

|                                          |                                                                                                                                                                                                                                                                                                                              |                                                                                    |
|------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Name                                     | : Mr. Mehul S. Prajapati                                                                                                                                                                                                                                                                                                     |  |
| Designation                              | : Assistant Professor                                                                                                                                                                                                                                                                                                        |                                                                                    |
| Department                               | : Dept of Mechanical Engg.                                                                                                                                                                                                                                                                                                   |                                                                                    |
| Date of Joining the Institution          | : 07.01.2011                                                                                                                                                                                                                                                                                                                 |                                                                                    |
| Email ID                                 | : <a href="mailto:mehul.prajapati@djsce.ac.in">mehul.prajapati@djsce.ac.in</a>                                                                                                                                                                                                                                               |                                                                                    |
| Office Contact                           | : 42335000/42335001<br>EXT : 1239                                                                                                                                                                                                                                                                                            |                                                                                    |
| Google Scholar Link                      | : <a href="https://scholar.google.com/citations?user=CUecA7AAAAAJ&amp;hl=en">https://scholar.google.com/citations?user=CUecA7AAAAAJ&amp;hl=en</a>                                                                                                                                                                            |                                                                                    |
| Researchgate Link                        | : <a href="https://www.researchgate.net/profile/Mehul-Prajapati-4">https://www.researchgate.net/profile/Mehul-Prajapati-4</a>                                                                                                                                                                                                |                                                                                    |
| ORCID                                    | : 0000-0002-4343-7486                                                                                                                                                                                                                                                                                                        |                                                                                    |
| Publons Researcher ID                    | : <a href="https://publons.com/researcher/4957493/mehul-prajapati/">https://publons.com/researcher/4957493/mehul-prajapati/</a>                                                                                                                                                                                              |                                                                                    |
| Qualifications with Class / Grade        | : <ol style="list-style-type: none"><li>1. PhD. Mechanical Engineering (Thesis submitted May 2026) (NIT Surat)</li><li>2. M. Tech. (Production) from VJTI with Ist Class (7.6CPI) in Jul, 2010.</li><li>3. B.E. (Production) from University of Mumbai with Ist Class (65.45%) in Jun, 2007.</li></ol>                       |                                                                                    |
| Additional Qualification /Certifications | : <ol style="list-style-type: none"><li>1. Lean Manufacturing Expert, Mizuho India Japan Study Centre, IIM Bangalore</li><li>2. Base SAS, SAS Visual Analytics, and Applied Analytics, using SAS (R) Enterprise Miner (TM) from SAS India.</li></ol>                                                                         |                                                                                    |
| Total Experience in Years                | : <p><b><u>Teaching:</u></b> 16 years</p> <ol style="list-style-type: none"><li>1. Assistant Professor at D. J. Sanghvi College of Engineering from 10/01/2011 till date.</li><li>2. Lecturer, VJTI from July, 2010 to Dec, 2010.</li></ol> <p><b><u>Industry:</u></b></p> <p>GET, L &amp; T from Jun 2007 to Dec, 2007.</p> |                                                                                    |
| Papers Presented in Conferences          | : <p><b><u>International</u></b> :--</p> <ol style="list-style-type: none"><li>1. Analysis of Pressure Relief Valve using Matlab Simulink’ at Thirty Seventh National &amp;Fourth International Conference on Fluid Mechanics and Fluid Power at IIT Madras</li></ol>                                                        |                                                                                    |

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Papers Presented in Journal | <p>: <b>International: --</b></p> <ol style="list-style-type: none"> <li>1. Optimization of CNC Die-Sinking EDM Process Parameters Based on MRR and EWR by Taguchi Method Using Copper Electrode on P20 Tool Steel, Lect. Notes Mechanical Engineering, on Intelligent Manufacturing and Automation, April 2020, <a href="https://doi.org/10.1007/978-981-15-4485-9_16">https://doi.org/10.1007/978-981-15-4485-9_16</a> .</li> <li>2. "Development of Storage System by Designing a Magazine for Forged Rings" Lect. Notes Mechanical Engineering on Intelligent Manufacturing and Automation, April 2020, <a href="https://doi.org/10.1007/978-981-15-4485-9_16">https://doi.org/10.1007/978-981-15-4485-9_16</a>.</li> <li>3. Experimental Investigation During Machining of P20 Tool Steel Using EDM”, Advances in Materials Processing and Manufacturing, June 2021, <a href="https://doi.org/10.1007/978-981-16-0909-1_56">https://doi.org/10.1007/978-981-16-0909-1_56</a> .</li> <li>4. Productivity Improvement by Applying Lean Tools for Manufacturing of Mechanical Seal” Proceedings of International Conference on Intelligent Manufacturing and Automation, March 2022, DOI: <a href="https://doi.org/10.1007/978-981-19-7971-2_12">https://doi.org/10.1007/978-981-19-7971-2_12</a>.</li> <li>5. Study on Evolution of Hydrogen Gas Bubble on the Performance of the <math>\mu</math>-ECDM Process, Proceedings of International Conference on Intelligent Manufacturing and Automation, March 2022, <a href="https://doi.org/10.1007/978-981-19-7971-2_27">https://doi.org/10.1007/978-981-19-7971-2_27</a> .</li> <li>6. Seal Face Design of Dry Running Seal Assembly to Reduce Gas Leakage, Proceedings of International Conference on Intelligent Manufacturing and Automation, March 2022, <a href="https://doi.org/10.1007/978-981-19-7971-2_52">https://doi.org/10.1007/978-981-19-7971-2_52</a> .</li> <li>7. Prajapati, M. S.; Lalwani, D. I. Investigation of Concurrent Tool Rotation with Ultrasonic Vibration on Dimensional Accuracy in ECDM, Mater. Manuf. Process. 2025, 00 (00), 1–17. <a href="https://doi.org/10.1080/10426914.2025.2549763">https://doi.org/10.1080/10426914.2025.2549763</a> .</li> <li>8. Prajapati, M.; Lalwani, D. Micro-Machining Through Ultrasonic Assisted Electrochemical Discharge Process: A Review. SAE Int. J. Mater. Manuf. March 2026, 19 (3), 5–19. <a href="https://doi.org/10.4271/05-19-03-0021">https://doi.org/10.4271/05-19-03-0021</a> .</li> <li>9. Prajapati, M. S., Lalwani, D. I. Surface Integrity Assessment under Ultrasonic Vibration-Assisted Rotary Tool Synergy in Electrochemical Discharge Machining. Mater. Manuf. Process. June 2026, 00 (00), 1–19. <a href="https://doi.org/10.1080/10426914.2026.2674575">https://doi.org/10.1080/10426914.2026.2674575</a> .</li> </ol> |
| Books Published/IPR/Patent  | <ol style="list-style-type: none"> <li>1. South African Granted <b>Utility Patent</b> no – 2022/2026 on 28<sup>th</sup> April 2022, “<b>An assembly of abrasive jet machining</b>”.</li> <li>2. Indian Patent Published no – 02421045349 on 26/07/2024, “<b>An artificial intelligence powered ultrasonic assisted rotary tool micro electrochemical discharge machining system</b>”.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| STTPs/ Workshops/ Training  | <ol style="list-style-type: none"> <li>1. Attended Symposium on “<b>VALUE ENGINEERING</b>” at V.J.T.I. Mumbai. (Jan.2009)</li> <li>2. Two Day Workshop on <b>Curriculum Development for Mechanical Engineering</b> at Mukesh Patel School of Technology Management &amp; Engineering on 2<sup>nd</sup> and 3<sup>rd</sup> April 2012.</li> <li>3. Two week ISTE- IITB workshop on <b>Engineering Mechanics</b> conducted by IIT from 26<sup>th</sup> November to 6<sup>th</sup> December 2013.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                          | <p>4. One week STTP on <b>Product Life Cycle Management</b> in collaboration with Siemens June 2014 at Fr Agnel College Vashi.</p> <p>5. One week STTP on <b>Digital Manufacturing</b> (using Delmia) in collaboration with Tata Technologies at Sardar Patel College of Engineering from 23<sup>rd</sup> to 28<sup>th</sup> May 2016.</p> <p>6. Three day FDP on Product Life Cycle Management in collaboration with TCS Sangam from 13 – 15 July, 2016.</p> <p>7. “<b>Faculty Development Programme</b>”, covering various aspects of <b>Industry Institute Interaction</b> was organised by the Department of Production Engineering in collaboration with the following industries.</p> <p>a) Mutual Engineering Pvt. Ltd., Vasai, on 28th &amp; 29th of November 2018.</p> <p>b) Mutual Automotive Pvt. Ltd., Pune, on 01st December 2018.</p> <p>c) Mahindra &amp; Mahindra (Automotive Division), Kandivali, 10th December 2018.</p> <p>d) Designcell CAD-CAM solutions Pvt. Ltd., Vasai, on 05th January 2019.</p> <p>8. One-day workshop on 3D Printing &amp; Applications at NMIMS’S Mukesh Patel School of Technology &amp; Management Engineering on 19<sup>th</sup> January, 2019.</p> <p>9. Two-day workshop on “<b>Active teaching learning strategies using Innovative Technology</b>” “on 25<sup>th</sup> &amp; 26<sup>th</sup> February 2019, at D.J Sanghvi College of Engineering.</p> <p>10. <b>GIAN Course on Micro/Nano machining</b> at NIT Calicut from 24/06/2019 to 28/06/2019.</p> <p>11. One week ISTE approved induction programme on “<b>Challenges &amp; Opportunity in Manufacturing in Indian Scenario</b>” “held from 2/7/2019 to 6/7/2019 at D.J Sanghvi College of Engineering thru Industry.</p> <p>12. One week STTP “<b>A Journey into the Manufacturing Sector in India in View of Industry 4.0 practices and COVID-19</b>” held from 9<sup>th</sup> June 2020 to 13<sup>th</sup> June 2020 at D.J Sanghvi College of Engineering.</p> <p>13. Two weeks certified training on <b>Base SAS, SAS Visual Analytics, Applied Analytics Using SAS (R) Enterprise Miner (TM)</b> from SAS India June 2020.</p> <p>14. <b>Industrial Training</b> at Furnisys (A Brand of Fabtech India) from 22-08-2022 to 04-09-2022</p> <p>15. One week FDP on <b>Product Life Cycle Management</b> in collaboration with TCS 05<sup>th</sup> June, 2023.</p> <p>16. One week <b>ISTE approved STTP</b>, Advancement in Indian Manufacturing: Leveraging Industry 4.0 to Drive Growth and Innovation” held during 24.06.2023 to 28.06.2023 organized by D.J Sanghvi College of Engineering.</p> <p>17. <b>Industrial Training</b> at Subaero Precision Machining from 19-12-2023 to 01-01-2024.</p> <p>18. One week <b>ATAL FDP</b> on “<b>Semiconductors in Design and Development of Micro-electro Mechanical Systems</b>” 08.01.2024 to 13.01.2024 at SPCE Mumbai.</p> <p>19. <b>Industrial Training</b> at ELcord Connect LLP from 06-01-2025 to 18-01-2025.</p> <p>20. <b>ATAL-FDP</b> on "SEMI-TECH: Semiconductor Innovation &amp; Technology for Next-Gen Electronics", 18/08/2025 to 22/08/2025 organized by SRM Institute of Science and Technology.</p> <p>21. One week <b>ISTE approved STTP</b>, “<b>ISTE STTP - Think. Do. Write. Publish</b>”, 27.10.2025 to 01.11.2025 organized by D.J Sanghvi College of Engineering.</p> |
| Professional Memberships | <p>Life member of Indian society of manufacturing Engineers (ISME).</p> <p>Life member of Indian society for Technical Education (ISTE).</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

| Professional Memberships                     | 1. Life member of Indian society of manufacturing Engineers (ISME).<br>2. Life member of Indian society for Technical Education (ISTE).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                            |                            |             |                                             |            |                                                |              |                                              |              |                                      |                |                                                 |
|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|----------------------------|-------------|---------------------------------------------|------------|------------------------------------------------|--------------|----------------------------------------------|--------------|--------------------------------------|----------------|-------------------------------------------------|
| Grants                                       | Grant received for Rs 60,000/- for <b>Co- investigator for</b> Minor Research Grant by University of Mumbai Topic – “ <b>Novel Technique of Travelling Wire-Electro Chemical Spark Machining (TW-ECSM) Process for Non-Conducting Materials</b> ” in 2019 – 2020.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                            |                            |             |                                             |            |                                                |              |                                              |              |                                      |                |                                                 |
| Subjects Taught                              | <b>F.E:</b> Engineering Mechanics, Engineering Drawing<br><b>S.E:</b> Strength of Material, Manufacturing Processes, Advance Manufacturing Processes.<br><b>T.E:</b> Micro & Nano Manufacturing processes, Processes Engineering & Tooling, Design of Jigs and Fixtures, Metrology & Quality Control, Mold & Metal Forming technology, Design of Press Tools.<br><b>B.E:</b> Engineering Economics Finance Accounting Costing, Management Information system                                                                                                                                                                                                                                                                                                                                   |                            |                            |             |                                             |            |                                                |              |                                              |              |                                      |                |                                                 |
| Projects Guided                              | <b>UG Level:</b> More than 50 live Industry projects guided in the area of Manufacturing, Operations Management, Design for the VII-semester In-plant training students of Production Engineering Department from 2011 - 2024. Multiple Innovative product development for S.E and T.E Mechanical students.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                            |                            |             |                                             |            |                                                |              |                                              |              |                                      |                |                                                 |
| Recommended Students for Higher Education    | <table border="0"> <thead> <tr> <th><u>Name of the Student</u></th><th><u>University/Industry</u></th></tr> </thead> <tbody> <tr> <td>Sagar Patel</td><td>M.S Material Science (Texas A&amp;M University)</td></tr> <tr> <td>Rohan Amin</td><td>M.S Industrial Engineering (Lehigh University)</td></tr> <tr> <td>Aditya Sheth</td><td>M.S Industrial Engineering (Texas Arlington)</td></tr> <tr> <td>Prachi Sheth</td><td>M.S Energy Management (Texas Dallas)</td></tr> <tr> <td>Aakash Panchal</td><td>M.S Industrial Engineering (Houston University)</td></tr> </tbody> </table> <p><b>More than 20 students admitted to different universities in U.S., Canada, Australia, Germany etc.</b></p>                                                                                         | <u>Name of the Student</u> | <u>University/Industry</u> | Sagar Patel | M.S Material Science (Texas A&M University) | Rohan Amin | M.S Industrial Engineering (Lehigh University) | Aditya Sheth | M.S Industrial Engineering (Texas Arlington) | Prachi Sheth | M.S Energy Management (Texas Dallas) | Aakash Panchal | M.S Industrial Engineering (Houston University) |
| <u>Name of the Student</u>                   | <u>University/Industry</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                            |                            |             |                                             |            |                                                |              |                                              |              |                                      |                |                                                 |
| Sagar Patel                                  | M.S Material Science (Texas A&M University)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                            |                            |             |                                             |            |                                                |              |                                              |              |                                      |                |                                                 |
| Rohan Amin                                   | M.S Industrial Engineering (Lehigh University)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                            |                            |             |                                             |            |                                                |              |                                              |              |                                      |                |                                                 |
| Aditya Sheth                                 | M.S Industrial Engineering (Texas Arlington)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                            |                            |             |                                             |            |                                                |              |                                              |              |                                      |                |                                                 |
| Prachi Sheth                                 | M.S Energy Management (Texas Dallas)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                            |                            |             |                                             |            |                                                |              |                                              |              |                                      |                |                                                 |
| Aakash Panchal                               | M.S Industrial Engineering (Houston University)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                            |                            |             |                                             |            |                                                |              |                                              |              |                                      |                |                                                 |
| Institute/Department Responsibility handled: | a) AICTE’s EOA team member from March 2022 till date.<br>b) Department NBA Criteria 6 co-ordinators.<br>c) College Admission committee from June 2011 till date.<br>d) College NAAC committee member from June 2017 till date.<br>e) College branding committee from July 2022 till date.<br>f) College time table coordinator from July 2022 till date<br>g) College sports committee from June 2018 till date<br>h) Production Departmental time table coordinator from July 2014 to 2023.<br>i) NBA criteria 3 Production department in charge till May2021<br>j) NBA Criteria 3 department in charge.<br>k) VAP coordinator from June 2015 to June 2017.<br>l) Industrial visits coordinator from June 2015 to June 2017.<br>m) Department Alumni coordinator from July 2017 to June 2019. |                            |                            |             |                                             |            |                                                |              |                                              |              |                                      |                |                                                 |
| Teaching Engagement                          | : <a href="https://sites.google.com/view/profmehulprajapati?usp=sharing">https://sites.google.com/view/profmehulprajapati?usp=sharing</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                            |                            |             |                                             |            |                                                |              |                                              |              |                                      |                |                                                 |