6. Nitin Goel, Shilpa, Shashi Yadav, "Simulation of Real and Reactive Power Flow Assessment with UPFC connected to a Single/Double Transmission line", *International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering (IJAREEIE)*, Vol. 3, Issue 4, pp 8384-8391, April 2014
<http://www.ijareeie.com/volume-3-issue-4#>
7. Nitin Goel, Shashi Yadav, Shilpa, "Three Phase Induction Motor Drive Using Single Phase Inverter and Constant V/F Method", *International Journal of Advanced Research*

in *Electrical, Electronics and Instrumentation Engineering (IJAREEIE)*, Vol. 3, Issue 4, pp 8339-8345, April 2014.

https://www.ijareeie.com/upload/2014/april/8_Three.pdf

8. Nitin Goel, P.R. Sharma, Suman Bala, "Performance Analysis Of SPWM Inverter Fed 3-Phase Induction Motor Drive Using MATLAB/Simulink", *International Journal of Advanced Technology in Engineering and Science (IJATES)*, Vol. 02, Issue 06, pp 183-193, June 2014
http://www.ijates.com/images/short_pdf/1403523469_P183-192.pdf
9. Nitin Goel, P.R. Sharma, Shashi Yadav, "Performance Analysis Of Doubly Fed Induction Machine", *International Journal of Advanced Technology in Engineering and Science*, Vol. 02, Issue 06, pp 284-289, June 2014
http://www.ijates.com/images/short_pdf/1403811273_P284-289.pdf
10. Manish Soni, Nitin Goel, "Simulation Modelling of Permanent Magnet Synchronous Machine Using Artificial Neural Network With PWM Technique" *International Journal of Electrical and Electronics Engineering Research*, Vol. 05, Issue 6; 61-70; Dec 2015
<http://www.tjprc.org/publishpapers/--1467111692-7.%20IJEEER%20%20-%20SIMULATION%20MODELLING%20OF%20PERMANENT%20MAGNET%20SYNCHRONOUS%20MACHINE.pdf>
11. Syed Arshad Hussain, Manish Soni, Nitin Goel, "Controlling of Doubly Fed Induction Generator Using Direct Torque Control", *International Journal of Scientific and Engineering Research*, Vol. 07, Issue 05: 1839-1846, May 2016
<https://www.ijser.org/researchpaper/CONTROLLING-OF-DOUBLY-FED-INDUCTION-GENERATOR-USING-DIRECT-TORQUE-CONTROL.pdf>
12. Nancy, Nitin Goel, "Application of FACTS devices in wind farm", *International Journal of Engineering Research and General Science*, Vol. 5, Issue 3, June, 2017
<http://pnrsolution.org/Datacenter/Vol5/Issue3/18.pdf>
13. Nitin Goel, Neha Saxena, "Soft Computing Application for Controlling Three Phase Induction Motor", *International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering (IJAREEIE)*, Vol. 6, Issue 7, pp 5348-5355, July 2017
http://www.ijareeie.com/upload/2017/july/20_Soft.pdf
14. Nitin Goel, P.R. Sharma, Dheeraj Joshi, "Analysis of Doubly Fed Induction Generator with Effect of Various Design Parameters" *Trends in Electrical Engineering (TEE)*, Vol 8, Issue 2, pp 10-18, Nov 2018.
<http://engineeringjournals.stmjournals.in/index.php/TEE/article/view/589>
15. Nitin Goel, P.R. Sharma, Dheeraj Joshi, "Analysis of Doubly Fed Induction Generator performance with variation in rotor resistance" *Journal of Emerging Technologies and Innovative Research (JETIR)*, Vol 5, Issue 8, pp 1150-1156, Aug 2018.
<https://www.jetir.org/view?paper=JETIRA006200>
16. Sumit Kumar Yadav, Shakuntla, Boora, Nitin Goel, "Design and Implementation of Electromagnetic Suspension Systems using FEM Parameterized Linear Actuator" *European Chemical Bulletin*, vol. 11(12), pp 749-759, 2022

17. Nitin Goel, Naresh Kr. Yadav, "Sustainable microgrid operations: multi-objective hybrid optimization for combined economic emission dispatch," *Electrical Engineering*. Springer Nature, Online 23/01/2025 <https://doi.org/10.1007/s00202-024-02912-9>
18. Nitin Goel, Naresh Kumar Yadav, "Hybrid Optimisation Strategy Based Economic Emission Dispatch for Microgrid", *International Journal of Industrial and Systems Engineering* (Inderscience - Scopus) Vol 50 (2), pp 164-190, **2025**
DOI: [10.1504/IJISE.2025.146608](https://doi.org/10.1504/IJISE.2025.146608)

International / National Conferences Attended:

1. Nitin Goel, Shakuntla Boora & Sunil Jadav, "Diagnose of Transformer Using DR Technique", National Conference on Recent Technologies in Electronics, VCE Meerut April 2011
2. Sunil Jadav, Gaurav Saini, Anand Pratap Singh and Nitin Goel, " Investigation on Different Parasitic of Current Mode Receiver", National Conference on Recent Technologies in Electronics, VCE Meerut April 2011
3. Nitin Goel, P.R. Sharma & Sunil Kumar, " Study of Doubly Fed Induction Generator Characteristics", National Conference on New Paradigms in Electronics, Communication & Computing, Echelon Institute of Technology, Faridabad, May 19, 2012
4. Nitin Goel, P.R. Sharma & Dheeraj Joshi, "Effect of Magnetizing Reactance on Doubly Fed Induction Generator Performance", All India Seminar on Optimal Use of Power Electronics in Modern Power System & Renewable Energy, Organized by IEI (India), Udaipur, March 8-9, 2013
5. Nitin Goel & Manish Soni, "Simulation Modelling of Permanent Magnet Synchronous Motor using PWM Technique", National Conference on Role of Science and Technology Towards 'Make in India', YMCA University of Science & Technology, Faridabad, March 05-07, 2016
6. Sonali Saini, Ashu, Nitin Goel and Munish Vashishath, "Comparison of Solar Energy Generating Materials: A Survey", INDIACom-2017; IEEE Conference, International Conference on "Computing for Sustainable Global Development" (BVICAM), New Delhi, March 01-03, 2017
<http://bvica.com.in/INDIACom/news/INDIACom%202017%20Proceedings/Main/papers.html>
7. Nitin Goel, P.R. Sharma & Dheeraj Joshi, "Power Quality Improvement of Grid Connected DFIG using Fuzzy Controller", 2018 2nd IEEE International Conference on Power Electronics, Intelligent Control and Energy Systems (ICPEICES), Delhi Technological University, Delhi, Oct 22-24, 2018
<https://ieeexplore.ieee.org/document/8897385>
8. Nitin Goel, Sangeeta Dhal, Bhavna Chauhan, Anshul Chopra, "A Comparison of Various Hashing Techniques", INDIACom-2018; IEEE Conference, International Conference on "Computing for Sustainable Global Development" (BVICAM), New Delhi, March 14-16, 2018
<http://bvica.com.in/INDIACom/news/INDIACom%202018%20Proceedings/Main/papers.html>

9. Nitin Goel, Atma Ram & Rajesh Saw “Performance Enhancement of MPPT Based Photovoltaic System Using Fuzzy Logic Controller”, International Conference on Advances in Sustainable Energy, Environment and Engineering (ICASEE-2021), J C Bose University of Science and Technology, YMCA Faridabad, April 16-17, 2021
10. Amit Sharma, Atma Ram & Nitin Goel, “IRPT Based Control Technique for DSTATCOM For Power Quality Enhancement”, International Conference on Advances in Sustainable Energy, Environment and Engineering (ICASEE-2021), J C Bose University of Science and Technology, YMCA Faridabad, April 16-17, 2021
11. Manish, Anju Gupta, Atma Ram & Nitin Goel, “Simulation of A Three Phase Inverter Using Closed Loop Voltage Control”, International Conference on Advances in Sustainable Energy, Environment and Engineering (ICASEE-2021), J C Bose University of Science and Technology, YMCA Faridabad, April 16-17, 2021
12. Nitin Goel, Neeraj Gupta, Prashant Kumar, Lalit Rai, “A Mathematical Model of Steam Drum Boiler and its Simulink Model for Power Plant” International Conference on Emerging Trends in Engineering, Science, Technology and Business (ICETESTB-2023), EIT Faridabad, May 10-11, 2023
13. Nitin Goel, Naresh Yadav, “A Review on Combined Economic and Emission Dispatch in Microgrid using Various Optimization Techniques” International Conference on Emerging Trends in Engineering, Science, Technology and Business (ICETESTB-2023), EIT Faridabad, May 10-11, 2023
14. Nitin Goel, Naresh Yadav, “Innovative Hybrid Optimization Algorithms to Enhance Combined Economic and Emission Dispatch in Microgrids” International Conference on Green Sustainable Solutions (ICGSS-2025), Dev Bhoomi Uttarakhand University, Dehradun, Feb 27-28, 2025.

Article Published in Technical Magazine

1. Nitin Goel “*Power Scenario - Status Quo of Maharashtra*”, Electrical India, Vol 56, Issue 1, pp 71-74, Jan 2016

Books/ Book Chapters

1. Atma Ram, P. R. Sharma, Rajesh Kr Ahuja, Nitin Goel “PLL Less Control Algorithm for Power Quality Improvement in Distribution System Using D-STATCOM”, LNEE (Innovations in Electrical and Electronic Engineering), Springer (ISBN1876-1100), pp 115-126, Feb 2020
https://link.springer.com/chapter/10.1007/978-981-15-4692-1_9
2. Sumit Kumar Yadav, Shakuntla Boora, Nitin Goel, “A Hybrid Approach to PMBLAC Machine for High-Speed Mobility” LNEE (Recent Developments in Electrical and Electronics Engineering) Springer, 2023, vol (979), pp 165–177
[A Hybrid Approach to PMBLAC Machine for High-Speed Mobility | SpringerLink](#)
3. Handbook on Electrical Vehicle Technology (Dec 2023) Scientific International Publishing House, ISBN 978-93-5757-827-1

[Scientific International Publishers \(sipinternationalpublishers.com\)](http://sipinternationalpublishers.com)

4. Fundamentals of Solar Photovoltaic Power Systems (Dec 2023) Scientific International Publishing House, **ISBN 978-93-5757-703-8**
[Scientific International Publishers \(sipinternationalpublishers.com\)](http://sipinternationalpublishers.com)
5. Human Values and Ethics in Professional Education (April 2024) Adhyyan Books, **ISBN 978-93-5847-232-5**
6. AI Tools for Research (June 2024) Infinite Research **ISBN 978-81-975273-8-8**

Patents

1. Design Patent granted "Smart Dustbin" (Design No. 378751-001) 04/09/2023
2. Design Patent granted "Light Weighted Surveillance Drone" (Design No. 405534-001) 24/01/2024
3. Design Patent granted "Solar Powered Wheelchair" (Design No. 454815-001) 09/04/2025
4. Design Patent granted "IoT-Based Organic Waste composting Machine" (Design No. 405534-001) 10/02/2025

Project

SEED Money Project Grant for the amount of Rs. 1,78,000 "Implementation of Six Axis Robotic Arm Multi-Purpose Industrial Application" 20/02/2025

Project/Dissertation Supervision:

1. M.Tech Minor Project: 13 (Completed)
2. M.Tech Dissertation: 12 (Completed)
3. MBA Project: 03 (Completed)

Administrative Duties/Participation

1. Vice-Principal in Community College of Skill Development, JCBoseUST, YMCA (since Jan 2021)
2. Member of the board of studies (BOS-Under Graduate) (July 2018-2020, Feb 2023 onward)
3. Member of the board of studies (BOS-Post Graduate) (since 2023)
4. Worked as Deputy Registrar (Purchase) (2016-17)
5. Department Web Site coordinator (2012-2021)
6. Twinning Coordinator in TEQIP-III project of the University (2017-20)
7. Department NBA Coordinator for NBA 2020-21
8. Department NBA Coordinator for NBA 2021-24
9. Member of Department Purchase Committee (2012-2023)
10. Member of Curriculum Design/Development for M.Tech Energy and Environment (2020-21)
11. Department UG Scheme/Curriculum Coordinator (since 2018)
12. Time Table coordinator (since 2019)
13. Member of Alumni Cell of the University (Since 2020)

14. Worked as University 'UGC Cell' Co-coordinator (2016-17)
15. Worked as Centre Supdt for University Examination at affiliating colleges
16. Worked on University's Solar Project (2014)
17. Worked as AICTE Coordinator (2012-2016)
18. Worked as CBS Exam Coordinator (2011-2019)
19. Participation in UG/PG admission committee.
20. Electrical Machine Lab in charge (2007-2015 and from 2020 onward)
21. Member of the University House allotment committee (Since 2022)

Membership of Technical Societies

1. Institution of Engineers (India)
2. IAENG International Association of Engineers
3. The Indian Science Congress Association
4. The Indian Society for Technical Education (ISTE)
5. Nuclear Track Society of India (NTSI)
6. Vijnana Bharati Haryana (VIBHA)

Activities conducted and organized

1. Conducted Expert Lecture on **“Three Secrets about The Electric Vehicle”** on 06/08/2024.
2. Conducted a value-added course in **“Power Electronics Circuits Simulation using LTSpice and MATLAB Simulink”** during the session from January to May 2024.
3. Conducted Community Outreach Skill Development Programme (COSDP) on **“Domestic Manufacturing of Show Lights (LED lights) for Rural and Underprivileged People — A Start-Up Concept Idea”** from Nov 06-10, 2023.
4. Conducted Value Added Course in **“LTSpice Circuit Simulation and Analysis Fundamentals”** during Oct-Nov 2023
5. Conducted Value Added Course in **“MS Office for Report Writing and Presentation”** during July- Dec 2022 session.
6. Organized Expert Lecture on **“Detection and Design of False Data Injection Attack on Cyber-Physical System”** 09th August 2022.
7. Conducted AICTE Sponsored International Conference on **“Recent Developments In Electrical and Electronics Engineering (ICRDEEE 2022)”** from 15th -16th April 2022.
8. Conducted Online Webinar on **“Converting Research to Patents”** 4th March 2022.
9. Conducted AICTE-sponsored online Short-Term Training Program on **“Electric Vehicle Techniques with OPAL-RT Solutions”** from 20th – 25th Dec 2021.
10. Conducted Two-day workshop on **“Design and Development of Electric Vehicle using Ansys”** 26th -27th Nov 2021
11. Conducted Webinar on **"Process of Writing and Publishing Quality Research Papers in Indexed Journals"** on 07th July 2021
12. Conducted Short Term Training Program (STTP) on **“AutoCAD for Engineers with PLC Basics”**, 25th June-02nd July 2021.

13. Conducted International Conference on “**Advances in Sustainable Energy, Environment and Engineering (ICSAAEE-2021)**”, 16-17 April 2021
14. Conducted TEQIP-III sponsored Faculty Development Program on “**Green Technology**”, 18-20 July 2020
15. Conducted Online Staff Development Programme on “**Basic computer skills and ICT Tool "Google Classroom"**”, 10-14 July 2020
16. Conducted National Quiz on “**Renewable Energy for Sustainable Development in India**”, 17 June 2020
17. Member of organizing committee in NAAC sponsored Workshop “**AN insight into Revised Accreditation Framework of NAAC**” 12 Feb 2020
18. Member of organizing committee of 8th International Symposium on “**Fusion of Science and Technology (ISFT-2020)**” 6-10 Jan 2020
19. Conducted Value Added Course in “**AutoCAD**” during July-Nov 2019.
20. Member of organizing committee of International Conference on “**Sustainable Development through Research in Engineering and Management**”, 26-27 Dec 2016.
21. Member of organizing committee of National Conference on “**New Horizons in Technology for Sustainable Energy and Environment**”, 9-10 March 2017
22. Member of organizing committee of International Conference on “**Sustainable Development through Research in Engineering and Management SDREM2016**”, 26-27 Dec 2016
23. Member of organizing committee of National Conference on “**Role of Science and Technology toward Make in India**”, 5-7 March 2016.
24. Member of organizing committee of DeitY Sponsored Workshop on “**Protecting and Exploring IPRs**” 19-20 Oct 2015.

Expert Lecture:

1. Delivered expert lecture on “**Entrepreneurship**” at Rajkiya Engineering College (REC), Ambedkar Nagar (UP) under TEQIP-III Twinning Activity, dated 19/02/2019.
2. Conducted a session and delivered an expert lecture on “**MS PowerPoint**” in One Week Online Staff Development Program (SDP) on **Basic Computer Skills and ICT Tools “Google Classroom”** conducted by the Department of Electrical Engineering, JCBoseUST, YMCA, Faridabad during July 10-14, 2020.
3. Conducted a session and delivered an expert lecture on '**Introduction to LTspice**' as part of the Value-Added Course titled '**LTspice Circuit Simulation and Analysis Fundamentals**,' organized by the Department of Electrical Engineering, JCBUoseUST, YMCA, held during Oct-Nov 2023.
4. Conducted a session and delivered an expert lecture on '**AC Circuit Simulation and Analysis using LTspice**' as part of the Value-Added Course titled '**LTspice Circuit Simulation and Analysis Fundamentals**,' organized by the Department of Electrical Engineering, JCBUoseUST, YMCA, held during Oct-Nov 2023.
5. Conducted a session and delivered an expert lecture on '**Building and Analyzing Diode circuits in LTspice**' as part of the Value-Added Course titled '**LTspice Circuit**

Simulation and Analysis Fundamentals,' organized by the Department of Electrical Engineering, JCBUoseUST, YMCA, held during Oct-Nov 2023.

6. Conducted a session and delivered an expert lecture on '**Simulation and Analysis of BJT Amplifier circuits in LTspice**' as part of the Value-Added Course titled '**LTspice Circuit Simulation and Analysis Fundamentals,**' organized by the Department of Electrical Engineering, JCBUoseUST, YMCA, held during Oct-Nov 2023.
7. Conducted a session and delivered an expert lecture on '**Understanding and Simulation of Operational Amplifier Circuits in LTspice**' as part of the Value-Added Course titled '**LTspice Circuit Simulation and Analysis Fundamentals,**' organized by the Department of Electrical Engineering, JCBUoseUST, YMCA, held during Oct-Nov 2023

Short-Term Courses/ Workshops/Seminars Attended:

Activity	In Campus (JCBUST, YMCA)	Other Institutes/ Organizations
FDP/STP	18	21
Workshops	07	06
Seminar/Webinar	03	03
MOOC Courses		02