


GIDC DEGREE ENGINEERING COLLEGE FACULTY PROFILE

	Name of Teaching Staff	Dr. Ankurkumar Pramobhai Desai			
	Designation	Assistant Professor			
	Department	Electrical Engineering			
	Date of Joining	29.09.2016			
	Qualifications with Class/Grade	UG	PG	PhD	
		First	First Class with Distinction	Ph.D. (Electrical Engineering)	
	Total Experience in Years	Teaching	Industry	Research	
		14 Yrs	-	5 Yrs	
	Area of Interest	Multiphase Induction Motor Drive, Industrial Automation, Control System, Power System Protection, Power System, Microprocessors and Microcontrollers			

	Papers Published in Journals	National	-	International	5
	Papers Presented at Conferences	National	-	International	4
	ORCID ID	https://orcid.org/0000-0002-7437-780X			

Details of Publication:-

1. **“A Novel Practical Approach to Identify Equivalent Circuit Parameters of Six-Phase Asymmetrical Induction Motor”**, Journal of Institution of Engineering (India) series B, Springer Nature, (Published).
 - Indexing: - **Scopus**, UGC Care List (India), etc.
 - Impact factor: - **1.6** (Year-2021)
 - ISSN: - 2250-2106, Electronic ISSN: - 2250-2114
 - Publisher:-**Springer Nature**
 - DOI:-<https://doi.org/10.1007/s40031-022-00805-8>
 - **Scopus Indexing:-**[https:- Desai, Ankurkumar Pramodbhai - Author details - Scopus Preview](https://desai.ankurkumarpramodbhai.com/author/details)
2. **“Experimental Realization of a Novel 48-Sector Space Vector Decomposition based SVPWM Technique for a Six-Phase Two-Level VSI-Fed Six-Phase Asymmetrical Induction Motor”**, Journal of Control, Automation and Electrical Systems, Springer Nature, (Published).
 - Indexing:- **Scopus**, **ESCI**, UGC Care List, etc.
 - Cite Score: - **2.6** (Year-2021)
 - Print ISSN:- 2195-3880, Electronic ISSN:- 2195-3899
 - Publisher:-**Springer Nature**
 - DOI:-<https://doi.org/10.1007/s40313-023-00985-8>
 - **Scopus Indexing:-**[https:- Desai, Ankurkumar Pramodbhai - Author details - Scopus Preview](https://desai.ankurkumarpramodbhai.com/author/details)
3. **“A New 48-Sector Space Vector Decomposition based SVM-DTC for Performance Improvement in Direct Torque Controlled Six-Phase Asymmetrical Induction Motor Drive”**, Journal “Electrical Engineering”, Springer Nature, (Published).
 - Indexing: - SCI, Scopus, UGC Care List, SCIE, etc.
 - CiteScore: - **3.3** (Year-2023)
 - Print ISSN:- 0948-7921, Electronic ISSN:- 1432-0487
 - Publisher:-**Springer Nature**
 - DOI:-<https://doi.org/10.1007/s00202-023-01788-5>
 - **Scopus Indexing:-**[https:- Desai, Ankurkumar Pramodbhai - Author details - Scopus Preview](https://desai.ankurkumarpramodbhai.com/author/details)
4. **“A Six-Phase Two Level VSI-Fed Six Phase Asymmetrical Induction Motor Using 48-Sector Vector Space Decomposition based SVPWM”**, 2nd International Conference of Emerging Technology (INCET 2021), from 21st to 23rd May 2021 and published at the IEEE Xplore and indexed in Scopus,(Published).
 - Indexing: - **Scopus**, UGC care List, etc.
 - INSPEC Accession Number: 20866949
 - Print ISSN:-978-1-7281-7030-5, Electronic ISSN:- 978-1-7281-7029-9
 - Publisher:- **IEEE**
 - DOI:-**10.1109/INCET51464.2021.9456128**
 - **Scopus Indexing:-**[https:- Desai, Ankurkumar Pramodbhai - Author details - Scopus Preview](https://desai.ankurkumarpramodbhai.com/author/details)

Scopus Preview

5. **“An Investigation of Direct Torque Control for a Six-Phase Asymmetrical Induction Motor”**, the IEEE 19th India Council International Conference (2022 INDICON), from 24th to 26th November 2022 and published at the IEEE Xplore and indexed in Scopus,(Published).
 - Indexing: - **Scopus**, UGC care List, etc.
 - Print ISSN: 2325-940X, Electronic ISSN:- 2325-9418
 - Publisher: - **IEEE**
 - DOI:-**10.1109/INDICON56171.2022.10039813**
 - **Scopus Indexing:-https:-** [Desai, Ankurkumar Pramodbhai - Author details - Scopus Preview](#)
6. **“Design and Analysis of High Gain DC to DC Converter”**, 2023 IEEE Renewable Energy and Sustainable E-Mobility Conference (RESEM) organized at Maulana Azad National Institute of Technology, Bhopal, from May 17th –18th, 2023 and will be published at the IEEE Xplore and indexed in Scopus.
 - Indexing: - **Scopus**, UGC care List, etc.
 - Print ISSN: 2325-940X, Electronic ISSN:- 2325-9418
 - Publisher: - **IEEE**
 - DOI:- [10.1109/RESEM57584.2023.10236278](#)
 - Scopus indexing :- [Desai, Ankurkumar Pramodbhai - Author details - Scopus Preview](#)
7. **“Three Phase Shunt Active Filter With Constant Instantaneous Power Control Strategy”** International Journal of Electrical Engineering & Technology (IJEET), ([www.iaeme.com](#)), Vol.4, Issue.4, July-Aug (2013), pp.245-254 (Published).
 - ISSN 0976-6545(Print), ISSN 0976-6553(online)
8. **“Analysis Approach For Three-Phase Two-Level Voltage Source Inverter And Five-Phase Two-Level Voltage Source Inverter For Induction Motor Drive”**, ([http://www.ijret.org/](#)) Volume: 2 Issue: 2 167 – 171 (Published).
 - ISSN: 2319 – 1163
 - Paper ID: S2013020273
9. **"Simulation Study of Sensorless Speed Control for Brushless DC Motor"** in the IEEE R10 Humanitarian Technology Conference 2023, organized at Marwadi University, Rajkot, India, from October 16–18, 2023. The conference is sponsored by the IEEE Gujarat Section. <https://doi.org/10.1109/R10-HTC57504.2023.10461918>
10. **“A Study with Simulation Implementation of Field Failure Protection on Synchronous Generator”** in Transactions of the Indian National Academy of Engineering (22-April-2024). <https://doi.org/10.1007/s41403-024-00474-7>
11. **“Investigation of a 2.2 kW Three Phase Induction Motor using Direct Troque Control for EV Applications”** in Sixth International Conference on Electrical, Computer and Communication Technologies (ICECCT 2024) on 26-

06-2024.

12. **“Modeling and Implementation of Autorecloser in Radial Power System and Microgrid”** in ICEPES2024 (3rd IEEE International Conference Electrical Power and Energy Systems on 21-06-2024.

Book:-

A book chapter in **“Special Electrical Machinery”** book and published by Wiley publication, in July 2024. ISBN: 978-1-394-19361-5.

<https://www.wiley.com/en-in/Special+Electrical+Machinery-p-9781394193615>

Design Patent

- **Design Patent Name: Transformer**
- Application Number: 373274-001
- Cbr Number: 207787
- Cbr Date: 31/10/2022 14:48:00
- Design Application Status: Design Accepted and Published, Journal No is 30/2023 and Journal Date is 28/07/2023
- Design Number: 373274-001
- Date of Registration: 31/10/2022
- Publisher: Office of the Controller General of Patents, Design & Trademarks, Department of Promotion of Industry and Internal Trade, Ministry of Commerce & Industry, Govt. of India
- Patent and Design Journal No: 30/2023
- Date of Publication: 28/07/2023
- Date of Availability: 28/07/2023
- **Link for Journal:** <https://search.ipindia.gov.in/DynamicUtility/Journal/Patent>

Reviewer of Research Paper in Peer Reviewed Scopus Index Journal

- i. Prof. (Dr.) Ankur P Desai reviewed a research article in the Journal of the Institution of Engineers (India): Series B, ISSN: 2250-2114, Springer Nature (New York, US) in April-March 2023.
- ii. Prof. (Dr.) Ankur P Desai reviewed a research article in the Journal of the Institution of Engineers (India): Series B, ISSN: 2250-2114, Springer Nature (New York, US) in June-July 2023.
- iii. Prof. (Dr.) Ankur P Desai reviewed a research article in the Journal of the Institution of Engineers (India): Series B, ISSN: 2250-2114, Springer Nature (New York, US) in July-Aug 2023.
- iv. Prof. (Dr.) Ankur P Desai reviewed a research article in the Journal of the Institution of Engineers (India): Series B, ISSN: 2250-2114, Springer Nature (New York, US) in Aug-Sept 2023.
- v. Prof. (Dr.) Ankur P Desai reviewed a research article in the Journal of the Institution of Engineers (India): Series B, ISSN: 2250-2114, Springer Nature (New York, US) in Sep-Oct 2023.
- vi. Prof. (Dr.) Ankur P Desai reviewed a research article in the Journal of the Institution of Engineers (India): Series B, ISSN: 2250-2114, Springer Nature (New York, US) in Aug-

Oct-Nov 2023.

- vii. Prof. (Dr.) Ankur P Desai reviewed a research article in the Journal of the Institution of Engineers (India): Series B, ISSN: 2250-2114, Springer Nature (New York, US) in Nov-Dec 2023.
- viii. Prof. (Dr.) Ankur P Desai reviewed a research article in the Journal of the Institution of Engineers (India): Series B, ISSN: 2250-2114, Springer Nature (New York, US) in Feb 2024.
- ix. Prof. (Dr.) Ankur P Desai reviewed a research article in the Journal of the Institution of Engineers (India): Series B, ISSN: 2250-2114, Springer Nature (New York, US) in May-2024.
- x. Prof. (Dr.) Ankur P Desai reviewed a research article in the Journal of the Institution of Engineers (India): Series B, ISSN: 2250-2114, Springer Nature (New York, US) in June-2024.

Expert Lecture on Webinar

- i. Prof. (Dr.) Ankur P. Desai conducted an expert lecture on “Power Electronics Converters” in the webinar organized by the Electrical Engineering Department, Govt. Polytechnic, Navsari on 25th October 2021.
- ii. Prof. (Dr.) Ankur P. Desai conducted an expert lecture on “PLC and its programming” at Electrical Engineering Department of Govt. Polytechnic, Vyara on 21-April-2024.
- iii. Prof. (Dr.) Ankur P. Desai conducted an expert lecture on “PLC and its programming” at Electrical Engineering Department of Govt. Polytechnic, Navsari on 23-April-2024.

Jury Member

- i. Prof. (Dr.) Ankur P. Desai served eminent Expert and judge in the “paper presentation “of state-level inter-collegiate techfest VISVESMRUTI-2017” at FETR College, Bardoli.
- ii. Prof. (Dr.) Ankurkumar P. Desai served as an expert in the skill competition in the present Collector of Navsari district among the ninety-four secondary and high secondary schools that offer the trade and vocational education courses at Vidhyakunj School, Navsari, which is held on December 18, 2023.

STTP/WORKSHOP/ CONFERENCE / SEMINAR Organized or Participated

1. Seminar /Webinar

- i. A seminar on “Aakash for Education” organized by Govt. of Gujarat dated 10th - 11th - Nov 2012.
- ii. A seminar on the “Nuclear Energy Awareness” program organized by KAPS, Kakrapar dated 20th and 22nd of July 2013.

- iii. A seminar on “Technical Enabled Technical Education: Issue and Perspectives” dated 20th Oct 2012.
- iv. A seminar on “Journey of Life” was organized by GDEC on 9th March 2017.
- v. A webinar on “Predictive Maintenance in MATLAB and Simulink” organized by MATLAB with Registration No. 692982 dated 23rd June 2017.
- vi. A webinar on “MATLAB for C/C++ Programmers” organized by MATLAB with Registration No. 318821 dated 8th August 2017.
- vii. A webinar on “Mathematical Modeling in the MATLAB Live Editor” organized by MATLAB with Registration No. 622779 dated 20th July 2017.
- viii. A webinar on “In-sensor monitoring with intelligent MEMS sensors” was organized by STElectronics on 13th June 2023.
- ix. A webinar on “How to conduct the AICTE Student Induction Program (SIP)” was organized by AICTE on the 20th September 2021.
- x. A webinar on “Creating Firmware for Electric Motor Drive using Auto Code Generation” was organized by MATLAB on 9th November 2021.
- xi. A webinar on “Archiving and Development Tools for Research” was organized by IEEE India Council YP on 26th April 2021.
- xii. A webinar on “Effective Publication” at IEEE India Council YP on 27th April 2021.
- xiii. A webinar on “Enabling Innovation for Automotive HIL Testing and Control Design” on 17th March 2021.
- xiv. A MATLAB webinar on “Teaching and Learning with MATLAB and Simulink” was organized by MATLAB with a registration ID. 354181 on 21st February 2019.
- xv. An online webinar on “Fundamentals of ETAP Software” was organized by ETAP Inc. on 25th November 2022.
- xvi. An online webinar on “Accelerate xEV Motor Drive ECU Development and Testing with HIL” was organized by MATLAB on 13th December 2022.
- xvii. An online webinar “Numerical Protection of Induction Motor” was organized by Electrical Engineering, SCET, Surat on 10th August 2020.
- xviii. An online webinar “Detailed Motor Design using JMAG” was organized by Powersys on 17th August 2020.
- xix. An online webinar “Enabling Innovation for Automotive HIL Testing and Control Design” was organized by Speedgoat, MATLAB on 17th March 2021.
- xx. An online webinar “Power Electronics-The key Technology for Grid Integration” Organized by IEEE Gujarat section on 21-Jun 2024.

2. Workshop

- i. A workshop on “Industrial Automation Using PLC & SCADA” organized by Electrical Engineering, F.E.T.R College, Bardoli dated 3rd Feb 2013 to 1st March 20213 (05 Sundays).
- ii. A workshop on “Energy Conservation Awareness” organized and funded by GEDA dated 14th March 13.
- iii. Prof. (Dr.) Ankur P. Desai attended and completed the “Coordinator Workshop for STTP on Control Systems” funded and organized by MHRD, Govt of India dated 13th September 2014 to 19th September 2014.
- iv. Prof. (Dr.) Ankur P. Desai attended and completed the “Workshop Coordinator of STTP on Control Systems” organized and funded and organized by MHRD, Govt of India dated 2nd December 2014 to 12th December 2014.
- v. Prof.(Dr.) Ankur P. Desai coordinated and conducted a two-day workshop on “Arduino & its Programming” organized by Electrical Engineering, GDEC, Navsari dated 3rd March 2017 to 4th March 2017.
- vi. Prof.(Dr.) Ankur P. Desai has coordinated a day workshop on “Energy Conservation Awareness” organized and funded by GEDA dated 21st July 2017.
- vii. A workshop on “ARM Cortex-M4 Microcontroller based Power Electronics System Development” organized by Electrical Engineering, SVNIT, Surat from 24th – 26th February 2017.
- viii. A workshop on “Solar Photovoltaics Fundamentals for Fabrications” dated 11.3.2017 at SVNIT, Surat
- ix. A workshop on “Microcontroller-based Power Electronics Application” was organized by Electrical Engineering from 14th -18th August 2017 at SVNIT, Surat.
- x. Prof. (Dr.) Ankur P. Desai coordinated an online workshop on “Energy Conservation Awareness” Sponsored by the Petroleum Conservation Research Association (PCRA) on 7th March 2022.
- xi. Prof. (Dr.) Ankur P. Desai coordinated an online workshop on “Energy Conservation Awareness” Sponsored and funded by GEDA, Gandhinagar on 20th Feb 2021.
- xii. Prof. (Dr.) Ankur P. Desai coordinated and conducted a day workshop on “PLC and its Industrial Applications” dated 22nd January 2019 at Vyara Polytechnic, Vyara.
- xiii. Prof. (Dr.) Ankur P. Desai coordinated and conducted a one-day workshop on “PLC and its Industrial Applications” dated 28th January 2019 at Govt.

Polytechnic, Valsad.

- xiv. Prof. (Dr.) Ankur P. Desai coordinated and conducted a day workshop on “PLC and its Industrial Applications” dated 21st January 2019 at Jaivantrai Harrai Polytechnic, Plasana.
- xv. A Two-day workshop on “Application of MATLAB Software in other Engineering Disciplines” on 18th-19th June 2019 organized by M & B Patel Institute of Technology, Anand.

3. STTP /FDP

- i. An STTP on “Recent Trends in Power Electronics” organized by LDRP College, Gandhinagar dated 22nd -26th June 2009.
- ii. A training program on “Induction Training” dated 22nd July to 15th July 2010.
- iii. An FDP of Design Engineering organized by GTU, Ahmedabad dated 10th Nov 2014 to 12th Nov 2014.
- iv. An FDP of Design Engineering organized by GTU, Ahmedabad dated 17th March 2016 to 21st March 2016.
- v. An FDP on “PLC & SCADA” organized by Augment Automation dated 13th June 2016 to 18th June 2016.
- vi. An FDP of Design Engineering organized by GTU, Ahmedabad dated 13th Oct 2016 to 19th Oct 2016.
- vii. An STTP on “Research Methodology for Academia” was organized from 10th -14th July 2017 at Naranlala School of Industrial Management and Computer Science, Navsari.
- viii. A week STTP on” Digital Signal Processor: An Introduction with Code Composer Studio and PSIM Software” was held on 14th -16th and 23th-24th, April 2022 which was organized by SVNIT, Surat.
- ix. An STTP on “Designing embedded systems enhanced with IOT Using Micropython” from 8th -12th January 2019 at GIDC Degree Engineering College, Abrama.
- x. An FDP “Three days Faculty Development Program for Student Induction Program for AICTE approved institutions (organized by AICTE)” was organized at Vishwakarma Government Engineering College, Chandkheda, Ahmadabad from 29th January to 31st January 2019.
- xi. An ISTE-approved STTP program on “Applications of Power Electronics in Power Systems” held from 19.06.2023 to 23.06.2023 organized by Dr. S & S.S. Ghandhy

College of Engineering & Technology, Surat, Gujarat.

- xii. A one-week short-term training program on “Advanced Engineering Optimization through Intelligent Techniques” (AEOTIT) from 25th-29th November 2019 at SVNIT, Surat.
- xiii. An STTP on “Designing of Mathematical Models in Different Fields of Engineering” organized by ASH Department, GDEC, Abrama, Navsari from 19th - 23rd March 2018.
- xiv. A Five-day FDP on “Digital VSLI System Design & Implementation” on 15th and 19th May 2018, organized by Department of Electronics Engineering, SVNIT, Surat.
- xv. A week STTP approved by ISTE and CTE on “Application of Power Electronics in Power Systems” held from June 19–23, 2023, organized by the Electrical Engineering Department (NBA-accredited), Dr. S & S.S. Ghandhy College of Engineering & Technology, Surat.
- xvi. A week NaMPET Phase-III sponsored Short-Term Course (STC) on “Control of Power Electronics Converters in Renewable and Transportation Applications” held from 28 September - 02 October 2023, organized by the Department of Electrical Engineering, SVNIT, Surat.

4. Course

- i. An eight-week online graded course on “Electrical Vehicle Technology” conducted by Deshya Technologies Pvt. Ltd. (Incubated by IIT Guwahati) dated 1.6.2017.
- ii. A course on “Build Multilayer Perceptron Models with Keras” conducted by Coursera dated 14th September 2020.
- iii. A four-week online course “Neural Network and Deep Learning” was conducted by the University of Michigan through Coursera in May 2020.
- iv. A seven-week online course “Programming for Everybody (Getting Started with Python)” was conducted by Coursera in 2020.
- v. A week online course “Linear Regression with NumPy and Python” was conducted by Cousera in June 2020.
- vi. A four-week Coursera ONLINE Certification Course on “Neural Network and Deep Learning” in the year 2020.
- vii. NPTEL ONLINE Certification Course on “Advances in UHV Transmission and Distribution” in June-September 2017.

Projects Guided:-

Prof. (Dr.) Ankur P. Desai has guided U.G. level students of B.E. in areas of PLC, SCADA, ARM Cortex M4 Microcontroller, Arduino, MATLAB, and Power Electronics. He has completed ten U.G.-level projects.

Internship Guided:-

Sr No.	Name	Year	Enrolment No	Company's Name
1	Dhruv M Patel	2023-24	201100109002	Ganesh Polychem Ltd.
2	Neel H Patel	2022-2023	201100109526	Waaree Ltd.
3	Krishna B Patel	2022-2023	201100109525	Trans Electro Ltd.
4	Kalpna R Patel	2022-2023	201100109512	Trans Electro Ltd.
5	Hatasvi M Patel	2022-2023	201100109528	Trans Electro Ltd.
6	Het A Mehta	2022-2023	201100109534	Datamini Technologies Ltd
7	Hashmukh N Makwana	2021-2022	191103109002	Elita Technology

Professional Memberships: - ISTE (LM-102384), IEEE Membership (student) (Year: 2021, 2023)

Administrative Responsibilities:-

- Member of the admission committee
- Member of the discipline committee
- Subject co-ordinator of PS-II, CST, and IA subjects and also handling the work of criteria-6 in the NBA work of the department
- Co-ordinator of Power System Protection, Microcontrollers Labs