


**GIDC DEGREE ENGINEERING COLLEGE FACULTY  
PROFILE**

Name of Teaching Staff	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. Pursuing (Electrical)	
Total Experience in Years	Teaching	Industry	Research	
	13 Yrs	-	5 Yrs	
Area of Interest				
Papers Published in Journals	National	-	International	5
Papers Presented at Conferences	National	-	International	3

## 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://www.scopus.com/authid/detail.uri?authorId=57951521400>
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://www.scopus.com/authid/detail.uri?authorId=57951521400>
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://www.scopus.com/authid/detail.uri?authorId=57951521400>
4. **“A Six-Phase Two Level VSI-Fed Six Phase Asymmetrical Induction Motor Using 48-Sector Vector Space Decomposition based SVPWM”**, 2<sup>nd</sup> International Conference of Emerging Technology (INCET 2021), from 21<sup>st</sup> to 23<sup>rd</sup> 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://www.scopus.com/authid/detail.uri?authorId=57951521400>

5. **“An Investigation of Direct Torque Control for a Six-Phase Asymmetrical Induction Motor”**, the IEEE 19th India Council International Conference (2022 INDICON), from 24<sup>th</sup> to 26<sup>th</sup> 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://www.scopus.com/authid/detail.uri?authorId=57951521400>
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 17<sup>th</sup> –18<sup>th</sup>, 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**
7. **“Three Phase Shunt Active Filter With Constant Instantaneous Power Control Strategy”** International Journal of Electrical Engineering & Technology (IJEET), ([www.iaeme.com](http://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

## **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. 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. 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.

**Expert Lecture on Webinar**

- i. Mr. Ankur P. Desai conducted an expert lecture on “Power Electronics Converters” in the webinar organized by the Electrical Engineering Department, Govt. Polytechnic, Navsari on 25<sup>th</sup> October 2021.

**STTP/WORKSHOP/ CONFERENCE / SEMINAR Organized or Participated**

**1. Seminar /Webinar**

- i. A seminar on “Aakash for Education” organized by Govt. of Gujarat dated 10<sup>th</sup> - 11<sup>th</sup> - Nov 2012.
- ii. A seminar on the “Nuclear Energy Awareness” program organized by KAPS, Kakrapar dated 20<sup>th</sup> and 22<sup>nd</sup> of July 2013.
- iii. A seminar on “Technical Enabled Technical Education: Issue and Perspectives” dated 20<sup>th</sup> Oct 2012.
- iv. A seminar on “Journey of Life” was organized by GDEC on 9<sup>th</sup> March 2017.
- v. A webinar on “Predictive Maintenance in MATLAB and Simulink” organized by MATLAB with Registration No. 692982 dated 23<sup>rd</sup> June 2017.
- vi. A webinar on “MATLAB for C/C++ Programmers” organized by MATLAB with Registration No. 318821 dated 8<sup>th</sup> August 2017.
- vii. A webinar on “Mathematical Modeling in the MATLAB Live Editor” organized by MATLAB with Registration No. 622779 dated 20<sup>th</sup> July 2017.
- viii. A webinar on “In-sensor monitoring with intelligent MEMS sensors” was organized by STElectronics on 13<sup>th</sup> June 2023.
- ix. A webinar on “How to conduct the AICTE Student Induction Program (SIP)” was organized by AICTE on the 20<sup>th</sup> September 2021.
- x. A webinar on “Creating Firmware for Electric Motor Drive using Auto Code Generation” was organized by MATLAB on 9<sup>th</sup> November 2021.
- xi. A webinar on “Archiving and Development Tools for Research” was organized by

- IEEE India Council YP on 26<sup>th</sup> April 2021.
- xii. A webinar on “Effective Publication” at IEEE India Council YP on 27<sup>th</sup> April 2021.
  - xiii. A webinar on “Enabling Innovation for Automotive HIL Testing and Control Design” on 17<sup>th</sup> March 2021.
  - xiv. A MATLAB webinar on “Teaching and Learning with MATLAB and Simulink” was organized by MATLAB with a registration ID. 354181 on 21<sup>st</sup> February 2019.
  - xv. An online webinar on “Fundamentals of ETAP Software” organized by ETAP Inc. on 25<sup>th</sup> November 2022.
  - xvi. An online webinar on “Accelerate xEV Motor Drive ECU Development and Testing with HIL” was organized by MATLAB on 13<sup>th</sup> December 2022.
  - xvii. An online webinar “Numerical Protection of Induction Motor” was organized by Electrical Engineering, SCET, Surat on 10<sup>th</sup> August 2020.
  - xviii. An online webinar “Detailed Motor Design using JMAG” was organized by Powersys on 17<sup>th</sup> August 2020.
  - xix. An online webinar “Enabling Innovation for Automotive HIL Testing and Control Design” was organized by Speedgoat, MATLAB on 17<sup>th</sup> March 2021.

## **2. Workshop**

- i. A workshop on “Industrial Automation Using PLC & SCADA” organized by Electrical Engineering, F.E.T.R College, Bardoli dated 3<sup>rd</sup> Feb 2013 to 1<sup>st</sup> March 20213 (05 Sundays).
- ii. A workshop on “Energy Conservation Awareness” organized and funded by GEDA dated 14<sup>th</sup> March 13.
- iii. Prof.Ankur P. Desai attended and completed the “Coordinator Workshop for STTP on Control Systems” funded and organized by MHRD, Govt of India dated 13<sup>th</sup> September 2014 to 19<sup>th</sup> September 2014.
- iv. Prof.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 2<sup>nd</sup> December 2014 to 12<sup>th</sup> December 2014.
- v. Prof.Ankur P. Desai coordinated and conducted a two-day workshop on “Arduino & its Programming” organized by Electrical Engineering, GDEC, Navsari dated 3<sup>rd</sup> March 2017 to 4<sup>th</sup> March 2017.
- vi. Prof.Ankur P. Desai has coordinated a day workshop on “Energy Conservation Awareness” organized and funded by GEDA dated 21<sup>st</sup> July 2017.
- vii. A workshop on “ARM Cortex-M4 Microcontroller based Power Electronics

- System Development” organized by Electrical Engineering, SVNIT, Surat from 24<sup>th</sup> – 26<sup>th</sup> 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 14<sup>th</sup> -18<sup>th</sup> August 2017 at SVNIT, Surat.
  - x. Prof.Ankur P. Desai coordinated an online workshop on “Energy Conservation Awareness” Sponsored by the Petroleum Conservation Research Association (PCRA) on 7<sup>th</sup> March 2022.
  - xi. Prof.Ankur P. Desai coordinated an online workshop on “Energy Conservation Awareness” Sponsored and funded by GEDA, Gandhinagar on 20<sup>th</sup> Feb 2021.
  - xii. Prof.Ankur P. Desai coordinated and conducted a day workshop on “PLC and its Industrial Applications” dated 22<sup>nd</sup> January 2019 at Vyara Polytechnic, Vyara.
  - xiii. Prof.Ankur P. Desai coordinated and conducted a one-day workshop on “PLC and its Industrial Applications” dated 28<sup>th</sup> January 2019 at Govt. Polytechnic, Valsad.
  - xiv. Prof.Ankur P. Desai coordinated and conducted a day workshop on “PLC and its Industrial Applications” dated 21<sup>st</sup> January 2019 at Jaivantrai Harrai Polytechnic, Plasana.
  - xv. A Two-day workshop on “Application of MATLAB Software in other Engineering Disciplines” on 18<sup>th</sup>-19<sup>th</sup> 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 22<sup>nd</sup> -26<sup>th</sup> June 2009.
- ii. A training program on “Induction Training” dated 22<sup>nd</sup> July to 15<sup>th</sup> July 2010.
- iii. An FDP of Design Engineering organized by GTU, Ahmedabad dated 10<sup>th</sup> Nov 2014 to 12<sup>th</sup> Nov 2014.
- iv. An FDP of Design Engineering organized by GTU, Ahmedabad dated 17<sup>th</sup> March 2016 to 21<sup>st</sup> March 2016.
- v. An FDP on “PLC & SCADA” organized by Augment Automation dated 13<sup>th</sup> June 2016 to 18<sup>th</sup> June 2016.
- vi. An FDP of Design Engineering organized by GTU, Ahmedabad dated 13<sup>th</sup> Oct 2016 to 19<sup>th</sup> Oct 2016.

- vii. An STTP on “Research Methodology for Academia” was organized from 10<sup>th</sup> -14<sup>th</sup> 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 14<sup>th</sup> -16<sup>th</sup> and 23<sup>th</sup>-24<sup>th</sup>, April 2022 which was organized by SVNIT, Surat.
- ix. An STTP on “Designing embedded systems enhanced with IOT Using Micropython” from 8<sup>th</sup> -12<sup>th</sup> 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 29<sup>th</sup> January to 31<sup>st</sup> 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 25<sup>th</sup>-29<sup>th</sup> 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 19<sup>th</sup> - 23<sup>rd</sup> March 2018.
- xiv. A Five-day FDP on “Digital VSLI System Design & Implementation” on 15<sup>th</sup> and 19<sup>th</sup> May 2018, organized by Department of Electronics 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 14<sup>th</sup> 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.

### **Projects Guided:-**

Prof. 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.

**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 Lab