



# IMS ENGINEERING COLLEGE, GHAZIABAD

(Affiliated to Dr. A.P.J. Abdul Kalam Technical University, Lucknow, Uttar Pradesh & Approved by AICTE, New Delhi)

NH-09, Adhyatmik Nagar, Near Dasna, Distt: Ghaziabad, Uttar Pradesh Website: <https://www.imsec.ac.in>

## SUPPORTING DOCUMENTS

AQAR: 2022-23

**6.5.1**

*Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes*

**Attachment: Supporting Documents**

5.2.1 Number of placement of outgoing students during the year 2022-23

Year	Name of student placed and contact details	Program graduated from	Name of the employer with contact details	Pay package at appointment
2022 - 2023	Abhijeet Singh 8795703592	B.Tech	Varun Beverages Shreya Singh	2.84 LPA
2022 - 2023	Anjali Rai 6392041593	B.Tech	Newgen Software Rajat Singh (7009214405)	4 LPA
2022 - 2023	Anshika Parmar 9557161676	B.Tech	Biovencer HR 0120 - 2341080	20000 Per Month
2022 - 2023	Anshu Nehra 7300456402	B.Tech	Newgen Software Rajat Singh (7009214405)	4 LPA
2022 - 2023	Anu Verma 9536937475	B.Tech	Newgen Software Rajat Singh (7009214405)	4 LPA
2022 - 2023	Anushka Ranjani 9548075792	B.Tech	Biovencer HR 0120 - 2341080	20000 Per Month
2022 - 2023	Apoorva Mishra 85227374275	B.Tech	Newgen Software Rajat Singh (7009214405)	4 LPA
2022 - 2023	Aradhana Pandey 8533000321	B.Tech	Jome Health Pvt. Ltd. Ms. Anila Singh - CEO	3 LPA
2022 - 2023	Ashish sharma 8580658703	B.Tech	Sunny Corporation NA	2.75 LPA
2022 - 2023	Ayushi Gupta 9695287009	B.Tech	BYU'S Biovencer	7 LPA
2022 - 2023	Brinda Bisht 7982164969	B.Tech	Biovencer HR 0120 - 2341080	20000 Per Month
2022 - 2023	Deepak Kumar 8077896765	B.Tech	Varun Beverages Shreya Singh	2.82 LPA
2022 - 2023	Deepak Mishra 9625530879	B.Tech	AKD Consultant Bindu Anand Dixit 9717726101	3 LPA
2022 - 2023	Kamakshi thnani 8491901288	B.Tech	Biovencer HR 0120 - 2341080	20000 Per Month
2022 - 2023	Malika Bachhel 9910368337	B.Tech	Jaro Education Altamash Ansari 992010839	6.60 LPA
2022 - 2023	Mitali Rai 9140119880	B.Tech	AKD Consultant Bindu Anand Dixit 9717726101	3 LPA
2022 - 2023	Nipun Taval 9548922304	B.Tech	Actioloab heena@actiolojobs.com	4 LPA
2022 - 2023	Pragya Srivastava 8004928617	B.Tech	Leverage Ed-Tech Sagata Sarkar	3.60 LPA
2022 - 2023	Pragya Tiwari 9819814209	B.Tech	Jaro Education Altamash Ansari 992010839	6.60 LPA
2022 - 2023	pranjali dwivedi 8178223801	B.Tech	AKD Consultant Bindu Anand Dixit 9717726101	3 LPA
2022 - 2023	Prival Mishra 8826610912	B.Tech	Biovencer HR 0120 - 2341080	20000 Per Month
2022 - 2023	Radhika Kaul 9871275260	B.Tech	Planet Spark Pragati Srivastava 7835997502	4 LPA
2022 - 2023	Rajata kesarwani 8808546780	B.Tech	Planet Spark Pragati Srivastava 7835997502	6.63 LPA
2022 - 2023	Saara Kapoor 6395392630	B.Tech	Kratikal Tech Shreya Trivedi 9667765448	6 LPA
2022 - 2023	Saif Ali 9149049331	B.Tech	Planet Spark Pragati Srivastava 7835997502	6.63 LPA
2022 - 2023	Sakshi Vats 8840875579	B.Tech	Qualitest Group Radhika Nair 9535188822	4 LPA
2022 - 2023	Sanskriti Vardhan 7307111831	B.Tech	Planet Spark Pragati Srivastava 7835997502	6.63 LPA
2022 - 2023	Shalu singh 8303754841	B.Tech	BYU'S Samridhi Gupta 9289136063	7 LPA
2022 - 2023	Sheetal Gupta 9569576671	B.Tech	Tekip Ritika Dey 7042003684	2.16 LPA
2022 - 2023	Sofia saif 7505367681	B.Tech	BYU'S Samridhi Gupta 9289136063	7 LPA
2022 - 2023	Snsthi Dwivedi 9205960432	B.Tech	BYU'S Samridhi Gupta 9289136063	7 LPA
2022 - 2023	Ujwal Garg 9045459930	B.Tech	Birmile Technologies business@birmile.com	5LRD 2.5 LPA
2022 - 2023	Urvashi Yadav 6386338306	B.Tech	BYU'S Samridhi Gupta 9289136063	7 LPA
2022 - 2023	Aakhya Chaudhary 9756825770	B.Tech	Qspiders Brunda . D (8951965481)	4 LPA
2022 - 2023	Ashwanayu Sharma 8512899097	B.Tech	Kiwitech Harish Naval 70895888800	4 LPA

2022 - 2023	Abhishhek Vardhney	7505594106	B.Tech	CS	Cavisson	Kajol Gupta	3.50 LPA
2022 - 2023	Anu Chaudhary	8755114885	B.Tech	CS	Qualitest Group	Radhika Nair 9535188822	4 LPA
2022 - 2023	Anukoo Sharma	7983909235	B.Tech	CS	Agicent	Bhawna Rana 8920361342	4 LPA
2022 - 2023	Ashi Sachan	8429247382	B.Tech	CS	Kanimage Pvt. Ltd.	HR 843993033	2.40 LPA
2022 - 2023	Ateek Ahamed	8423725394	B.Tech	CS	Sony India (Superwell)	Kanchan Negi	23,700 Per Month.
2022 - 2023	Danish Ali	9536025616	B.Tech	CS	Sony India (Superwell)	Kanchan Negi	23,700 Per Month.
2022 - 2023	Dev Mishra	7651910321	B.Tech	CS	Qspiders	Bruna . D (8951965481)	4.2 LPA
2022 - 2023	Dhruv Anand	8273399918	B.Tech	CS	Tech Mahindra	Shrutika 9341906657	3.25 LPA
2022 - 2023	Esha Choudhary	8077712484	B.Tech	CS	Nagarro	Madun Gupta 7011817052	4.5 LPA
2022 - 2023	Indrasen Gupta	7388881232	B.Tech	CS	BYJU'S	Samiddhi Gupta 9289136063	7 LPA
2022 - 2023	Kanek Choudhary	8057780796	B.Tech	CS	Sony India (Superwell)	Kanchan Negi	23,700 Per Month.
2022 - 2023	Kundeep Saini	9119037006	B.Tech	CS	Tech Mahindra	Shrutika 9341906657	3.25 LPA
2022 - 2023	Kushagra Raghav	9897926857	B.Tech	CS	Cavisson	Kajol Gupta	3.5 LPA
2022 - 2023	Madhavi Tripathi	9717467959	B.Tech	CS	Nucleus Software	Sapna Pandey	4.33 LPA
2022 - 2023	Manvik sagar	9760052987	B.Tech	CS	Chetu Inc.	Angali Singh Pundir 01204843237	3.5 - 4 LPA
2022 - 2023	Mehmood Ur Rehman	9910379873	B.Tech	CS	Chetu Inc.	Angali Singh Pundir 01204843238	3.5 - 4 LPA
2022 - 2023	Mukul Chaudhary	7054488730	B.Tech	CS	Agicent	Bhawna Rana 8920361342	4 LPA
2022 - 2023	Nikhil Pratap Singh	6397127217	B.Tech	CS	The Indian Express	Jyoti Sharma 6397266860	3 LPA
2022 - 2023	Pallavi Gangwar	77104774, 730222266	B.Tech	CS	Wingman Partners	Gamma Singh 8506070010	5 LPA
2022 - 2023	Prajwal Srivastava	9667256572	B.Tech	CS	TCS	Siddharth Singh 8572824885	3.36 LPA
2022 - 2023	Prashu	9639467321	B.Tech	CS	Qualitest Group	Radhika Nair 9535188822	4 LPA
2022 - 2023	Pujan Rastogi	9528133800	B.Tech	CS	Hexaware Technologies	Avinash Talreja 9702565555	6 LPA
2022 - 2023	Raman Gupta	7500706311	B.Tech	CS	Cavisson	Kajol Gupta	3.50 LPA
2022 - 2023	Ritui Gupta	9837998739	B.Tech	CS	Chetu Inc.	Angali Singh Pundir 01204843239	3.5 - 4 LPA
2022 - 2023	Sakshi Patel	7355420130	B.Tech	CS	Nucleus Software	Sapna Pandey	4.33 LPA
2022 - 2023	Sameeksha Ahuja	7392944226	B.Tech	CS	Hexaware Technologies	Avinash Talreja 9702565555	4 LPA
2022 - 2023	Shagun Srivastava	8702433358	B.Tech	CS	Sopra Steria	Gurpreet Singh 9910408802	6 LPA
2022 - 2023	Shashank Tripathi	8957569819	B.Tech	CS	Tech Mahindra	Shrutika 9341906657	3.25 LPA
2022 - 2023	Sheshan Kumar	8434695020	B.Tech	CS	Chetu Inc.	Angali Singh Pundir 01204843240	3.5 - 4 LPA
2022 - 2023	Shivam Singh	6386258242	B.Tech	CS	Chetu Inc.	Angali Singh Pundir 01204843241	3.5 - 4 LPA
2022 - 2023	Shivangee Srivastava	7080370369	B.Tech	CS	Kiwitech	Harish Nayal 7088588800	30,000 Per Month
2022 - 2023	Shreya	9084448107	B.Tech	CS	Zscaler	Mansi Kundrani 7017884030err	6 LPA
2022 - 2023	sonu tomer	8700536335	B.Tech	CS	NetProphets Cyberworks	Lydia George 99711126935	3.60 LPA
2022 - 2023	Tejova Tawari	8429236832	B.Tech	CS	Agicent	Bhawna Rana 8920361342	4 LPA
2022 - 2023	Utkarsh Sharma	8191819099	B.Tech	CS	Mitsure Technologies	Isha Sharma 9694097802	6 LPA
2022 - 2023	Vishal Gupta	7037823947	B.Tech	CS	Grapcity	Madhu Bujoo 9873454947	6 LPA
2022 - 2023	Yashi Kishrestha	7668832460	B.Tech	CS	Hexaware Technologies	Avinash Talreja 9702565555	6 LPA
2022 - 2023	Yashika Tyagi	7668858048	B.Tech	CS	The Indian Express	Jyoti Sharma 6397266860	3 LPA
2022 - 2023	Abdul Nawaz Khan	7651859919	B.Tech	CSE	Kiwitech	Hanish Nayal 7088588800	30,000 Per Month

C.E. Talreja  
 TMS & OPA  
 30,000 Per Month  
 30,000 Per Month  
 30,000 Per Month

2022 - 2023	Ashay Pratap Singh	7518890010	B.Tech	CSE	Tech Mahindra	Shruka 9341906657	3.25 LPA
2022 - 2023	Abhinav Singhai	7060253851	B.Tech	CSE	Acadecrat	Niketa Rawat 9818490857	18 - 20K Per Month
2022 - 2023	Adarsh sivastava	8299556647	B.Tech	CSE	Qualitest Group	Radhika Nar 9535188822	4 LPA
2022 - 2023	Adesh Singh	6382764041	B.Tech	CSE	TCS	Siddharth Singh 8572824885	7 LPA
2022 - 2023	Aditya Bhardwaj	7054564790	B.Tech	CSE	Chebu Inc.	Anjali Singh Pundir 01204843242	3.5 - 4 LPA
2022 - 2023	Aditya Jain	9794351561	B.Tech	CSE	Mitsure Technologies	Isha Sharma 9694097802	6 LPA
2022 - 2023	Aditya Mittal	9411432338	B.Tech	CSE	Tech Mahindra	Shreika 9341906657	3.25 LPA
2022 - 2023	Ajay Pratap Singh	8503882990	B.Tech	CSE	Vinculum Group	Varun Jodon 8077969198	4 LPA
2022 - 2023	Akash Kumar	9260941456	B.Tech	CSE	Sopra Steria	Gurpreet Singh 9910408802	6 LPA
2022 - 2023	Akash Singh	8958710503	B.Tech	CSE	Qualitest Group	Radhika Nar 9535188822	4 LPA
2022 - 2023	Akash Srivastava	7897801076	B.Tech	CSE	Qspiders	Brunida . D (8951965481)	4.2 LPA
2022 - 2023	Akshay Kumar	8877698280	B.Tech	CSE	Mitsure Technologies	Isha Sharma 9694097802	6 LPA
2022 - 2023	Amish Jha	7827571449	B.Tech	CSE	BufferCode	Vipin Kumar 8882205222	3 LPA - 6LPA
2022 - 2023	Amr Kumar Maura	9625890528	B.Tech	CSE	Wingman Partners	Garima Singh 8506070010	5 LPA
2022 - 2023	Ananya Saxena	9084633020	B.Tech	CSE	Chebu Inc.	Anjali Singh Pundir 01204843243	3.5 - 4 LPA
2022 - 2023	Anas Sabbag	9971162681	B.Tech	CSE	Big Oh Notation	Tarun Kapoor 8448102310	5 LPA
2022 - 2023	Anjali Maddeshiya	9910266402	B.Tech	CSE	BYJU'S	Samridhi Gupta 9289136063	7 LPA
2022 - 2023	Ankita	9149056760	B.Tech	CSE	HCL Tech	Preeti Sharma (9999140964)	4.25 LPA
2022 - 2023	Anmol choudhary	7780941456	B.Tech	CSE	Mudeus Software	Sapna Pandey	4.33 LPA
2022 - 2023	Anshul Rajput	9634267506	B.Tech	CSE	Vinculum Group	Varun Jodon 8077969198	4 LPA
2022 - 2023	Anubhav Shail	7985992406	B.Tech	CSE	Chebu Inc.	Anjali Singh Pundir 01204843244	3.5 - 4 LPA
2022 - 2023	Anupriya Pal	9634433019	B.Tech	CSE	Tech Mahindra	Shruka 9341906657	3.25 LPA
2022 - 2023	Anurag Singh	8960979377	B.Tech	CSE	Zscaler	Manasi Kundrani 7017894030err	6 LPA
2022 - 2023	Aryan Kumar	8299314643	B.Tech	CSE	NEC Corporation	Aditi Singh 9289212721	4 LPA
2022 - 2023	Avi Jaiswal	9839429697	B.Tech	CSE	BYJU'S	Samridhi Gupta 9289136063	7 LPA
2022 - 2023	Ayush Gupta	8726066692	B.Tech	CSE	Sendinblue	Mausheen Javed	6 LPA
2022 - 2023	AYUSH KUMAR SINGH	7275318191	B.Tech	CSE	Chebu Inc.	Anjali Singh Pundir 01204843245	3.5 - 4 LPA
2022 - 2023	Ayushmaan Sahu	9336449193	B.Tech	CSE	Jaro Education	Altamash Ansari 992010840	6.60 LPA
2022 - 2023	Ayushman	9140373872	B.Tech	CSE	Sony India (Superwell)	Kanchan Negi	23,700 Per Month.
2022 - 2023	Bhanu Pratap Shukhodia	9711075922	B.Tech	CSE	BYJU'S	Samridhi Gupta 9289136063	7 LPA
2022 - 2023	Bhavya Kumar Yadav	7017715487	B.Tech	CSE	Qspiders	Brunida . D (8951965481)	4.2 LPA
2022 - 2023	Bibhas Chandra Gupta	9335040457	B.Tech	CSE	NEC Corporation	Aditi Singh 9289212721	4 LPA
2022 - 2023	Chaitanya walia	8755428051	B.Tech	CSE	Nuclues Software	Sapna Pandey	4.33 LPA
2022 - 2023	Chirag Goel	8923246904	B.Tech	CSE	Unthinkable (Datfodl)	Sonal Goel 8285280581	5 LPA
2022 - 2023	Shivendra Mishra	9026302485	B.Tech	CSE	Qspiders	Brunida . D (8951965481)	4.2 LPA
2022 - 2023	Anam Srivastava	9918579739	B.Tech	CSE	NEC Corporation	Aditi Singh 9289212721	4 LPA
2022 - 2023	Amrendra Mohan shukla	8081776699	B.Tech	CSE	Kwikitech	Harish Nayal 7088588800	30,000 Per Month
2022 - 2023	Deeksha Gupta	8377858811	B.Tech	CSE	All E Technologies	Huzifa Rafiq 7889959973	CT 5 LPA
2022 - 2023	Deeksha Singh	8800262171	B.Tech	CSE	Ericsson	Tanushree	NH-2478 LPA

30,000 Per Month  
 CT 5 LPA  
 NH-2478 LPA

2022 - 2023	Deepak Gupta	9599835322	B.Tech	CSE	Mitsuru Technologies	Isha Sharma 9694097802	6 LPA
2022 - 2023	Deepanshu Tyagi	8527583604	B.Tech	CSE	Tech Mahindra	Shruti 9341906657	3.25 LPA
2022 - 2023	Deepanshu Kashyap	7310557991	B.Tech	CSE	Merino Consulting	Preethi Jain 8375962738	15,000 Per Month
2022 - 2023	Dev Raghav	9699830137	B.Tech	CSE	Mitsuru Technologies	Isha Sharma 9694097802	6 LPA
2022 - 2023	Devansh Agarwal	9667036762	B.Tech	CSE	Nagarro	Haddan Gupta 7011817052	4.5 LPA
2022 - 2023	Devansh Sinha	7248353578	B.Tech	CSE	Wingman Partners	Garima Singh 8506070010	5 LPA
2022 - 2023	Devendra Kumar	8630834625	B.Tech	CSE	Wingman Partners	Garima Singh 8506070010	5 LPA
2022 - 2023	Dheer Verma	9570290285	B.Tech	CSE	BYJU'S	Samridhi Gupta 9289136063	7 LPA
2022 - 2023	Diyanshu Singh	9634192352	B.Tech	CSE	Magic EdTech	Kavita Aggarwal 9910299808	6 LPA
2022 - 2023	Diyanshu Kishan	8541852668	B.Tech	CSE	Wingman Partners	Garima Singh 8506070010	5 LPA
2022 - 2023	Gaurav Pratap Singh Khatri	8860433350	B.Tech	CSE	Magic EdTech	Kavita Aggarwal 9910299808	6 LPA
2022 - 2023	Gauri Agarwal	9625476585	B.Tech	CSE	Agicent	Bhawna Rana 8920361342	4 LPA
2022 - 2023	Geeta Goyal	8851495200	B.Tech	CSE	Nagarro	Maduri Gupta 7011817052	4.5 LPA
2022 - 2023	Haren Varshan Sharma	8445573034	B.Tech	CSE	Cavisson	Kajal Gupta	3.5 LPA
2022 - 2023	Hansul Kanjpal	9205780155	B.Tech	CSE	Mirkeeta Inc.	Priyanka Goel 7048923706	5.5 LPA
2022 - 2023	Hansul Kumar	7054089231	B.Tech	CSE	Mirkeeta Inc.	Priyanka Goel 7048923706	5.5 LPA
2022 - 2023	Hansul Singh	8810498854	B.Tech	CSE	BYJU'S	Samridhi Gupta 9289136063	7 LPA
2022 - 2023	Himanshu Sharma	8447753859	B.Tech	CSE	Nucleus Software	Sapna Pandey	4.33 LPA
2022 - 2023	Himanshu Saraswat	8800547539	B.Tech	CSE	NEC Corporation	Aditi Singh 9289212721	4 LPA
2022 - 2023	Ishika Sharma	9870260685	B.Tech	CSE	Corforge	Anish Jain	4.5 LPA
2022 - 2023	Ishika Sharma	9971841989	B.Tech	CSE	Qualitest Group	Radhika Nair 9535188822	4 LPA
2022 - 2023	Ishika Tyagi	8851608917	B.Tech	CSE	Wingman Partners	Garima Singh 8506070010	5 LPA
2022 - 2023	Kapil Kumar	9557058819	B.Tech	CSE	Mirkeeta Inc.	Priyanka Goel 7048923706	5.5 LPA
2022 - 2023	Keshav Kumar	9313379659	B.Tech	CSE	Webkul	Deepika 9718457711	3.6 LPA
2022 - 2023	Khalik Rza Khan	7600082820	B.Tech	CSE	Ericsson	Tanushree	3.75 LPA
2022 - 2023	Khushboo Agarwal	9690377325	B.Tech	CSE	Mitsuru Technologies	Isha Sharma 9694097802	6 LPA
2022 - 2023	Kuldeep dubey	8860984835	B.Tech	CSE	Ericsson	Tanushree	3.75 LPA
2022 - 2023	Lakshya Kumar	9634051667	B.Tech	CSE	Webkul	Deepika 9718457711	3.6 LPA
2022 - 2023	Mansur Agrawal	7060562301	B.Tech	CSE	Chetu Inc.	Anjali Singh Pundir 01204843246	3.5 - 4 LPA
2022 - 2023	Manav Tyagi	7303820738	B.Tech	CSE	Tech Mahindra	Shrutika 9341906657	3.25 LPA
2022 - 2023	Manish Sharma	8766263072	B.Tech	CSE	Cavisson	Kajal Gupta	3.5 LPA
2022 - 2023	Manish Yadav	9549353900	B.Tech	CSE	Mitsuru Technologies	Isha Sharma 9694097802	6 LPA
2022 - 2023	Mansi Agarwal	8382999723	B.Tech	CSE	Sony India (Superwell)	Kanchan Neel	23,700 Per Month.
2022 - 2023	Mansi Jain	9354044869	B.Tech	CSE	BYJU'S	Samridhi Gupta 9289136063	7 LPA
2022 - 2023	Manu Chahar	9599142687	B.Tech	CSE	NEC Corporation	Aditi Singh 9289212721	4 LPA
2022 - 2023	Manu Sharma	96275186584	B.Tech	CSE	Agicent	Bhawna Rana 8920361342	4 LPA
2022 - 2023	Mayank	8076176975	B.Tech	CSE	Mitsuru Technologies	Isha Sharma 9694097802	4 LPA
2022 - 2023	MO Rizwan	7860396850	B.Tech	CSE	BYJU'S	Samridhi Gupta 9289136063	4 LPA
2022 - 2023	Mohd Aalam	6398522617	B.Tech	CSE	BYJU'S	Samridhi Gupta 9289136063	4 LPA

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2022 - 2023	Mohd Ashfaq	7309880686	B.Tech	CSE	BYJU'S	Samridhi Gupta 9289136063	7 LPA
2022 - 2023	Monu Teotia	8586014646	B.Tech	CSE	Hexaware Technologies	Avinash Talreja 9702569555	4 LPA
2022 - 2023	Arpit Rai	8957906346	B.Tech	CSE	NEC Corporation	Aditi Singh 9289212721	4 LPA
2022 - 2023	Lucky Ram	8057430700	B.Tech	CSE	Chetu Inc.	Anjali Singh Pundir 01204843247	3.5 - 4 LPA
2022 - 2023	Mukul Malik	7505917005	B.Tech	CSE	NEC Corporation	Aditi Singh 9289212721	4 LPA
2022 - 2023	muzayen jahan	9027838976	B.Tech	CSE	BYJU'S	Samridhi Gupta 9289136063	7 LPA
2022 - 2023	Kaman Gupta	9650392343	B.Tech	CSE	Unthinkable (Daffodil)	Sonal Goel 8285280581	5 LPA
2022 - 2023	Kavneet	9149103160	B.Tech	CSE	Kiwitech	Harish Nayal 7088588800	30,000 Per Month
2022 - 2023	Reha Singh	8303182166	B.Tech	CSE	Qspiders	Brunda . D (8951965481)	4.2 LPA
2022 - 2023	Nilaya Dutta	9599459178	B.Tech	CSE	Hexaware Technologies	Avinash Talreja 9702569555	4 LPA
2022 - 2023	Nishika Singh	7668992592	B.Tech	CSE	Jorie Health Pvt. Ltd.	Ms. Anita Singh - CEO	3 LPA
2022 - 2023	Riten Verma	9415056824	B.Tech	CSE	RemoteState	Saumya Srivastava 8920535027	5 LPA
2022 - 2023	Patik Bhatnagar	7599074312	B.Tech	CSE	Keyence India	Aleena Akhtar 9319291234	5.5 LPA
2022 - 2023	poorva jain	8077686165	B.Tech	CSE	Sopra Steria	Gurpreet Singh 9910408802	6 LPA
2022 - 2023	Pragab Dwivedi	8840129377	B.Tech	CSE	One Point System	NA	2.40 LPA
2022 - 2023	Prajwal Tiwari	9984975702	B.Tech	CSE	Unthinkable (Daffodil)	Sonal Goel 8285280581	5 LPA
2022 - 2023	Pranshu Kaushtik	7505254558	B.Tech	CSE	Velocity Software	HR 8368410182	5 IPS
2022 - 2023	Prbhav Athray	9012592386	B.Tech	CSE	NEC Corporation	Aditi Singh 9289212721	4 LPA
2022 - 2023	Premleta Yadav	9319172259	B.Tech	CSE	Mitsure Technologies	Isha Sharma 9694097802	6 LPA
2022 - 2023	Prena Kumari	8178232361	B.Tech	CSE	Sopra Steria	Gurpreet Singh 9910408802	6 LPA
2022 - 2023	Prena Saxena	9773695240	B.Tech	CSE	Mitsure Technologies	Isha Sharma 9694097802	6 LPA
2022 - 2023	Priyam Dwivedi	9838344461	B.Tech	CSE	Chetu Inc.	Anjali Singh Pundir 01204843248	3.5 - 4 LPA
2022 - 2023	Priyanshu Goel	7351799331	B.Tech	CSE	Qspiders	Brunda . D (8951965481)	4.2 LPA
2022 - 2023	Pulkit Sun	8115372759	B.Tech	CSE	TCS	Siddharth Singh 8572824885	3.36 LPA
2022 - 2023	Radhika Sharma	9368198878	B.Tech	CSE	BYJU'S	Samridhi Gupta 9289136063	7 LPA
2022 - 2023	Rahul Singh	9889661261	B.Tech	CSE	TCS	Siddharth Singh 8572824885	3.36 LPA
2022 - 2023	Raj Kesarwani	8858642490	B.Tech	CSE	Nagarro	Madhuri Gupta 7011817052	4.5 LPA
2022 - 2023	Raj Meurva	9026664917	B.Tech	CSE	Mitsure Technologies	Isha Sharma 9694097802	6 LPA
2022 - 2023	Rajjail Singh	7985466513	B.Tech	CSE	BYJU'S	Samridhi Gupta 9289136063	7 LPA
2022 - 2023	Rajiviek Sundhyal	9546077702	B.Tech	CSE	Qualitest Group	Radhika Nair 9535188822	4 LPA
2022 - 2023	Richa Tiwari	8707637714	B.Tech	CSE	Nagarro	Madhuri Gupta 7011817052	4.5 LPA
2022 - 2023	Rishabh Jain	7890704040	B.Tech	CSE	Kiwitech	Harish Nayal 7088588800	30,000 Per Month
2022 - 2023	Rishabh Raj	7505750316	B.Tech	CSE	Qspiders	Brunda . D (8951965481)	4.2 LPA
2022 - 2023	Rishabh Sharma	8882387909	B.Tech	CSE	BYJU'S	Samridhi Gupta 9289136063	7 LPA
2022 - 2023	Ritesh kumar gautam	7533976901	B.Tech	CSE	BYJU'S	Samridhi Gupta 9289136063	7 LPA
2022 - 2023	Ritik Mangal	9599314251	B.Tech	CSE	Qualitest Group	Radhika Nair 9535188822	4 LPA
2022 - 2023	Riya Malik	8130426721	B.Tech	CSE	Sopra Steria	Gurpreet Singh 9910408802	7 LPA
2022 - 2023	Rudransh Rastogi	7088025848	B.Tech	CSE	Qspiders	Brunda . D (8951965481)	4 LPA
2022 - 2023	Rupali Singh	8382024422	B.Tech	CSE	Nagarro	Madhuri Gupta 7011817052	4 LPA

4 LPA HEAD  
4.5 LPA  
30,000 Per Month  
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2022 - 2023	Sagar Arya	7895897606	B.Tech	CSE	Prudes Technologies	Sagar Arya 7895897606	3.5 LPA
2022 - 2023	Saket Pal	9672418362	B.Tech	CSE	Mitsure Technologies	Isha Sharma 9694097802	6 LPA
2022 - 2023	Tripti pandey	7817025585	B.Tech	CSE	Mitsure Technologies	Isha Sharma 9694097802	6 LPA
2022 - 2023	Ankit kumar verma	8953330558	B.Tech	CSE	Chetu Inc.	Anjali Singh Pundir 01204843249	3.5 - 4 LPA
2022 - 2023	Gaurav Kushwaha	9565848460	B.Tech	CSE	Big Oh Notation	Tanvi Kapoor 8448102310	5 LPA
2022 - 2023	Lokesh Saini	7895498294	B.Tech	CSE	TCS	Siddharth Singh 8572824885	3.36 LPA
2022 - 2023	Sakshi varshney	7668807381	B.Tech	CSE	All E Technologies	Huzefa Rafiq 7889959973	5 LPA
2022 - 2023	Satyam Nandev	8874308759	B.Tech	CSE	Chetu Inc.	Anjali Singh Pundir 01204843250	3.5 - 4 LPA
2022 - 2023	Saujanya Rastogi	7409516830	B.Tech	CSE	Qspiders	Brunda . D (8951965481)	4.2 LPA
2022 - 2023	Saurabh Tringunoyal	9084899870	B.Tech	CSE	Unthinkable (Daffodil)	Sonal Goel 8285280581	5 LPA
2022 - 2023	Shakshi Gupta	7068180221	B.Tech	CSE	All E Technologies	Huzefa Rafiq 7889959973	5 LPA
2022 - 2023	Shikhar Srivastava	6393994998	B.Tech	CSE	Qualitest Group	Radhika Nair 9535188822	4 LPA
2022 - 2023	Shivam Kumar	9027167486	B.Tech	CSE	Unthinkable (Daffodil)	Sonal Goel 8285280581	5 LPA
2022 - 2023	Shivam Parashar	7310940262	B.Tech	CSE	Chetu Inc.	Anjali Singh Pundir 01204843251	3.5 - 4 LPA
2022 - 2023	Shivang Sharma	8766211778	B.Tech	CSE	Qualitest Group	Radhika Nair 9535188822	4 LPA
2022 - 2023	Shivani Rajput	9696903102	B.Tech	CSE	Hexaware Technologies	Avinash Talreja 9702569555	4 LPA
2022 - 2023	Shivansh Rawat	7394910774	B.Tech	CSE	Total IT Global	Ritika Dey 7042003684	3.50 LPA
2022 - 2023	Shobhit Varshney	8433436566	B.Tech	CSE	Agicent	Bhawna Rana 8920361342	4 LPA
2022 - 2023	Shruti Rai	9120613491	B.Tech	CSE	AptTech Education	NA	4.12 LPA
2022 - 2023	Shruti Goel	8057405432	B.Tech	CSE	Jorle Health Pvt. Ltd.	Ms. Anica Singh - CEO	3 LPA
2022 - 2023	Shubham Srivastava	7991523202	B.Tech	CSE	Keyence India	Aleena Akhtar 9319291234	5.5 LPA
2022 - 2023	Shubham Yadav	7887036667	B.Tech	CSE	Impledge Technologies	HR 9773769486	5.5 LPA
2022 - 2023	Smita Singh	7525959538	B.Tech	CSE	Merino Consulting	Pritha Jain 8375062738	15,000 Per Month
2022 - 2023	Somya Banga	6397046946	B.Tech	CSE	Nagarro	Maduri Gupta 7011817052	4.5 LPA
2022 - 2023	Tanmay Badola	8586837735	B.Tech	CSE	Tech Mahindra	Shrutika 9341906657	3.25 LPA
2022 - 2023	Tanmay Gupta	8979539632	B.Tech	CSE	Tech Mahindra	Shrutika 9341906657	3.25 LPA
2022 - 2023	Tanmay Thirewal	9161371140	B.Tech	CSE	Qualitest Group	Radhika Nair 9535188822	4 LPA
2022 - 2023	Tanu Kesharwani	7992080730	B.Tech	CSE	Big Oh Notation	Tanvi Kapoor 8448102310	5 LPA
2022 - 2023	Tanya Chaudhey	7571002292	B.Tech	CSE	Semindbue	Naushien Javed	6 LPA
2022 - 2023	Tanya Gupta	7983256668	B.Tech	CSE	Vinculum Group	Varun Jadon 8077969198	4 LPA
2022 - 2023	Tarang Kushwaha	7651903315	B.Tech	CSE	Webkul	Deepika 9718457711	3.6 LPA
2022 - 2023	Tushar Gupta	7275292568	B.Tech	CSE	Qspiders	Brunda . D (8951965481)	4.2 LPA
2022 - 2023	Tushar Sharma	8802325889	B.Tech	CSE	Deutchcell Solutions	H@deutchcell.com	35,000 Per Month
2022 - 2023	Tushar Singh	9118345840	B.Tech	CSE	Qualitest Group	Radhika Nair 9535188822	4 LPA
2022 - 2023	Ujjwal Sharma	9643679978	B.Tech	CSE	Womeki	NA	9.5 LPA
2022 - 2023	Ujjwal Verma	8085750847	B.Tech	CSE	Merkle Science	NA	15,000 Per Month
2022 - 2023	Vaibhav Tyagi	7078989557	B.Tech	CSE	Tech Mahindra	Shrutika 9341906657	9.5 LPA
2022 - 2023	Vaibhav Tyagi	7983986674	B.Tech	CSE	Tech Mahindra	Shrutika 9341906657	9.5 LPA
2022 - 2023	Vanshika Kaushik	8445820405	B.Tech	CSE	Sony India (Superwell)	Kanchan Negi	23,000 Per Month

15,000 Per Month  
 9.5 LPA  
 35,000 Per Month  
 9.5 LPA  
 23,000 Per Month  
 9.5 LPA  
 23,000 Per Month  
 9.5 LPA  
 23,000 Per Month  
 9.5 LPA

2022 - 2023	Vikas gupta	9084941818	B.Tech	CSE	Onetu Inc.	Angali Singh Pundir 01204843252	3.5 - 4 LPA
2022 - 2023	Vikrant	6397693660	B.Tech	CSE	Cedross Technologies	Deepanshi Saxena 0522 - 4077902	4.25 LPA
2022 - 2023	Vinayak Dubey	8738077751	B.Tech	CSE	Mitsure Technologies	Isha Sharma 9694097802	6 LPA
2022 - 2023	Vishal Bhardwaj	8373930017	B.Tech	CSE	Qspiders	Bruna . D (8951965481)	4.2 LPA
2022 - 2023	Yash Jaiswal	9696887058	B.Tech	CSE	Tech Mahindra	Shrutika 9341906657	3.25 LPA
2022 - 2023	Yash Kumar Upadhyay	6388358064	B.Tech	CSE	Chetu Inc.	Angali Singh Punder 01204843253	3.5 - 4 LPA
2022 - 2023	Abhishek Kumar Singh	8271642978	B.Tech	ECE	WVDN	Ankur Singla 9991316104	4 LPA
2022 - 2023	Adarsh Srivastav	7379560819	B.Tech	ECE	WVDN	Ankur Singla 9991316104	4 LPA
2022 - 2023	Akash kumar Dwivedi	9560499564	B.Tech	ECE	WVDN	Ankur Singla 9991316104	4 LPA
2022 - 2023	Alok Kumar Mishra	9461430807	B.Tech	ECE	Super Plastronics	Purnima Sharma 8744817837	2,49,671 LPA
2022 - 2023	Ashwini Patel	912966056	B.Tech	ECE	WVDN	Ankur Singla 9991316104	3.20 LPA
2022 - 2023	Diyansh rastogi	7900887282	B.Tech	ECE	Cavisson	Kajol Gupta	3.5 LPA
2022 - 2023	Fahad Iqbal	9506780634	B.Tech	ECE	Ericsson	Tanushree	3.75 LPA
2022 - 2023	Hrshita	8279659925	B.Tech	ECE	WVDN	Ankur Singla 9991316104	4 LPA
2022 - 2023	Ishan Sharma	7455828179	B.Tech	ECE	Tech Mahindra	Shrutika 9341906657	3.25 LPA
2022 - 2023	Manvendra Singh	7055775632	B.Tech	ECE	TCS	Siddharth Singh 8572824885	3.36 LPA
2022 - 2023	Megha Kumari	6396909092	B.Tech	ECE	WVDN	Ankur Singla 9991316104	4 LPA
2022 - 2023	Mohit Kumar	7091007260	B.Tech	ECE	Ericsson	Tanushree	3.75 LPA
2022 - 2023	Nidhi Mishra	7518062002	B.Tech	ECE	WVDN	Ankur Singla 9991316104	4 LPA
2022 - 2023	Riddhi Agarwal	7703993391	B.Tech	ECE	NetProphets Cyberworks	Lydia George 9971126935	3.60 LPA
2022 - 2023	Ritesh tiwari	9870132298	B.Tech	ECE	BYJU'S	Samridhi Gupta 9289136063	7 LPA
2022 - 2023	Shoab Alam	6391396688	B.Tech	ECE	Avidron Aerospace	hmananiger@avidron.com	3.36 LPA
2022 - 2023	Shrishi Singh	8440119899	B.Tech	ECE	Ericsson	Tanushree	3.75 LPA
2022 - 2023	Subhranshu Patra	9911446208	B.Tech	ECE	Hexaware Technologies	Avinash Talreja 9702569555	4 LPA
2022 - 2023	Suryansh Pratap Singh	8126071036	B.Tech	ECE	Cavisson	Kajol Gupta	3.5 LPA
2022 - 2023	Tejesh kumar	7302882134	B.Tech	ECE	BYJU'S	Samridhi Gupta 9289136063	7 LPA
2022 - 2023	Utkarsh Aditya	7479806837	B.Tech	ECE	Super Plastronics	Purnima Sharma 8744817837	2,49,671 LPA
2022 - 2023	Utkarsh gupta	9335217517	B.Tech	ECE	BYJU'S	Samridhi Gupta 9289136063	7 LPA
2022 - 2023	Varsha	9625248979	B.Tech	ECE	WVDN	Ankur Singla 9991316104	4 LPA
2022 - 2023	Vinit Mishra	9936383345	B.Tech	ECE	Mitsure Technologies	Isha Sharma 9694097802	6 LPA
2022 - 2023	Yash Sisodia	8445049313	B.Tech	ECE	Mitsure Technologies	Isha Sharma 9694097802	6 LPA
2022 - 2023	Alok Srivastava	7985749384	B.Tech	EN	WVDN	Ankur Singla 9991316104	4 LPA
2022 - 2023	Deepak sahu	6386787871	B.Tech	EN	WVDN	Ankur Singla 9991316104	4 LPA
2022 - 2023	Priya Chaudhary	8447674001	B.Tech	EN	WVDN	Ankur Singla 9991316104	4 LPA
2022 - 2023	Tanya Singh	9548304153	B.Tech	EN	WVDN	Ankur Singla 9991316104	4 LPA
2022 - 2023	Utkarsh Rai	9939736636	B.Tech	EN	Chetu Inc.	Angali Singh Pundir 01204843254	3.5 LPA
2022 - 2023	Aakash Nuthreja	78199990495	B.Tech	IT	All E Technologies	Huzefa Rafiq 7889959973	GM 5 LPA 3.5 LPA 3.5 LPA
2022 - 2023	Abhishek Dubey	9911203385	B.Tech	IT	Webkul	Deepika 9718457711	3.5 LPA 3.5 LPA 3.5 LPA
2022 - 2023	Amit Singh	7668644747	B.Tech	IT	BYJU'S	Samridhi Gupta 9289136063	3.5 LPA 3.5 LPA 3.5 LPA

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 115 Engg. Rd, LPA Colony  
 Mt-24, Adhikar, Haryana  
 136123



2022 - 2023	Aditya Sharma	7060519099	B.Tech	IT	Chetu Inc.	Anjali Singh Pundir 01204843255	3.5 - 4 LPA
2022 - 2023	Akshat Saxena	9793740888	B.Tech	IT	All E Technologies	Huzifa Ratiq 7899959973	5 LPA
2022 - 2023	Archt Gupta	8957848262	B.Tech	IT	Hexaware Technologies	Avinash Talreja 9702569555	4 LPA
2022 - 2023	Arushi Saxena	7668996577	B.Tech	IT	Wingman Partners	Garima Singh 8506070010	5 LPA
2022 - 2023	Ayush Kumar	9315213447	B.Tech	IT	Ericsson	Tanushree	3.75 LPA
2022 - 2023	Bharat Verma	8126415436	B.Tech	IT	Qspiders	Brunda . D (8951965481)	4.2 LPA
2022 - 2023	Chittaranjan Kumar	7488295994	B.Tech	IT	Nucleus Software	Sapno Pandey	4.33 LPA
2022 - 2023	Deeksha Srivastava	7838285403	B.Tech	IT	Mitture Technologies	Isha Sharma 9694097802	6 LPA
2022 - 2023	Himanshu bagle	8218318299	B.Tech	IT	Senchblue	Nausheen Javed	6 LPA
2022 - 2023	Hrudyanshu	6396347300	B.Tech	IT	Chetu Inc.	Anjali Singh Pundir 01204843256	3.5 - 4 LPA
2022 - 2023	Hritvik Hiraniwar	8587034477	B.Tech	IT	Wingman Partners	Garima Singh 8506070010	5 LPA
2022 - 2023	Hritvik Choudhary	8126714492	B.Tech	IT	Apar Technologies	HR Ms. Kritika Shukla	4.20 LPA
2022 - 2023	Kanik Goel	9458753878	B.Tech	IT	BYJU'S	Samriddhi Gupta 9289136063	7 LPA
2022 - 2023	Karan Bisht	7292068161	B.Tech	IT	NEC Corporation	Aditi Singh 9289212721	4 LPA
2022 - 2023	Karnika Gupta	7303849437	B.Tech	IT	Hexaware Technologies	Avinash Talreja 9702569555	4 LPA
2022 - 2023	Keshav Kumar	8789214147	B.Tech	IT	Unthinkable (Darfool)	Sonal Goel 8285280581	5 LPA
2022 - 2023	Kritika	9305484249	B.Tech	IT	Tech Malindra	Shruti 9341906657	2.2 LPA - 3 LPA
2022 - 2023	Kshitej Tripathi	7571947999	B.Tech	IT	Unthinkable (Darfool)	Sonal Goel 8285280581	5 LPA
2022 - 2023	Malay dwivedi	7007141857	B.Tech	IT	Nagarro	Madun Gupta 7011817052	4.5 LPA
2022 - 2023	mayank tyagi	6398727388	B.Tech	IT	Wingman Partners	Garima Singh 8506070010	5 LPA
2022 - 2023	Mohd Shahzeb Shamsi	7505246211	B.Tech	IT	NEC Corporation	Aditi Singh 9289212721	4 LPA
2022 - 2023	Parth Pandey	7458910523	B.Tech	IT	Cavission	Kajal Gupta	3.5 LPA
2022 - 2023	Piyush Kumar Updhyay	9369243403	B.Tech	IT	Mitture Technologies	Isha Sharma 9694097802	6 LPA
2022 - 2023	Pranshu Vishnoi	7060892182	B.Tech	IT	Hexaware Technologies	Avinash Talreja 9702569555	4 LPA
2022 - 2023	Raghav Gupta	8193866003	B.Tech	IT	BYJU'S	Samriddhi Gupta 9289136063	7 LPA
2022 - 2023	Satavshi Mishra	6393383812	B.Tech	IT	Merrino Consulting	Priha Jain 8375062738	15,000 Per Month
2022 - 2023	Rajat Singh	7428058226	B.Tech	IT	Mitture Technologies	Isha Sharma 9694097802	6 LPA
2022 - 2023	Rajneesh saiwani	8178017286	B.Tech	IT	Webkul	Deepika 9718457711	3.6 LPA
2022 - 2023	Rishabh Sachan	7905273144	B.Tech	IT	Nucleus Software	Sapna Pandey	4.33 LPA
2022 - 2023	Ritik Pandey	7042816904	B.Tech	IT	Qualitest Group	Radhika Nair 9535188822	4 LPA
2022 - 2023	Ritik Singh	7310589657	B.Tech	IT	Hexaware Technologies	Avinash Talreja 9702569555	4 LPA
2022 - 2023	Sachin Chauhan	8395067567	B.Tech	IT	Webkul	Deepika 9718457711	3.6 LPA
2022 - 2023	Sahil Kumar	9799052053	B.Tech	IT	Chetu Inc.	Anjali Singh Pundir 01204843257	3.5 - 4 LPA
2022 - 2023	Sankalp Tandon	8188866680	B.Tech	IT	Chetu Inc.	Anjali Singh Pundir 01204843258	3.5 - 4 LPA
2022 - 2023	Shalu	9560575339	B.Tech	IT	Chetu Inc.	Anjali Singh Pundir 01204843259	3.5 - 4 LPA
2022 - 2023	Shambhavi Savarna	6204873825	B.Tech	IT	Chetu Inc.	Anjali Singh Pundir 01204843260	3.5 - 4 LPA
2022 - 2023	Shivam Chauhan	9548107578	B.Tech	IT	Webkul	Deepika 9718457711	3.5 - 4 LPA
2022 - 2023	Shivang Bhardwaj	9549470499	B.Tech	IT	Big Oh Notation	Tanvi Kapoor 8448102310	C F endowment Coles IT5-Engineering Colles 115-245 Adityan 011-2622-20115
2022 - 2023	Shivank Chauhan	7037008384	B.Tech	IT	Wingman Partners	Garima Singh 8506070010	

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 IT5-Engineering Colles  
 115-245 Adityan  
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2022 - 2023	Shubhu Bhattacharjee	9548502628	B.Tech	IT	Chetu Inc.	Anjali Singh Pundir 01204843261	3.5 - 4 LPA
2022 - 2023	Simmi Singh Puar	6398233522	B.Tech	IT	Mitsure Technologies	Isha Sharma 9694097802	6 LPA
2022 - 2023	Sparsh Tyagi	8506871525	B.Tech	IT	Eriksen	Tanushree	3.75 LPA
2022 - 2023	Srishti Tiwari	9953484597	B.Tech	IT	Qualitest Group	Radhika Nair 9535188822	4 LPA
2022 - 2023	Tanya Ranjan	8084456711	B.Tech	IT	Qualitest Group	Radhika Nair 9535188822	4 LPA
2022 - 2023	Tushar Ahuja	8218653943	B.Tech	IT	NetProfiets Cyberworks	Lydia George 9971126935	3.60 LPA
2022 - 2023	Tushar Chhabra	7531941033	B.Tech	IT	BYJU'S	Samiddhi Gupta 9289136063	7 LPA
2022 - 2023	Tushar Tyagi	9910573727	B.Tech	IT	Cavison	Kajal Gupta	3.5 LPA
2022 - 2023	Udit Kumar	7055168499	B.Tech	IT	Chetu Inc.	Anjali Singh Pundir 01204843262	3.5 - 4 LPA
2022 - 2023	Utkarsh Sharma	8800976185	B.Tech	IT	Unthinkable (Darfofil)	Sonal Goel 8285280581	6 LPA
2022 - 2023	Utkarsh Srivastava	9454044498	B.Tech	IT	Qspiders	Bruna . D (8951965481)	4.2 LPA
2022 - 2023	Vaishnavi Ojha	6306375228	B.Tech	IT	Qspiders	Bruna . D (8951965481)	4.2 LPA
2022 - 2023	Vansh Tyagi	8126168882	B.Tech	IT	NEC Corporation	Aditi Singh 9289212721	4 LPA
2022 - 2023	Vishu Aggarwal	7017604083	B.Tech	IT	Mitsure Technologies	Isha Sharma 9694097802	6 LPA
2022 - 2023	Yash Kumar	7060533462	B.Tech	IT	Wellkul	Deepika 9718457711	3.6 LPA
2022 - 2023	Aashish	8216592874	B.Tech	ME	DBG	Renu Sharma 9053003375	30,000 Per Month
2022 - 2023	Abhijeet shindodia	9058361934	B.Tech	ME	DBG	Renu Sharma 9053003375	30,000 Per Month
2022 - 2023	Ansh Choudhary	8493888481	B.Tech	ME	SFC Solutions	Renu Sharma 9053003375	4 - 5 LPA
2022 - 2023	Arpit Tiwari	7186456653/73074676	B.Tech	ME	SFC Solutions	Shubham Sahu	4 - 5 LPA
2022 - 2023	Nikhil Kumar	9068706221	B.Tech	ME	Hicon Engineering	Sudhanshu Srivastava 9810945777	5 LPA
2022 - 2023	Nirmal kumar raj	7217860509	B.Tech	ME	Aviutron Aerospace	hrmanager@aviutron.com	3.36 LPA
2022 - 2023	Nishant panchal	9717363665	B.Tech	ME	Aviutron Aerospace	hrmanager@aviutron.com	3.36 LPA
2022 - 2023	Sechin Tiwari	9386716801	B.Tech	ME	Aviutron Aerospace	hrmanager@aviutron.com	3.36 LPA
2022 - 2023	Saurabh Tyagi	9643544562	B.Tech	ME	Hike Education	Tushar 7428328839	5.35 LPA
2022 - 2023	Shivashish pandey	9717762594	B.Tech	ME	Aviutron Aerospace	hrmanager@aviutron.com	3.36 LPA
2022 - 2023	Siddhant Mishra	9650316540	B.Tech	ME	Makino Auto	Deeksha Agarwal 0120-4630000	20,000 Per Month
2022 - 2023	Tushar Tharu	7042688785	B.Tech	ME	DBG	Renu Sharma 9053003375	30,000 Per Month
2022 - 2023	Abhishek Rai	7007428756	MBA	MBA	HDFC Life	Rutuja Bandal 7719037360	4.75 LPA
2022 - 2023	Akshat Mishra	8954587942	MBA	MBA	HDFC Life	Rutuja Bandal 7719037360	4.75 LPA
2022 - 2023	Amr Kumar Singh	8299406800	MBA	MBA	Kotak Mahindra	Saurabh Mahto 8789096189	3.50 LPA
2022 - 2023	Aniket Ashiana	9161342134	MBA	MBA	Hike Education	Tushar 7428328839	5.35 LPA
2022 - 2023	Anjali Srivastava	8840621013	MBA	MBA	RMV Workforce	Ms. Priyanka Sood	2.64 LPA
2022 - 2023	Ashirwad Ruhela	9997055428	MBA	MBA	HDFC Life	Rutuja Bandal 7719037360	4.75 LPA
2022 - 2023	Ayushi Singh	7355546844	MBA	MBA	HDFC Life	Rutuja Bandal 7719037360	4.75 LPA
2022 - 2023	Ayushi Tyagi	9084744211	MBA	MBA	Makino Auto	Rutuja Bandal 7719037360	4.75 LPA
2022 - 2023	Deepthi dashan	9540909862	MBA	MBA	Aditya Birla Capital	Deeksha Agarwal 0120-4630001	20,000 Per Month
2022 - 2023	Dhruv panchal	9540074506	MBA	MBA	Kotak Mahindra	Tanvi Mahajan 9501040554	2.64 LPA
2022 - 2023	Faizan	9582340966	MBA	MBA	Star Freight & Forwarding P	Saurabh Mahto 8789096189	3.50 LPA
2022 - 2023	Kajal	7217604124	MBA	MBA	Learning Routes	HR 9810815411	2.64 LPA

HR-25 LPA 2023-2024

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2022 - 2023	Keshav Kumar Singh	8477840052	MBA	MBA	Kotak Mahindra	Saurabh Mahto 8789096189	3.50 LPA
2022 - 2023	Manish Singh	9792939092	MBA	MBA	Mac Pro Business	NA	1.8 LPA
2022 - 2023	Moyenk Gautam	8953764607	MBA	MBA	Learning Routes	Vipul Sareen 97116 66201	6.6LPA
2022 - 2023	Mohammad Faizan	9045170661	MBA	MBA	Star Freight & Forwarding P	HR 9810815411	25000 Per Month
2022 - 2023	Mohd Rohaan	8802262079	MBA	MBA	YARS Solution	NA	48,600 Per Month
2022 - 2023	Mohd Tarseer	6306913416	MBA	MBA	HDFC Life	Rutuja Bandal 7719037360	4.75 LPA
2022 - 2023	Muskan Goel	9935160857	MBA	MBA	Trident Information	Khushboo Nirala 9643008748	3.6 LPA
2022 - 2023	Mishra	88510 14472	MBA	MBA	Makino Auto	Deeksha Agarwal 0120-4630002	20,000 Per Month
2022 - 2023	Pallavi Malhotra	8527692404	MBA	MBA	Kotak Mahindra	Saurabh Mahto 8789096189	3.50 LPA
2022 - 2023	Priva Gautam	9627235617	MBA	MBA	Regalo Kitchens	Akanksha Dhingra 9717139176	9.60 LPA
2022 - 2023	Rahul Singh bora	7042111943	MBA	MBA	Aditya Birla Capital	Tarvi Mahajan 9501040554	2.6 - 3 LPA
2022 - 2023	Rajan Tyagi	7302021603	MBA	MBA	Aditya Birla Capital	Tarvi Mahajan 9501040554	2.6 - 3 LPA
2022 - 2023	Sachin	9140262580	MBA	MBA	BYJU'S	Samriddhi Gupta 9289136063	7 LPA
2022 - 2023	Sarmad Ali	8882369049	MBA	MBA	Kotak Mahindra	Saurabh Mahto 8789096189	3.50 LPA
2022 - 2023	Shafaly shreya	7779873644	MBA	MBA	Kotak Mahindra	Saurabh Mahto 8789096189	3.50 LPA
2022 - 2023	Siddhi Gaur	8588055085	MBA	MBA	Hindware	Amrit Pandey	6.6 LPA
2022 - 2023	Somya Gupta	8656307853	MBA	MBA	Kotak Mahindra	Saurabh Mahto 8789096189	3.50 LPA
2022 - 2023	Suhel Khan	9149063345	MBA	MBA	HDFC Life	Rutuja Bandal 7719037360	4.75 LPA
2022 - 2023	Sunanda Chauthan	9456448887	MBA	MBA	HDFC Life	Rutuja Bandal 7719037360	4.75 LPA
2022 - 2023	Tanya Mishra	9354129826	MBA	MBA	Kotak Mahindra	Saurabh Mahto 8789096189	3.50 LPA
2022 - 2023	Tushar Kaushik	9354201569	MBA	MBA	Kotak Mahindra	Saurabh Mahto 8789096189	3.50 LPA
2022 - 2023	Yogender Singh	9149025499	MBA	MBA	HDFC Life	Rutuja Bandal 7719037360	4.75 LPA



## Approximation of operators related to squared Szász-Mirakjan basis functions

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**Abstract.** The main objective of this paper is to define a sequence of positive linear operators by means of the squared Szász-Mirakjan basis functions. We estimate the rate of convergence in terms of the modulus of continuity and the class of Lipschitz functions. Furthermore, we have shown the comparison and convergence of these operators with the help of some illustrative graphics.

### 1. Introduction and Preliminaries

The basis of the theory of approximation is the theorem discovered by Weierstrass in 1885. The first constructive proof of this theorem was given by Bernstein [5] in 1912. He introduced a sequence of polynomials  $B_m : C[0, 1] \rightarrow C[0, 1]$  defined by

$$B_m(h; y) = \sum_{k=0}^m p_{m,k}(y) h\left(\frac{k}{m}\right), \quad y \in [0, 1], \quad (1)$$

where Bernstein basis function is given by

$$p_{m,k}(y) = \binom{m}{k} y^k (1-y)^{m-k}, \quad m \in \mathbf{N}.$$

Later it was discovered that Bernstein polynomials have numerous noteworthy properties, so new applications and generalizations are being found of it. The aim of these generalizations is to provide appropriate and powerful tools to application areas such as computer-aided geometric design, numerical analysis and solutions of differential equations. Szász [16] and Mirakjan [12] generalized the Bernstein polynomials to an infinite interval as

$$S_m(h; y) = \sum_{k=0}^{\infty} s_{m,k}(y) h\left(\frac{k}{m}\right), \quad h \in C[0, \infty), \quad (2)$$

2020 Mathematics Subject Classification. 41A25; 41A36

Keywords. Linear positive operators; Szász-Mirakjan operators; Rate of convergence; Modulus of continuity.

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(M. Mursaleen)

**HORROR AND NEGLIGENCE IN THE SELECTED POEMS OF SIEGFRIED****SASSOON****Dr. SHIKHA BAKSAR**

Assistant Professor

IMS Engineering College,

Ghaziabad, U.P., India

**ABSTRACT**

*This research paper explores the themes in Siegfried Sassoon's war poems. The major theme of Sassoon's poetry is horror of the trenches but there are certain sub themes like negligence of tired soldiers, political ineptitude, blind faith in war, satire on generals and churchmen and racial discrimination which present a horrible picture of war in front of us. Siegfried Sassoon has written famous war poems, religious poems and autobiographies but he is mostly acknowledged for his angry and compassionate nature. He earned Military cross and the title "Mad Jack" for his quick practical response and fearlessness in case of danger. His war poems exemplify the realization of the disconnection between the views of war at home and the insensitive and frightening realities of the battlefield. His poetry depicts both physical and mental distortion that a soldier faces during war. This study provides a deep insight to the reader to visualize the atrocities a soldier faces during war from the perspectives of Siegfried Sassoon.*

**Keywords:** Siegfried Sassoon, war, horror, trenches, atrocities, soldier, sorrow, negligence of tired soldiers

# Two Level Storage Inventory Model with Ramp Type Demand under Inflationary Environment with Partial Backordering

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**Abstract:** A two level storage inventory model is constructed in this article. It is well known that the demand for seasonal products (such as fur coats) increases at the beginning of the season until a certain period of time and stabilizes into a fixed amount of time for the rest of the season. To store these extra parts for the buyer arrange additional storage space. This model uses a ramp type demand rate, variable deterioration and shortages are partially backlogged using a variable backordering rate. The entire research is conducted in an inflationary environment. The goal of this model is to reduce the system's total average cost. A numerical assessment and sensitivity analysis are used to verify the suggested model's optimal solution.

**Keywords:** Two-warehouse, ramp type demand rate, partial backlogging, inflation, time varying deterioration.

## 1. Introduction

The majority of inventory issues are founded on the assumption that you have access to an owned warehouse with infinite storage. In practice, however, because warehouses often have limited storage space, this assumption is untrue. Inventory management purchases a large number of goods all at once when the cost of sourcing products is higher than the cost of inventory, or when a favorable price discount for bulk purchases is available, or when the demand for the product is high. The present owned warehouse (OW), which has limited storage capacity, will be unable to accommodate such a large amount of items. After that, the excess items are stored in a rented warehouse (RW), which is located either far away or close to OW and these items are only sold to clients at OW. The cost of inventories at RW is often higher than at OW. As a result, goods are placed first in OW, followed by excess stock in RW, in order to reduce inventory carrying costs. RW stocks are also cleared first, with stock shifted from RW to OW in a continuous or bulk release pattern. This inventory system is known as a two-storage inventory system.

In supermarkets, when attractive discounts are available for bulk purchases or when the purchase price of goods exceeds other inventory-related costs. The company's management chooses to buy a significant quantity of goods all at once. These goods cannot be housed in a

crowded market area's existing storehouse (i.e. OW). In this circumstance, one (often more than one) additional godown (i.e., RW) is hired on a rental basis for the storage of more goods. Hartley<sup>4</sup> invented the two-warehouse inventory system first. Hartley<sup>4</sup> provided a basic two-story model, in which the cost of transporting a unit from a rented area (RW) to a warehouse (OW) was not considered. Sarma<sup>5</sup> gives a two-level storage deterministic inventory model with infinite refilling rate. In this model, he extends the Hartley<sup>4</sup> model by introducing a transport value. For a linear trend in demand with two levels of storage, Goswami and Chaudhuri<sup>6</sup> provide an EOQ model. For degrading goods, Bhunia and Maiti<sup>13</sup> formulated a two-warehouse inventory model with linearly increasing demand over time, shortages were permitted and excess demand was backlogged. Due to the restricted capacity of existing storage Kar et al.<sup>14</sup> suggested a deterministic inventory model with two level storage facilities over a finite time horizon. Zhou and Yang<sup>15</sup> gives a two-level storage inventory model with a stock-level dependent demand rate. Hsieh et al.<sup>17</sup> proposed a two-warehouse deterministic inventory model for degrading goods with shortages by reducing the net present value of the entire cost. Recently, Skouri and Konstantaras<sup>24</sup> created two warehouse inventory models for decaying commodities with ramp demand rates.

As the list deteriorates in nature, the problem becomes



## Design and Analysis of Suspended Core Photonic Crystal Fiber Formed by Semicircular Air Holes Near the Core

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**Abstract-** A silica photonic crystal fiber (PCF) with three rings of air holes arranged in hexagonal lattice is proposed to modify and control the nonlinearity and dispersion properties. First time, semicircular air holes are taken near the core to obtain suspended core. High filling fraction and small suspended core are possible without disturbing other air holes in the cladding. Thus, the proposed PCF offers better properties and flexibility in fabrication than existing PCFs. Semicircles are elongated systematically towards center of the core based on eccentricity of the semicircles. The effect of core suspension on the dispersion, nonlinearity, effective area, confinement loss, dispersion penalty and bit error rate of the proposed PCFs are investigated using finite element method. This study reveals that the dispersion and zero dispersion wavelength can be modified by adjusting the eccentricity of the semicircles. It is found that the dispersion curves show two zero dispersion wavelengths at eccentricity greater than 0.2. The effect of the eccentricity of semicircles on nonlinearity, effective area and confinement loss has been observed and it is found that nonlinearity increases with an increase in eccentricity. In comparison with the reported results of the other PCFs, the proposed PCF shows similar dependence of fiber parameters on eccentricity of the semicircles. It is anticipated that the proposed PCF could reduce the fabrication difficulties due to its high pitch and semicircles of air holes near the core. Thus, these PCFs can be a new class of fabrication friendly PCFs for future applications in various field.

**Index Terms-** Confinement loss, Dispersion, Effective area, Nonlinear coefficient, Zero Dispersion Wavelength.

### I. INTRODUCTION

Photonic crystal fibers have been a research interest over the last two decades. They exhibit

remarkable properties like endless single-mode propagation [1-2], tunable dispersion [3-4], high non-linear coefficient [5-7], and large birefringence [7] over conventional optical fibers. Photonic crystal fibers are made by using the solid core and periodic arrangement of air holes in the cladding. The diameter of the air hole ( $d$ ) and the distance between the air holes called pitch ( $\Lambda$ ) are characteristic parameters of PCFs. The flexibility in choosing the characteristic parameters made the PCF choice for a wide range of applications such as supercontinuum generation [8], optical sensors [9], optical communication [10], pulse compression [11], fiber laser [12] and polarization-maintaining fibers [13].

PCFs made from silica show superior optical properties in the visible and near infrared regions, thus, making PCFs with silica is a natural choice. Control of dispersion and nonlinearity plays a crucial role in the applications of silica photonic crystal fibers [14]. Hence, several techniques have been proposed over the years to control the nonlinearity and dispersion properties of PCFs by varying the geometrical parameters [15-20]. Among them suspended core PCF is a promising technique for control of dispersion and nonlinearity of the PCFs [21-24]. These fibers are composed of small core and light is strongly confined in the core. Thus, PCFs with suspended core are flexible in the design of nonlinearity and dispersion. D Ghosh et.al. [25-26] fabricated suspended core PCF by introducing egg-shaped air holes adjacent to the core to obtain suspended core. They showed that the egg-shaped air holes significantly influenced the nonlinearity and

# Impact of COVID 19 on the banking sector

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**Abstract:** COVID-19 adversely affected the Indian Economy as well as human lives. Almost all the sectors have been affected. This paper aims to investigate the COVID-19 pandemic's effect on the banking sector. Because of the lockdown, there were no sources of income. That's why people demanded advances and on the other hand, they were not able to pay the loans. To overcome this situation, the Reserve bank of India and the central Government have taken many measures to provide relief to the people. This Research Paper shows the relationship between NPAs, Advances, and Profitability due to COVID-19 and also the impact of measures taken by RBI and the government in the Indian Banking sector.

**Keywords:** Covid-19, Banking Sector, Pandemic, Indian Banking, Reserve Bank of India.

## I. INTRODUCTION

In January 2020, coronavirus emerged in India and hit millions of lives with thousands of deaths across the world. To fight COVID-19, the Indian Government announced complete lockdown in the country starting on March 24, 2020 and the same was extended to 3rd May, 2020. A similar action has been taken by many governments around the world. However, this kind of measures taken by the Indian Government to control the spread of covid-19 pandemic impacted the GDP of the country in a disruptive way.

One of the most important sectors of the Indian economy is the banking sector which is responsible for all the financial activities going on in the country and working as a supporting hand to all of the industries in terms of financing, credit, transactions, collection and payment and so on. Covid-19 has caused so much effect in the performance of the Indian banking sector in terms of NPAs, Profitability, advances etc. Indian banks have faced a difficulty during the pandemic period and it has changed the profitability of the Indian banks.

They have faced many challenges and the changes they made have impacted on their financial statements. One of the core impacts was because of the increase in NPAs, non-repayment of loans and demand of credit. And these have caused the banks to reduce their profitability from the year 2019 onwards. To check the impact of COVID-19 on Indian Banks, various policy measures were taken by Reserve Bank of India and Indian Government at centre level and state level. Some experts believe that Banking sector mainly in India may take a long time to recover from the impact of this pandemic.

### *Indian Banking sector*

A bank is an institution which has a primary function to accept deposits and lend money to needful individuals, businesses, and governments. When any individual deposits money in the bank,

it doesn't matter what the amount is, the individual knows that the money will be safe in the bank as compared to anywhere else. Besides this, banks provide numerous services such as loan facilities, fixed deposit schemes, debit & credit card facilities, etc.

In India, currently, there are a total of 33 banks, of which 12 are public sector banks and the rest 21 are private sector banks. The banks have a dominant position in India's economy and it is a major contributor to employment in India. Unfortunately, many of the performance indicators of India's banks have faced negative situations since the last five years. This situation holds true in case of PSBs as they seem more inefficient compared to their peer groups.

To get a better picture of the impact of covid-19 on Indian banks, one must be aware of the factors that affect the profitability of a bank.

## II. LITERATURE REVIEW

Ambrish Kumar Mishra, Archana Patel and Sarika Jain (Feb, 2021) carried out a research study titled "Impact of Covid-19 Outbreak on Performance of Indian Banking Sector" demonstrates repercussions of the Covid-19 in the performance of the Indian banking sector by creating and evaluating the largest comprehensive knowledge base called ontology (Covid19-IBO) in order to get semantic information, in continuation of the same they address few important research questions with respect to Indian economy.

Vikas Kumar and Sanjeev Kumar (Jan, 2021) carried out a research study titled "Impact of Covid\_19 on Indian Economy with Special Reference to Banking Sector: An Indian Perspective" demonstrates overview of the impact of COVID-19 situation on Indian economy and its banking sector and also analyses the various policy measures taken by Reserve Bank of India and Indian Government at center level and state level to improve the current economic situation of the country.

Ashly Lynn Joseph and Dr. M. Prakash (Jul, 2014) carried out a research study titled "A Study on Analyzing the Trend of NPA Level in Private Sector Banks and Public Sector Banks" demonstrates trends of NPA in banking industry, the factors that mainly contribute to NPA raising in the banking industry and also provides some suggestions how to overcome this burden of NPA on banking industry.

Dr. Jitender Singh and Dr. B. S. Bodla (2020) carried out a research study titled "Covid-19 Pandemic and Lockdown Impact on India's Banking Sector: A Systematic Literature Review" demonstrates the impact of this pandemic on Banks and NBFCs due to lockdown which has resulted into closure of



all commercial organizations, educational institutions, public and private offices, suspension of means of transportation, etc. by considering views expressed by several groups including economists, financial institutions like IMF, World Bank and consulting firms.

Dr. Nilam Panchal studied that the impact of covid-19 pandemic on the profitability of the bank and collect the data from different banks i.e. Axis bank, SBI bank, Bank of broda and HDFC bank and show their NPAs and total advances in cr. Author use statistical tools like correlation.

Dr. Priyanka Bhobade, Dr. D.Y. Patil Vidyapeeth's and Prof. Anu Alex study about the change in RBI policy due to COVID-19 and discover that the government encouraging people to design innovative business model and Author also define the different RBI reforms.

Darjana, D., Wiryono, S. K., & Koesrindartoto, D. P. (2022) collect data of 10 year monthly data and data is collected from Indonesia Financial Statistics, released by the central bank, Bank Indonesia. And use the regression model as a statistical tool.

Rakesh Kumar, MD and CEO, TransUnion Cibil says, the ongoing COVID-19 pandemic poses a new threat to businesses, especially for small and medium enterprises. Out of the loans worth Rs 2.32 lakh crore of MSME are at a risk, Rs 13,500 crore of micro enterprises may become NPA, in the coming 12 months, as they fall in the risk category of 7 to 10, which is the highest risk category according to TransUnion Cibil, a credit Information firm (quoted in Financial Express Online, April 27, 2020). Thus, banks and NBFCs are going to be ultimately affected if the huge part of loans of micro enterprises turns bad.

Dr. Priyanka Bobade Global Business School & Research Centre, Tathwade, Pune study about the Change in RBI policy due to COVID-19 and to find out a solution for the Indian Banking system to face COVID-19 Pandemic.

### III. RESEARCH METHODOLOGY

#### Objectives of the study:

- To find the impact of the covid-19 pandemic on the profitability of the bank.
- To establish the relationship among the NPAs, advances and Net profit during the pandemic period.

#### Data collection:

- The study is planned to be carried out with the help of secondary data.

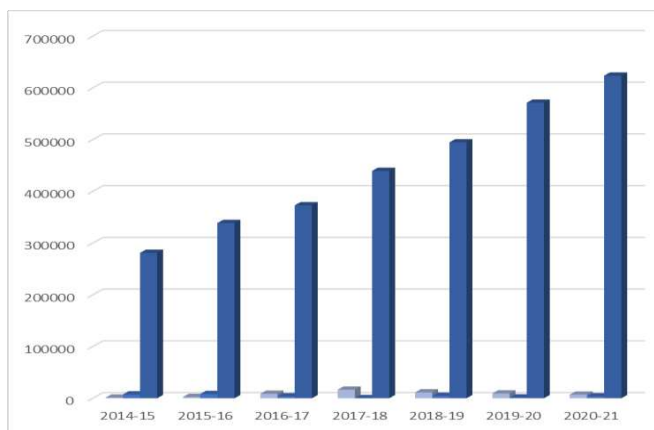
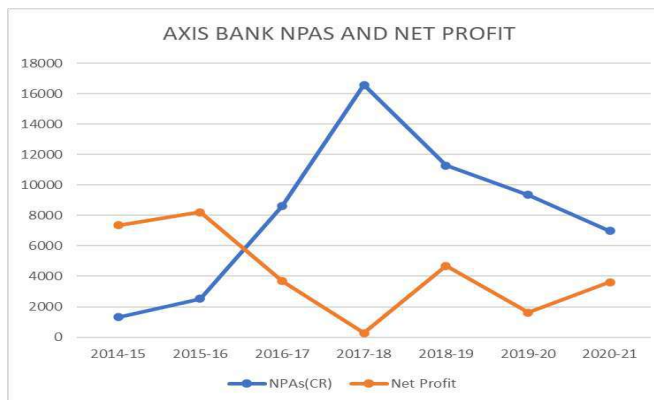
#### Sources of Data:

- Bank's annual reports
- Magazines, newspaper, articles, and journals
- Literature review

### IV. DATA INTERPRETATION & ANALYSIS

#### 1. Axis Bank

YEAR	NPAs(CR)	Net Profit	Total Advances
2014-15	1316.71	7357.82	281083.03
2015-16	2522.14	8223.66	338774
2016-17	8626.55	3679.28	373069
2017-18	16591.71	275.68	439650
2018-19	11275.6	4676.61	494798
2019-20	9360.41	1627.22	571424
2020-21	6993.52	3614	623720



#### Interpretation:

In the above chart, NPAs for the year 2014-15 is Rs. 1316.71 CR and Net Profit for the year is Rs 7357.82 CR. In the subsequent year, the net profit and NPAs of the bank both rose i.e., Rs 7357.82 CR, Rs 1316.71 CR and 6993.52 respectively. The reason behind the same is the net profit of the bank is much higher than the NPAs of the bank. Thus, there is nominal or no effect of NPAs is seen on the bank profit in the year 2014-15 and 2015-16.

In the year 2016-17, the net profit of the bank decreased to Rs 3679.28 CR and NPAs of the bank surpassed the net profit of the bank. The NPAs have increased to Rs 8626.55 CR. Thus, it is clearly seen that the sudden increase of the NPAs of the bank has majorly impacted the profitability of the bank in the year 2016-17. The reason for the sudden increase in the NPAs in the

year 2016-17 is that there was higher liquidity and very less corporate credit demand. Still the company managed to increase the loan advances in the year 2016-17 but all the benefits were eaten up by the increase in the NPAs.

In the year 2017-18, the NPAs of the bank doubled compared to 2016-17. This again majorly impacted the profitability of the bank for the year. The profit of the bank reduced to Rs 275.68 CR. In the year 2020-21, the NPAs got reduced and net profit increased. Thus, it is clearly seen that there is an inversely proportional relationship between NPAs and net profit of the bank.

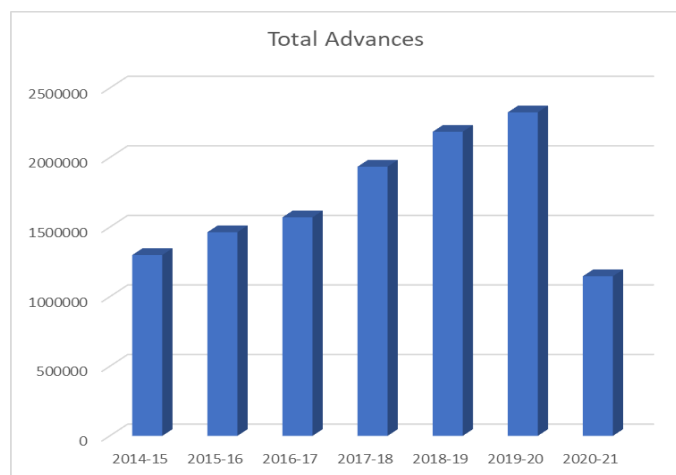
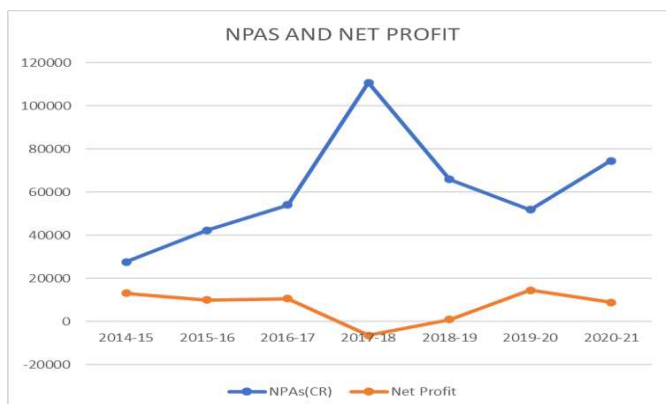
**Pandemic effect:**

In the year 2019-20, Net profit and NPAs, both are decreasing.

1. NPAs are decreasing
2. Loan disbursement is also increasing

**2. State Bank of India**

YEAR	NPAs(CR)	Net Profit	Total Advances
2014-15	27590.58	13101.9	1300026.39
2015-16	42365.78	9950.65	1463700.42
2016-17	54065.61	10484.1	1571078.38
2017-18	110854.7	-6547.45	1934880.19
2018-19	65894.74	862.23	2185876.92
2019-20	51871.3	14488.11	2325289.56
2020-21	74,482	8834.3	1147652



**Interpretation:**

From the above charts, it is clearly seen that from the year 2014-15 to 2020-21 NPAs are higher than the Profit in state bank of India. Reason behind this can be the sharp rise in total advances every year.

In the year 2018-19, NPAs of the bank are decreasing compared to the previous year and also Profitability has increased to 862.23 crores from -6547.45 crores. Reason behind such a growth was:

1. Government Investments
2. Demand from Personal loan segment
3. Better Risk management

From the above data of NPAs and Advances it is clearly seen that in the year 2017-18, NPA ratio was 5.72% while in the year 2018-19, it decreased to 3.01% which led to greater Profitability.

**Pandemic effect:**

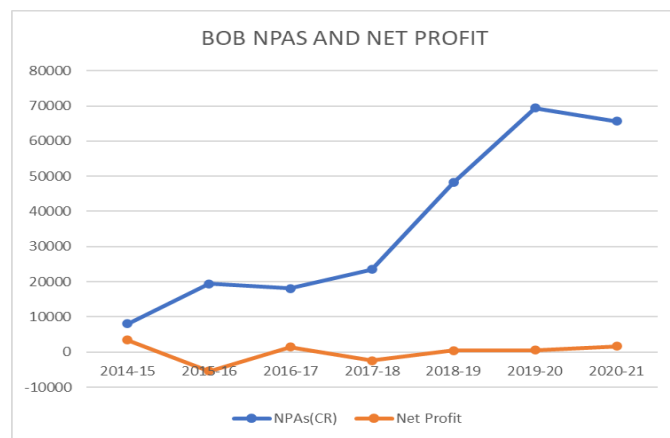
After 2018-19, a similar position was found in the year 2020-21 in spite of facing Covid-19 Pandemic. Reasons are:

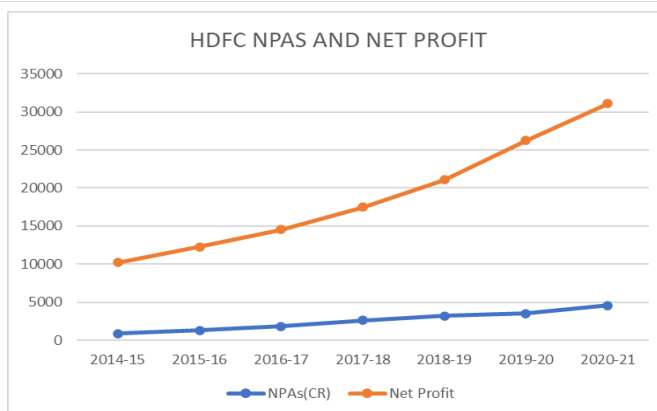
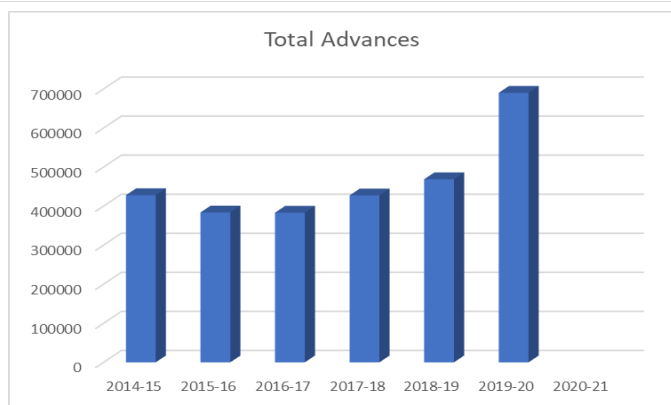
1. Digital Payments
2. Increased Interest Income due to rise in Advances
3. Corporate credit demand
4. MSME lending

So we can say that, demand for the advances was high in the year 2019-20 due to the financial crisis in covid-19 pandemic which led to a source of income for SBI in terms of Interest on loans and also because of decrease in NPAs, profitability was increased.

**3. Bank of Baroda**

YEAR	NPAs(CR)	Net Profit	Total Advances
2014-15	8069.49	3398.44	428065.14
2015-16	19406.46	-5395.54	383770.18
2016-17	18080.18	1383.14	383259.22
2017-18	23482.65	-2431.81	427431.83
2018-19	48232.76	433.52	468818.74
2019-20	69381.43	546.19	690120.73
2020-21	65698	1679	734033





**Interpretation:**

In the above chart, NPAs for the year 2014-15 is Rs. 8069.49CR and Net Profit for the year is Rs. 3398.44 CR. In the subsequent year, NPAs have increased drastically with Rs. 19406.46 and on the other hand because of the rise in NPAs, Net Profit has decreased and made a loss of Rs. 5395.54 CR.

In the year 2016-17, BOB revived its profit of Rs. 1383.14 CR succeeded in decreasing its NPAs which was 18080.18 CR. Though there is not much difference in NPAs and advances compared to previous year, then also they made Profit. Sources of the Profit can be corporate financial services, international operations, retail financial services, business financial services, global treasury and rural financial services.

Again, in the year 2017-18, BOB failed to achieve profitability and made a loss of Rs. 2431.81 CR because of the drastic increase in NPAs of 23482.65 CR. So the inverse relationship between NPAs and Profitability can be seen in the year 2017-18.

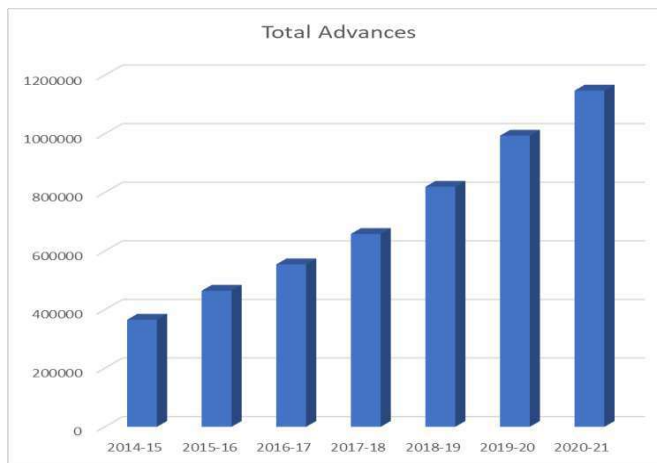
In the year 2018-19, NPAs of the bank almost doubled but then also Profit was increased compared to previous year. Reason behind profitability can be the income from other sources increased and it covered the loss of NPAs. But In the year 2020-21 NPAs slightly increased and net profit increased 3 times and total advances also increased.

**Pandemic effect:**

In the next year 2020-21, NPAs decreased to 65698 CR and Profit increased to 1679CR respectively. Reason can be the rise in Advances i.e., 734033 CR which led to increase in interest income and in turn increase in Profitability. Reason behind the increase in Advances can be the Covid-19 pandemic as people were in need of credit.

**IV. HDFC**

YEAR	NPAs (CR)	Net Profit	Total Advances
2014-15	896.28	10215.92	365495.03
2015-16	1320.37	12296.21	464593.96
2016-17	1843.99	14549.64	554568.2
2017-18	2601.02	17486.73	658333.09
2018-19	3214.52	21078.17	819401.22
2019-20	3542.36	26257.32	993702.88
2020-21	4,554.82	31,116.53	1147652



**Interpretation:**

HDFC Bank’s NPAs, Net profit as well as loan advances are increasing from 2014-15 to 2020-21. It is clearly seen that there is no effect of increased NPAs on net profit. The reason behind the same is the loan advances and net profit. Net profit is much higher than the NPAs of the companies.

Thus, NPAs have not affected the profitability of the business. Their loan advances have risen from Rs 265495.03 CR to Rs 1147652CR in seven years, which is approximately triple of the loan advances in 2014-15. The more the loan advances, the more the net profit will be. Thus, NPAs are not becoming a barrier to reduce the profitability of the bank.

**Pandemic effect:**

Total advances in the year 2020-21 has increased to Rs 1147652 CR, which is because of the moratorium given by the banks to the defaulters. Thus, their advances have increased and NPAs have not increased more than it would have been, due to the moratorium given. Also, their NPAs are very nominal compared to the net profits over 7 periods of time. Thus, there was an insignificant impact on the net profit of the bank, though the whole Indian economy was down.

**Correlation Analysis:**

Correlation of	Axis	SBI	BOB	HDFC
Net profit & NPAs	-0.9	-0.9	0.04	0.97
Net profit & Total advances	-0.7	-0.3	0.23	1

*Note:*

- Ø If the correlation is less than 1 then there is reciprocal relation between the two variables.
- Ø If the correlation is near 0, then there is no relation between the two variables.
- Ø If the correlation lies between 0.1 to 0.5, then there is moderate impact of one variable on the other.
- Ø If the correlation is more than 0.5, then there is high impact of one variable on the other.

## V. FINDINGS

*Axis Bank:*

The correlation between Net profit and NPAs comes to -0.90.

The correlation between the total advances and the Net profit comes to -0.7.

This shows that both the variables have reciprocal relation. The reciprocal relation is justified because the profit is very less compared to the NPAs of the bank. Thus, NPAs have a greater and negative impact on profitability of the business. Though the advances are increasing, the profitability is hampered because of NPAs.

*SBI:*

The correlation between Net profit and NPAs comes to -0.90.

The correlation between the total advances and the Net profit comes to -0.3.

The reason is justifiable for the above correlations. There is a reciprocal relationship between NPAs and Net profit. The reason is that SBI has higher NPAs than their Net profit. Their loan advances have increased in 2019-20. During the pandemic period, people were in need of credit demand. Also the moratorium given to the customers have led to decrease in NPAs. Thus, their profitability for the year 2019-20 has increased. But the profitability will hamper in the coming years as they will need to make higher provisions for the NPAs and this will reduce the profitability of the bank.

*BOB:*

The correlation between Net profit and NPAs comes to 0.04.

The correlation between the total advances and the Net profit comes to 0.23.

The correlation 0.04 shows that there is no relation between net profit and NPAs of the bank. The reason behind the same can be the high fluctuation in the Net profits. Net profits for the five years are fluctuating because there is unevenness in the loan advance. The loan advances have increased in the year 2019-

20. For liquidity purposes, BOB has invoked the Covid-19 restructuring schemes of the RBI for loans worth Rs 7800 CR in the year 2020.

*HDFC:*

The correlation between Net profit and NPAs comes to 0.97.

The correlation between the total advances and the Net profit comes to 1.

The correlation of Net profit and NPAs shows that there is positive relation between the two. This is because HDFC bank has much higher profitability than its NPAs are. Thus, the increasing NPAs does not have impact or negligible impact on the profitability of the bank. Their advances have increased 3 times from 2015 to 2020, the same as the Net profit.

## VI. CONCLUSION

COVID-19 outbreak has hampered the Indian Banking operations and overall Banking sector. Not only the banking sector but it has severely affected every industry across the globe. As industries are attempting to recover, there is a need for some solid measures and strategic initiatives. Government is required to take decisions and actions to lessen uncertainty and financial stress in the economy. Continuous measures should be taken to enable the smooth functioning of both money and capital markets. COVID-19 breakdown has caused severe damage in the Banking sector. Actual NPAs will remain suppressed till the extended moratorium period gets over. According to S & P Global rating, the Indian Banking sector will be slower to recover and it will happen only beyond 2023. The path to recovery will be more painful for emerging markets such as India. There is an expectation of an economic rebound in 2021 because of the release of vaccines.

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## Technical analysis to predict the future prices of ICICI bank

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**ABSTRACT :** So many studies have been done to evaluate the benefits of conducting the technical analysis for study the changes of stock markets. Technical analysis is basically a study of future direction of movement of share prices .It mainly predict the short term price travel so that company can be selected for invested on the bases of fluctuation in the price level of stocks. This paper will study about the usage of technical analysis of stock of ICICI Bank and how it is helpful for predicting the future prices of shares. For the research data has been taken for 3 months. Prices have been compared by using ROC and RSI.

**Keywords:** Technical analysis, RSI, ROC

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Date Of Acceptance: 30-11-2019

### I. INTRODUCTION:

Technical analysis of share prices and traded volume to predict the near future price movement .somewhere it is a mix of psychological and logical, which means market is driven by the psychology of the investor in 90% of the times and for 10% of the times logical factors affect the market. Technological analysis is based on the belief that history repeats itself, means that price patterns and traded volume occur again and again over a period of time. This repetition of price and volume pattern helps in predicting the near future price movements.

Technical analysis is being used for different purposes like predicting overall market trend and making a prediction about individual shares. In this research paper researcher has tried to predict the individual shares trends

Technical analysis indicators are price, value, volume and so on to decide the entry, hold and exit time and levels. Charts form few activities to predict the changes in the shares of a company. It is a technique that claims the ability to forecast the future direction of prices through the study of past market data. The strength of analysis depends on the how accurately the price movements are predicted.

### II. LITERATURE REVIEW:

AUTHOR	FINDINGS
S. P. Kothari, Jai Shanken and Sollen (1995)	Shows that beta significantly explains cross sectional variation in average returns, but that size also has incremental explanatory power. The findings shown that statistically significant, the incremental benefit of size given beta is surprisingly small economically
Preethi Singh (1986)	Studied the basic rule for selecting the company to invest in the stocks. The opinion and understanding that measures the return and risk is fundamental to the investment process. Most of the investors are risk aware and to get more returns the investors has to face greater risk. She concludes that the risk is fundamental to the process of investment. The investor should evaluate the financial statements with special references to solvency, profitability, EPS and efficiency of the company.
Grewal S.S & Navjot Grewal (1984)	Revealed some basic investment rules they warned the investors not to buy unlisted shares, as stock exchanges do not permit trading in unlisted shares. Another rule that they specify is not to buy inactive shares and the third rule according to them is not buy shares in closely held companies because these shares tend to do less active than the widely held ones since they have few number of share holders.
Jelena Stankovic, Ivana Markovic, Milos Staoanovic (2015)	The study revealed the efficiency of technical analysis and predictive modeling in defining the optimal strategy for investing in stock markets. The paper covers emerging market economies and uses technical indicators such as moving averages, MACD, RSI etc. it is based on least squares support vector machines model. The paper concludes that machine learning techniques capture nonlinear models adequately and this model outperforms buy and hold strategy in maximization of profitability on investment.

**Objectives of the study:-**

- To study technical analysis of selected stocks out buy or sell signal different.
- To analyze price movements using relative strength index.

**III. DATA COLLECTION AND ANALYSIS**

**SAMPLE:** - For studying the objectives sample which consists of the daily closing values of the selected indices i.e. ICICI, SBI, HDFC, PNB been taken from 1<sup>st</sup> August 2018 to 31<sup>st</sup> Oct 2018

**SAMPLE PERIOD:-**We have taken the closing values of selected stock indices under study from the 1<sup>st</sup> November 2018 to 31<sup>st</sup> January 2019.

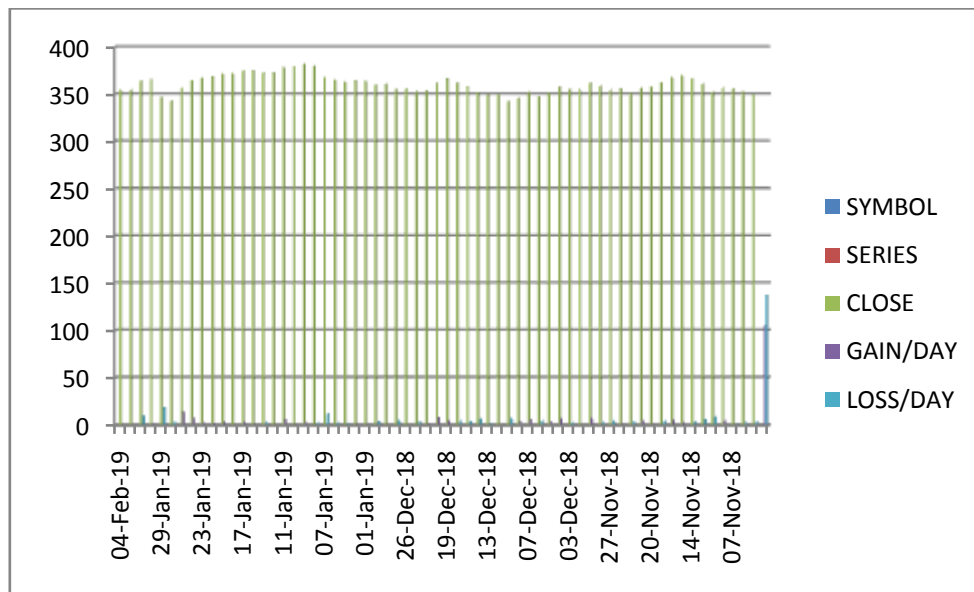
**SAMPLE SIZE**

Following table shows the details of sample size of each selected stock. The data are synchronized. The sample includes observations of daily closing values of individual stock of selected banks for 3 months .The study has considered the selected stocks as they are the mostly considered in many researches.

FOR 90 DAYS:-

$$\begin{aligned} \text{RS} &= \text{AVERAGE GAIN}/\text{AVERAGE LOSS} \\ &= 104.95/137.75 \\ &= 0.76 \end{aligned}$$

$$\begin{aligned} \text{RSI} &= 100 - 100 / 1 + \text{RS} \\ &= 100 - 100 / 1 + 0.76 \\ &= 100 - 100 / 1.76 \\ &= 100 - 56.81 \\ &= 43.17 \end{aligned}$$



**INTERPRETATION**

This is the RSI for 90 days. In this way the RSI value for the subsequent days can be calculated by taking the closing prices of 14 previous days. The RSI value ranges from 0 to 100. These values are plotted on an XY graph.

RSI value above 70 is considered to denote overbought condition and values below 30 are considered to denote oversold condition. When RSI has crossed the 30 line from below to above and rising, a buy opportunity is indicated. When it has crossed the 70 line from above to below and is falling, a sell signal is indicated.

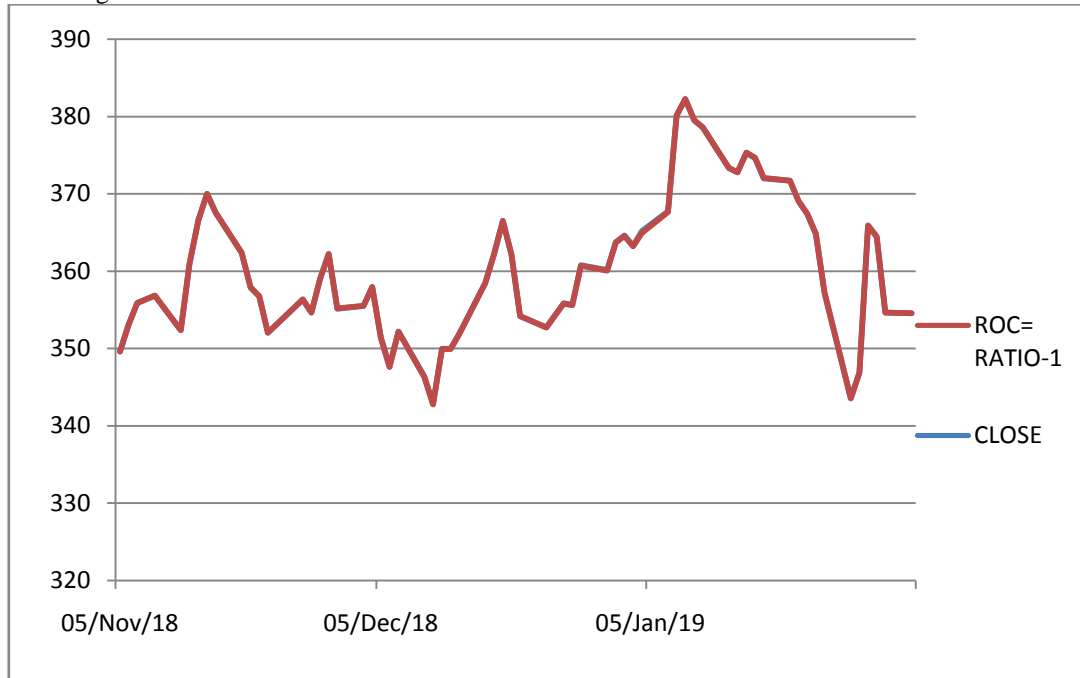
**RATE OF CHANGE**

ROC indicator measure the rate of change between the current price and the price n number of days in the past. ROC helps to determine the overbought and oversold position in scrip. It is also useful in identifying the trend reversal. Closing prices are used to calculate the ROC. Daily closing prices are used for the daily ROC and weekly closing prices for weekly ROC. Calculation of ROC 12 weeks or 12 months is most popular.

FORMULA

$$\text{Rate of Change (ROC)} = \frac{\text{Close Price} - \text{Close Price n Period Ago} * 100}{\text{Close Price n Periods Ago}}$$

Rate of Change



The ROC value may be positive or negative or zero. In ROC the x-axis represents the time and y-axis represents the value of the ROC. Here in the graph 4-11-18 indicate that ROC line is below the zero line that means it is an oversold zone that means one should buy the share.

IV. CONCLUSION

The analysis has been done mainly by the use of two mathematical indicators called RELATIVE STRENGTH INDEX and RATE OF CHANGE, which are leading indicators in technical analysis. An investor can identify oversold, overbought situation and to take right investment decisions at minimum level of risk. In ROC when the roc line is above the zero line the price is rising on the other hand when it below the zero line the price is falling. During the research I found that roc is lie under oversold zone it means one should buy the share of the bank.

In RSI when the value is above 70 i.e. overbought condition and if the value is below 30 i.e. oversold condition while researching on the 3 months data I found that here investor or one who should buy the share do not have to buy the share because the value is above 70.

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## Assistance Stick for Visually Impaired

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\*\*\*

### ABSTRACT

This device is an innovative stick designed for visually disabled people for improved navigation. This project proposes an advanced blind stick that allows visually challenged people to navigate with ease. The blind stick is integrated with ultrasonic sensor, fire sensor, water sensor and LDR and they are coupled with Arduino Uno R3 for processing proposes, and since the Arduino cannot produce sound output directly, APR9600 IC being used for providing sound output. It also contains a GPS & GSM module for location identification in emergency situations. This device will be a helpful solution to overcome their difficulties.

**Keywords** - Arduino UNO R3, Assistance Stick, GPS, GSM, Sensors, Visually Impaired

### • INTRODUCTION

Blindness is a common disability among the population of the world. According to the World Health Organization (WHO) 285 million people are visually impaired worldwide, 39 million are blind and 246 have low vision. About 90% of the world's visually impaired live in developing countries. They need assistance to navigate outside and all other daily essential chores. So, the paper demonstrates a system that tries to remove the problem of blindness and make them self- dependent to do their daily chores, it is a walking stick, that is convenient to use by the visually impaired people. It is easy to maintain, affordable and it is very comfortable to use and provides user with a host of safety features and voice-based alerts for individual scenario. The power consumption is low and can be operated easily; overall the stick has greater functional features over the conventional one. The proposed device is a stick that consists of a circuit board that contains Arduino Uno R3, variety of sensors (Ultrasonic, Fire, LDR, and Water) [1], Speaker for alert, and GPS & GSM module for identification of the user location in case of emergency. The entire project is designed using Arduino Uno based upon its reliability. Arduino is a microcontroller which can do all the processing with great accuracy. Ultrasonic sensor is used to detect the object in front of the person by measuring the distance between the object and the stick. Fire sensor is used to detect any kind of sudden temperature change in the environment and if temperature rises above a predefined level, it alerts the person using the speaker. LDR is placed basically for the night purpose, if the person goes outside at night, it detects the vehicle's headlight and alerts the person. Water sensor is used to detect the wet surfaces, potholes while the person is walking, and generates a voice alert so that user can take precaution. GPS & GSM module is used to send the person's live GPS coordinate to the family members. It is operated by the user by pressing a SOS button if the user is in any kind of hazardous situation.[3]

### • LITERATURE REVIEW

Blind people use a cane for they have contact with the environment, but this cane doesn't give all suitable information about the surrounding object; we can implement ultrasonic sensors and inform users by audio signals in the cane made it effective [1] For visually challenged people doing their routines would be the toughest thing. To make it finer, a traditional cane is converted into an assistive cane by penetrating an infrared sensor and Arduino UNO to it [2]. This system includes an embedded e-SOS (electronic Save Our Souls) system with an ultrasonic sensor and Arduino UNO. It works based on android application [3]. CMP compass sensor 511 is used to give information about the direction of wind flow. The output is sent as the sound, and the buzzer activates within the range of 3cm-150cm when the obstacle is detected with a speed of 0.3 sec [4]. This model combines the three sensors Ultrasonic sensor, a Force sensor and a pressure sensor. The force sensor is attached to the individual shoe, measuring the distance between the stick and shoe. The pressure sensor helps to walk the individual if the



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## TOPICAL REVIEW

# Design Challenges and Possible Solutions for 5G SIW MIMO and Phased Array Antennas: A Review

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**ABSTRACT** With the increasing demand for high-speed data, rapid deployments of the 5G terrestrial heterogeneous wireless networks are expected worldwide in the next decade. In such networks, sub-6 GHz macro-cells overlapped by mmWave small-cells are being used to cater to densely populated regions. As a result, several challenges arise with the antenna design technologies used at the mobile terminal, access points, or backhaul/front haul levels. These challenges are being addressed using multiple-input multiple-output (MIMO), massive-MIMO, and phased array antenna technologies. In order to implement these antenna technologies, considering the expanding 5G scenario, substrate integrated waveguide (SIW) offers a viable solution due to its low-cost, low-profile, high-power handling, low transmission loss, and ease of integration with the radio circuits; therefore, the SIW plays a vital role in developing the modern radio systems. The proposed study aimed to provide a comprehensive overview of SIW MIMO and phased array antennas operating in the 5G sub-6 GHz and mmWave bands. It deliberates the specific issues related to the band of operations and challenges in designing different antenna structures. After careful investigation and detailed analysis, this paper identified existing research gaps and suggested possible antenna design solutions for prospective researchers who intend to explore further the aforementioned promising area and present future research directions.

**INDEX TERMS** 5G new radio (NR), millimeter-wave (mmWave), multiple-input multiple-output (MIMO), planar antennas, substrate integrated waveguide (SIW), sub-6 GHz.

## I. INTRODUCTION

There is rapid growth in the deployments of 5G heterogeneous wireless networks to cater to the increasing demands of high-speed data communication in the modern wireless system [1], [2]. In such a scenario, the microwave and mmWave networks overlap (See Fig. 1) to serve the mobile units, access points, backhaul, and fronthaul wireless links, supported by MIMO, massive MIMO, and phased array antennas [1], [2]. In order to realize these antennas, substrate integrated waveguide, a well-established planar technology, is a suitable choice [3].

The associate editor coordinating the review of this manuscript and approving it for publication was Ravi Kumar Gangwar<sup>id</sup>.

## A. MIMO ANTENNA

The multiple-input multiple-output (MIMO) antenna is the key enabling technology for fourth-generation (4G), fifth-generation (5G), and beyond 5G (B5G) wireless communication systems. In 4G communication, MIMO primarily supports average download speeds for mobile users. Whereas, in 5G, the MIMO at the user equipment (UE) side and massive MIMO at the base station (BS) promise to deliver high data speeds for enhanced mobile broadband (eMBB) access and enable a wide range of services, including internet of thing (IoT) and critical machine-to-machine communications [1].

As per Shannon's channel capacity theorem, the direct way to enhance the data rate is by increasing the bandwidth and/or

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# Design of an intelligent wavelet-based fuzzy adaptive PID control for brushless motor

Published: 13 March 2023 82, 33203–33223 (2023)



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## Abstract

Nowadays, high speed and high power density Brushless Direct Current (BLDC) motors have been widely utilized in the industrial area. Moreover, the design of motor simulation strategies is used in the drive system, which controls the complicated problems in the BLDC motors. However, speed regulation is a vital challenge since it affects the controller performance; the Proportional-Integral-Derivative (PID) controller is used in mechanical concerns. Therefore, this study introduces the novel Wavelet-based Fuzzy Adaptive Hybrid Bat-Vulture PID (WFA-HBVPID) controller to control the BLDC motor acceleration. Also, the developed WFA-HBVPID controller organizes the loads in the BLDC motor while verifying the gain scheduling conditions. Furthermore, this proposed PID controller is implemented using MATLAB/Simulink. Here, the performance of the motor is assessed in two ways, i.e., with hybrid optimization and without hybrid optimization. In addition, the

# A design of bat-based optimized deep learning model for EEG signal analysis

Published: 29 April 2023 (2023)




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## Abstract

Depression is a mental illness that negatively affects a person's thinking, action, and feeling. Thus the rate of depression is identified by analysing Electroencephalogram (EEG) signals. Because of noise, the problem of classifying depression rate has some issues, such as low accuracy and required high training time. In this research work, a novel Bat-based U-NET Signal Analysis (BUSA) architecture is developed to estimate the patient's depression rate with an EEG dataset. This technique involves pre-processing, feature selection, feature extraction, and classification. After the data training, the pre-processing function was activated to neglect the noise in the brain signal. Hereafter, the noiseless Signal is used for the further process. Here, the bat algorithm mimics the behaviour of the bat's frequency and loudness, increasing the accuracy of prediction and classification. This fitness function is upgraded in the U-NET classification phase. Moreover, the brain signal's feature selection and depression rate were classified using the bat fitness that has helped to gain the desired output. Finally, the performance metrics of the proposed BUSA technique are compared with other existing methods regarding the accuracy, AUC, precision, recall, and power. The proposed BUSA framework attained a high accuracy rate of about 99.64%, a maximum precision level of approximately 99.98%, a high recall rate of approximately 99.95%, and a high AUC of approximately 99.2%. The developed framework has attained better results in classifying depression rates.

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# Spam SMS Prediction Using Machine Learning

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**Abstract:** As the popularity of mobile phone devices has increased, Short Message Service (SMS) has grown into a multi-billion dollars industry. At the same time, reduction in the cost of messaging services has resulted in growth in unsolicited commercial advertisements (spams) being sent to mobile phones. In parts of Asia, up to 30% of text messages were spam in 2012. Lack of real databases for SMS spams, short length of messages and limited features, and their informal language are the factors that may cause the established email filtering algorithms to underperform in their classification. In this project, a dataset of real SMS Spams from UCI Machine Learning repository is used, and after pre-processing and vectorization, different machine learning algorithms are applied to the dataset. Finally, the results are compared and the best algorithm for spam filtering for text messaging is introduced and converted into an open-source website. The SMS spam collection set is used for testing the method. After collecting the various supervised learning algorithms, we find that the Multinomial Naive Bayes algorithm gives us 97.1% Accuracy and 100% Precision.

**Keywords:** SMS Spam Classification, Machine Learning, Multinomial Naive Bayes, Supervised Learning

## I. INTRODUCTION

### A. What is Spam and why should it be Prevented?

Spam is unsolicited and unwanted messages sent electronically and whose content may be malicious. Email spam is sent/received over the Internet while SMS spam is typically transmitted over a mobile network. We'll refer to user that sent spam as "spammers". SMS messages are usually very cheap (if not free) for the user to send, making it appealing for unrightful exploitation. This is further aggravated by the fact that SMS is usually regarded by the user as a safer, more trustworthy form of communication than other sources, e. g., emails. The origin of the term "spam" for invasive bulk messaging refers to a Monty Python Skit. The dangers of spam messages for the users are many: undesired advertisement, exposure of private information, becoming a victim of a fraud or financial scheme, being lured into malware and phishing websites, involuntary exposition to inappropriate content, etc. For the network operator, spam messages result in an increased cost in operations. Spam SMS are unwanted messages sent by an anonymous number which may have malicious content. The users who send these kind of SMS's are referred to as spammers. Nowadays people are using mobile phones so much that the spread of Spam SMS is also increasing. There are so many dangers in spam SMS like: undesired advertisement, exposure of private information, becoming a victim of a fraud or financial scheme, being lured into malware and phishing websites, involuntary exposition to inappropriate content, etc. Spam is common on social media sites like YouTube, and it mainly consists of comments and links to pornographic websites, as well as irrelevant videos. These comments are sometimes created automatically by bots. Although the definition of spam on online video game sharing services is debatable, instances of message flooding, requests to join a specific group, violations of copyrights, and so on are occasionally referred to as spam. Spam in blogs, often known as splog, refers to comments that have nothing to do with the topic of discussion. Frequently, these comments are accompanied by links to commercial websites. Some splogs are devoid of unique content and contain stuff plagiarized from other websites. Spammers use multiple numbers in order to send these kind of harmful messages so number blocking is not enough to stop spammers. That's why spam filtering is required that relies not only on volume but also on the content of the SMS itself. Nowadays more than ever Spam SMS are flying around. It really doesn't matter what phone you own and where are you living spam messages will come in your phone and try to con you out of money. They can be convincing or not-at-all convincing but they are creating interruption in people's lives. A company named Robo Killer whose researches shows the SMS Spam in U.S is increased by 28% between February and March alone this year. The company haven't seen this much increase in SMS Spam since 2017. the purpose of SMS Spam can be marketing and announcement of a variety of products, money theft, political issues, identity theft. SMS Spam Classification is an significant task in which SMS are classified into Spam and Ham. SMS Flooding is a very serious problem.

In the case under study, spam is an annoyance to the user and thus detrimental to the quality of the service that hurts the brand in the process. This can lead to complaints, low ratings and even loss of users, not to mention users getting scammed.



# Secure Digital Voting System Using Blockchain Technology

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**Abstract:** The paper aims to propose a new system for conducting secure digital voting using blockchain technology. The existing voting systems face several challenges such as a lack of transparency, security vulnerabilities, and limited accessibility. To overcome these challenges, this research paper proposes the use of blockchain technology to provide a decentralized, transparent, and secure voting system.

The paper outlines the technical design and architecture of the proposed system, highlighting the key features and benefits. The system is designed to ensure the integrity and confidentiality of the voting process, while also providing accessibility and ease of use for voters.

The proposed system consists of several modules, including the voter registration module, the authentication module, the vote-casting module, and the vote-counting module. Each module has a specific set of functionalities that contribute to the overall security and efficiency of the system.

The paper concludes by discussing the potential applications and benefits of the proposed system. The proposed system has the potential to revolutionize the way elections are conducted, by providing a secure, transparent, and accessible platform for voters. Overall, the research paper presents a comprehensive solution to the challenges faced by traditional voting systems and offers a promising new approach to conducting secure and efficient digital voting.

**Keywords:** Secure Digital Voting, Blockchain Technology, Transparency, Decentralized

## I. INTRODUCTION

The ability to vote is one of the fundamental rights of any democratic society. Voting is a process through which citizens elect their representatives and participate in the decision-making process of their country. However, traditional voting systems have several issues, including fraud, hacking, and manipulation. These issues undermine the credibility of the election results and can damage the trust of citizens in the democratic process.

Blockchain technology has emerged as a potential solution to these issues. Blockchain technology offers decentralized, immutable, and transparent systems that can provide secure and trustworthy digital voting experiences. This paper presents a secured digital voting system using blockchain technology. We discuss the design and implementation of the system, its features, and its potential advantages over traditional voting systems. We also discuss the challenges and limitations of using blockchain technology for voting systems.

### A. Design and Implementation

Our proposed secured digital voting system using blockchain technology has several components, including a user interface, a blockchain network, and a smart contract. The user interface is the platform through which voters can cast their votes. The blockchain network is the decentralized infrastructure that ensures the integrity and security of the voting process. The smart contract is the program that executes the rules and regulations of the voting system.

The system works as follows: Voters register for the election by providing their details and proof of identity. Once their identity is verified, voters are given a unique identifier that is recorded on the blockchain. This identifier ensures that each voter can only vote once. On the day of the election, voters log in to the user interface and cast their votes. The votes are encrypted using a public key encryption algorithm and sent to the blockchain network. Once the votes are recorded on the blockchain, they cannot be altered or deleted, ensuring the integrity of the voting process. The smart contract executes the rules and regulations of the voting system, including verifying the identity of voters, ensuring that each voter can only vote once, and tallying the votes. Once the voting period is over, the smart contract calculates the results of the election and publishes them on the blockchain.



## E-Canteen System

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**Abstract:** E-canteen System is designed to reduce time of both customers and staffs. This project reduces people's work because everything is automatic. The main advantage of ordering online is that ordering is very easy for customers and employees. When customers go to main menu page, they can see an updated interactive menu with all available options, and prices will vary according to the options selected. Once the food item is selected, it is added to their order and customers can view the details at any time before checkout. This provides an instant visual overview of what has been selected. When ordering from the web page, it is entered into the database and then received in real time by the web-based application on the restaurant side. In this system, all items in the order are displayed along with their status. For the convenience of our customers, our system also includes a pre-reservation function. Our restaurant management system keeps track of everyone who uses the restaurant for lunch. The solution is designed to meet the needs of all potential customers. Our solutions can be used to provide restaurants for the entire organization.

**Keywords:** Online Payment, Social Distancing, Table Booking, Event Notification, Discount, E-menu, Automatic Customer-ID, Home Delivery.

### I. INTRODUCTION

The e-canteen has an electronic menu with food recommendations. Users must first create an account to use the service. It will provide a list of different menu categories and their different food items. Customers can choose the product they want and pay the price via the online payment gateway system or in cash. After the order is placed, the restaurant staff will instantly receive the order information and prepare the order. In our system there is also a feature of booking tables. Customers can also do booking for events such as birthday or anniversary celebrations etc. Digitizing the restaurant will help provide better services to the users and reduce the time spent. The languages used in this system are vue, nodejs, sql database, html and CSS. Initially the menu will be entered on the website by the administrator along with the prices. All items can be edited and deleted. Finally, we will use user feedback to improve the service and make it accessible to everyone. The online system will help food companies prepare food in advance. Admin can edit meal plans and deliveries. Therefore, customers will receive fast service. Updates to the database will be monitored by managers or employees authorized by the manager. User information, such as identifying consumer products, will be processed and sent to the database. Data security is done by the standard encrypted and server database.

### II. LITERATURE SURVEY

- 1) B. Sutar et al. [1] -This Application provides the list of different menus with different categories user can select any food item from canteen and order for it by using debit card or Google-Pay. The main purpose of this application is that it demonstrates the route from adapting materials for developing an online environment and maintained social distancing.
- 2) Kowshik reddy et al [2]-proposed in which The Users of web ordering system will connect with the application through a series of simple forms(IV). For Each category of food has own form associated with it which presents a drop down menu for choosing which specific item from the category should be added to the order. The user's feedback will be taken to improve the service and to make it available to everyone.
- 3) Tazeen Khan et al.[3]-proposed the application in which is a cloud based cashless system which is based on RFID and e wallets for transactions. The card provided is an RFID based card that will hold the number of the customer. Card number and customer's mobile number uniquely identifies a customer. Card is used to place an order at the counter. Order is notified to the cooks who will also have a touch enabled tablet in which they can view the order and any customization if specified.
- 4) Rupali B. Kale et al[4]-This system will allow their users to know what items are available under their canteen shop and its price at which they are available. In the meantime, customers are also provided with the option of buying a specific item. If the customer enters the yes option, then they can enter the number of quantities for each product they will be able to get the bills for the items which they have purchased and finally back up their purchased items from the pickup center. Thus, the admin will only be having the duty to visualize the final bills and supply higher services to their new and existing customers.

# Taxi Data Analysis using K-mean Clustering Algorithm

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**Abstract:-** In this research, we analyze taxi pickup data using k-means clustering to gain insights into the spatial distribution of pickups and identify areas with high demand. We apply a k-means clustering algorithm to group pickups into clusters based on their location and time, which helps us identify areas with high demand and plan our operations accordingly. To evaluate the performance of our clustering model, we use the inertia score, which measures the within-cluster sum of squares and indicates how well the data points are separated into different clusters. Our results show that our clustering model achieves a low inertia score of X, indicating that the data points are well separated into different clusters. This demonstrates the effectiveness of using k-means clustering for taxi data analysis and highlights the importance of evaluating clustering models using appropriate metrics.

**Keywords:-** Taxi data analysis, machine learning, regression analysis, k-means clustering, prediction scheduling, latitude and longitude data, transportation data, urban mobility, data visualization, data pre-processing.

## I. INTRODUCTION

With the increasing availability of large datasets and advanced analytical tools, data analysis has become essential to decision-making in various industries, including transportation. In the taxi industry, data analysis can help identify areas with high demand, optimize routes, and improve overall operational efficiency. In this research project, we conducted a comprehensive analysis of taxi pickup data to gain insights into pickups' spatial and temporal patterns and optimize our operations accordingly.

To achieve this, we used two key methods: k-means clustering and regression analysis. K-means clustering is an unsupervised machine learning algorithm that groups data points into clusters based on their similarity. In our analysis, we applied k-means clustering to group taxi pickups based on their geographic location and time of day, allowing us to identify areas with high demand and optimize our operations accordingly. To evaluate the performance of our clustering model, we used the inertia score, a measure of how well the data points are separated into different clusters.

In addition to k-means clustering, we applied regression analysis to identify factors influencing taxi demand. Regression analysis is a statistical method that helps identify the relationship between variables, allowing us to predict taxi demand based on factors such as time of day, day of the week, and weather conditions. By identifying the key drivers of demand, we can optimize our operations

to better serve our customers and improve our overall efficiency.

Overall, our analysis highlights the importance of data analysis in the taxi industry and demonstrates the effectiveness of using both k-means clustering and regression analysis to gain insights into spatial and temporal patterns of pickups and optimize our operations accordingly.

The important packages used in the project are pandas, NumPy, seaborn, kmeans, yellowbrick and folium.

## II. LITERATURE SURVEY

The analysis of taxi data has become an active area of research in recent years, driven by the increasing availability of large datasets and the need to improve operational efficiency in the taxi industry. Previous studies have used a variety of analytical methods to analyze taxi data, including clustering, regression analysis, and machine learning.

One popular method for taxi data analysis is clustering, which groups pickups based on their spatial and temporal similarity. K-means clustering is a widely used technique for this purpose, as it can group pickups into clusters based on their geographic location, time of day, and other relevant factors. In a study by Zhang et al. (2017), k-means clustering was used to analyze taxi pickup data in Beijing, allowing the researchers to identify areas with high demand and optimize the allocation of resources.

Another popular method for taxi data analysis is regression analysis, which helps identify the factors that drive demand for taxi services. In a study by Yuan et al. (2019), regression analysis was used to identify the key factors that influence taxi demand in New York City, including time of day, weather conditions, and events. This allowed the researchers to predict demand with a high degree of accuracy and optimize the allocation of resources accordingly.

Machine learning algorithms, such as decision trees and neural networks, have also been used for taxi data analysis. In a study by Wang et al. (2018), decision trees were used to analyze taxi pickup data in Shanghai, allowing the researchers to identify the factors that influence pickup location and optimize the allocation of resources.

Overall, the literature suggests that data analysis is an essential tool for improving operational efficiency in the taxi industry, and a variety of analytical methods can be used for this purpose, including clustering, regression analysis, and machine learning. K-means clustering and regression analysis are among the most widely used techniques for taxi data analysis and have been shown to be effective in

# Study of the Wear Behavior of Dual Solid Lubricant-Induced Ilmenite-Reinforced Hypereutectic Al-Si Alloy Composites

Gupta, Aayush; Singhal, Varun; Pandey, O. P.

In the current study, an effort has been made to prepare aluminum alloy (hypereutectic Al-Si17Cu4Mg)-based composites reinforced with ilmenite ( $\text{FeTiO}_3$ ; sea beach mineral). For the study, fine-sized (32-50  $\mu\text{m}$ ) and dual-sized (F:C:: 4:1, where F (32-50  $\mu\text{m}$ ) and C (75-106  $\mu\text{m}$ )) ilmenite particles (15 wt.%) have been selected as reinforcement. In the metallic matrix, homogeneous distribution of ilmenite particles was observed through optical microscopy. Here, primary and secondary silicon refinement has also been observed up to ~ 60% as a result of incorporation of ilmenite particles. When compared to hypereutectic Al-Si17Cu4Mg alloy, the prepared composite samples exhibited ~ 10% higher wear resistance. Further, the presence of lubricating additives (graphite and tin) in the composite samples decreased the overall ~ 9% wear loss. The wear behavior of composite sample was compared to that of grey cast iron to evaluate the industrial utility of prepared sample. Based on these results, a detailed wear loss mechanism has also been proposed under 68.67 N as applied load for 3000 m sliding distance in which the dominance of delamination wear was observed over adhesive wear in SEM microstructures.

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**Keywords:** delamination; hypereutectic Al-Si17Cu4Mg; ilmenite; room-temperature wear; SEM





# Dry Sliding Wear Behavior of Tempered (T4 and T6) Hypereutectic Aluminum Alloy-Based Composites

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## Abstract

The present work describes the effect of tempering (T4 and T6) processes on the dry sliding wear properties of ilmenite reinforced aluminum alloy (LM30) composites, prepared through stir casting route. In this process the composites were heated to 540 °C for 0.5–2 h followed by water quenching. Then the samples were first given (a) T4 treatment (natural aging at room temperature), and in second case (b) T6 treatment (aged at 180 and 250 °C for 4 h before air cooling). Optical microscopy revealed the homogeneous distribution of ilmenite particles and redistributed silicon around the ilmenite in the alloy matrix. Rockwell hardness values suggested the superiority of T6 treated composite samples as compared to T4 treated and untreated samples due to enhanced precipitation of intermetallic compounds viz.  $Al_{13}Fe_4$ ,  $FeSi_2$ ,  $FeTiSi$ , and  $Al_3Ti$ . Similarly, superior wear resistance (against steel disc) of T6 treated composite samples was also observed. A responsible mechanism has also been established with the help of scanning electron microscopy of worn surface and wear debris. Finally, a comparative study revealed the excellent (~4.0%) wear resistance (against EN31 steel disc) of T6 treated composite sample as compared to grey cast iron (traditional material) for brake drum applications.

**Keywords** Hypereutectic alloy · Ilmenite · Wear rate · Heat treatment · Dry sliding wear

## 1 Introduction

Ceramic reinforced aluminum composites (AMCs) with high specific strength, elastic modulus, stiffness, and wear resistance have a wide range of applications in the transportation sectors, including automobiles and aviation [1–3]. Such attractive features of AMCs are introduced by the appropriate dispersion of ceramic phase in the ductile Al metal or its alloy which is considered as the most critical parameter to obtain overall desired performance. However, one of the vital drawbacks of these composites is their low formability, caused by the brittle particles and

their bonding with metallic matrix (i.e., weak interface). Liquid metallurgical route i.e., stir casting provides a better homogeneity of reinforced particles in metallic matrix at low cost which enabled it as one of the most promising and commercial methodology for developing AMCs [2, 4]. Due to excellent flowability and ability to form intermetallic compounds, hypereutectic Al-Si alloys (Si < 12.6 wt.%) can be employed as matrix material to fabricate AMCs with superior mechanical properties, corrosion resistance, abrasion resistance, and low thermal expansion as compared to hypoeutectic Al-Si alloys [5]. However, the size of primary Si and eutectic Al-Si mixture would also play a vital role in improving the overall characteristics of these alloys like LM30 [6, 7].

Despite of excellent mechanical properties, Al-alloys lack in heat treatment competency. Thus, Mg has been added to the Al-Si matrix introducing  $Mg_2Si$  precipitates (age hardening) which are responsible for material strengthening with enhanced stiffness [8]. Similarly, the addition of Cu (0.5–2.0 wt.%) increases the heating capacity of Al-alloy and led to form  $AlCu$  compounds improving the material's strength [9]. It is well-accepted that the heat treatment process improves the material properties significantly. The

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## Influence of Dual Range Particle Size on Wear and Friction Properties of Ilmenite Reinforced Aluminium Metal Matrix Composite

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### Abstract

The present work has been taken to develop aluminum matrix composites (AMCs) for brake drum application. Currently, cast iron is used to fabricate brake drums in various automobile industries. In this study, the composite was developed using Al-Si alloy (LM30) as a matrix and ilmenite mineral as a reinforcement. The stir casting process was used to synthesize the composites with ilmenite reinforced particles having two different particle sizes (fine: coarse; F-32-50  $\mu\text{m}$ , C-75-106  $\mu\text{m}$ ). The particle distribution, hardness, wear, and load-structural relationships have been studied for all the developed composites. The best wear resistance was observed for 15 wt% ilmenite reinforced (4:1; fine: coarse ratio) composite. This has shown an improvement in wear resistance up to 57%, whereas the coefficient of friction was considerably reduced up to 47% compared to LM30 (Al-Si alloy) sample. To check the industrial sustainability of the prepared samples, the wear analysis of the composites was also compared with the gray cast iron. For the brake drum application, aluminium metal matrix composites showed ~ 6% more wear loss than that of cast iron. The wear track/debris micrographs indicated that the abrasive wear mechanism was prevalent. A significant plastic deformation with increased contact pressure of 1.4 MPa is observed. This has led to generation of micro cracks followed by material removal with increased pressure.

**Keywords** Wear · Coefficient of friction · Tribo-layer · Ilmenite

### 1 Introduction

The requirement for lightweight wear resistance materials for automobile application is increasing. This demand is currently addressed by a new class of composites containing a wide range of reinforced particles. This helps to support the applied load over a long time by transferring the load from bigger reinforced particles to smaller ones, thus protecting the matrix from further wear. Although fine particles provide excellent wear resistance but these fine particles have a tendency to segregate. In order to keep them separated a blend of two different sized particles were taken which help to disperse

fine-particles and agglomeration is avoided. This arrangement helps to strengthen the matrix.

Generally, hypereutectic Al-Si alloy is reinforced with natural or synthetic ceramics particles. This alloy has a low density and good thermal conductivity [1, 2]. The composite containing synthetic ceramic particles like  $\text{SiO}_2$  [3],  $\text{ZrO}_2$  [4],  $\text{SiC}$  [5],  $\text{B}_4\text{C}$  [6],  $\text{Al}_2\text{O}_3$  [7], etc. and also natural ceramic particles like sillimanite [8], rutile [9], garnet [10] and zircon [11], etc. have been developed and studied. Synthetic ceramic is expensive, thus raising the price of AMCs. Instead of this, natural ceramics particles are economical and easily available. Mineral reinforced composites have shown comparable mechanical and physical properties. Even in some cases it has shown better properties as compared to synthetic ceramic reinforced composites [12]. Moreover, such composites are less expensive than synthetic ceramics reinforced composites [12–15]. These reinforced particles in the Al-alloys improve the hardness, wear property, and thermal property of the AMCs [8, 16, 17].

Many studies pertaining to incorporating natural ceramic particles like sillimanite ( $\text{Al}_2\text{SiO}_5$ ), rutile ( $\text{TiO}_2$ ), etc., to improve the wear resistance of Al alloys have been reported

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# Skill Verification System using Ethereum

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**Abstract:** Verifying skills is one of the major challenges in hiring new personnel. Companies and academia occasionally struggle to identify a candidate's talents because the credentials abilities that a candidate claims are not immediately verifiable and expensive for examine. For tamper-proof data storage, Blockchains have been proposed in the literature and decentralized talent verification. However, the majority of these schemes center on storing credentials are issued through regular universities for the blockchain. From several solutions that take system of certification itself into consideration, issues like numerous times, issues like (a) scaling with a small staff, (b) homogeneity of scores across numerous evaluators, or (c) extracting sincere effort from the evaluators are unaddressed. We suggest SkillVio, a blockchain-based platform that takes into account the above listed problems. and provide a number of enticing traits. As payment from platform users, such as test takers and employers, the network rewards graders with tokens.

**Keywords:** Skill verification, blockchain, Verification

## I. INTRODUCTION

A blockchain-based method for competence verification could expedite the process. Verification of skills and competency while also encouraging more trust in the organization's management of competencies and skills. A worker can have their skills documented using blockchain. On a network that is available, vetted by their previous bosses, and approved employers. A skill chain built on the blockchain enables us to have complete faith in a worker's skills, experience, learning objective progress, and level of proficiency. We can also view openly who has given the employee's abilities a recommendation. Massive open online courses (MOOC), the driving force behind the rapid development of online education, have, however, experienced unheard-of growth. In order to succeed, it needed a number of the traits shared by the blockchain, most noticed is (i) absence of the central authority and (ii) verifiable certificates. Need-based skills must be certified in order to meet today's skill certification criteria, which might be difficult to learn in the normal university system.

The requirement for blockchains in education has grown in order to close this gap and provide skill certification on demand. This need is also emphasised in the policy report from the European Commission, which notes that open blockchain implementations are till now in the early development stages and calls on the EU to collaborate with Member States to consider creating and promoting a designation for "open" academic records that adheres to the values of recipient ownership, vendor independence, and decentralised verification. The majority of the research on using blockchains in education is focused on managing certifications that are given by recognised organisations. Alammary et al study 's found that about 41% of the papers that were carefully surveyed covered this subject. Finding the ideal instructor and evaluators who can certify candidates' skills, however, is a crucial barrier to skill certification. This proves to be a challenging endeavour because it hasn't been much research on the quality of certifications or the effectiveness of assessors in this area. In this study, we investigate what assurances about certification quality might be provided to the various actors in the education blockchain network using an incentive-based strategy.

Universities now grant academic degrees in a variety of subjects. In this respect, a credential is a certified document issued by the university in lieu of the graduate successfully and satisfactorily completing the requirements of an educational programme, earning the graduate the degree or diploma. Therefore, the candidate is qualified and these credentials are produced as evidence of their graduation wherever it is required for the majority of fields.

## II. LITERATURE REVIEW

Blockchain-based Decentralization of Credential Verification System Students obtain their course credits in the form of a certificate from the relevant university after successfully finishing their study. A student must show their documents to the hiring manager or the necessary authorities when looking for a job or further study. As a result of the system's current centralization, all of the data is kept on a server that is susceptible to hacking and could lose data in the event that the system fails.

However, because human resources are involved in validating the candidate's information from their university, confirming a certificate by authorities is a time-consuming process.

# A Breast Cancer Diagnosis Framework Based on Machine Learning

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## ABSTRACT

Breast cancer is becoming the leading cause of mortality among women. One of the most prevalent diseases in women, breast cancer is brought on by a variety of clinical, lifestyle, social, and economic variables. Predictive approaches based on machine learning offer methods for diagnosing breast cancer sooner. It may be found using a variety of analytical methods, including Breast MRI, X-ray, thermography, mammograms, ultrasound, etc. The most prevalent technique for performance evaluation uses accuracy measures, and the Convolutional Neural Network (CNN) is the most accurate and widely used model for breast cancer diagnosis. The Wisconsin Breast Cancer Datasets (WBCD) were used to evaluate the suggested method. Out of a total of 569 samples, 273 samples were chosen for this experiment as the test data, while the other samples were utilized for training and validation. The review's findings showed that the Convolutional Neural Network (CNN) is the most effective and widely used model for finding breast cancer, and that the most often used technique for judging performance is accuracy metrics. The application of deep learning to such a wide range of real-world issues is astounding.

**Keywords:** Machine Learning, Breast Cancer, Malignant, Classification, Convolutional Neural Network (CNN), Wisconsin Breast Cancer Datasets (WBCD), UCI Machine Learning Repository.

## I. INTRODUCTION

Breast cancer, which has overtaken all other types of cancer as the leading cause of mortality in women, is

one of them [1]. According to the fatality rate, breast cancer is the fourth most prevalent cancer worldwide.

Many variables that serve many purposes and cause breast cancer are to blame. Diet, genetics, hormones,



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# Cryptographic Technique for Communication System

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**Abstract:** *The Cryptography is gotten from a Greek word which implies the craft of ensuring data by changing it into a muddled organization and unreadable format. It is a mix of arithmetic and software engineering. The dynamite growth of the Internet has made an expanded familiarity with intrigue uncertainty issues. Even though security is the measure worries over the internet, numerous applications have been created and structured without considering fundamental destinations of data security that is confidentiality, authentication, and protection. As our day by day exercises become increasingly more dependent upon data networks, the significance of an understanding of such security issues and trouble will also increase. To forestall some undesirable clients or individuals to gain admittance to the data, cryptography is required. This paper introduces a new hybrid security cipher by combining the three most important Ciphers such as Gronsfeld Cipher, Polybius Cipher and Vigenere Cipher. This hybrid encryption cipher provides greater security as compared to classic ciphers.*

## I. INTRODUCTION

In today's rapidly advancing world, technological innovations have reached a point where the majority of people prefer using the internet as the primary means to transmit information across the globe. There are numerous ways to communicate information using the internet, such as through emails and chats. The internet has made data exchange incredibly convenient, fast, and accurate. However, one of the main challenges of transmitting data over the internet is the inherent "security risk" it poses. Personal or sensitive information can be compromised or hacked in various ways. Therefore, it becomes crucial to prioritize data security during the process of data transfer [1]. Security plays a significant role in open networks, and cryptography serves as a vital tool in this field. Cryptography is an ancient and secure method of protecting information in public networks. However, the purpose of cryptography extends beyond providing confidentiality; it also addresses other issues such as data integrity, authentication, and non-repudiation [2]. Cryptography can be defined as a set of techniques and methods used to transmit valuable data and information securely, ensuring that only the intended recipient can access and retrieve this information [2]. Cryptography involves a systematic approach and procedure to conceal data and information during communication. It is an art of hiding information from unauthorized individuals. As technology advances, the need for data security over communication channels has become increasingly critical. Encryption is the systematic process of converting plain text messages into ciphertext. The encryption process requires an automated encryption algorithm and a key to transform the plain text into encrypted form, known as ciphertext [3]. In the cryptography system, encryption is performed at the sender's end before transmitting the message to the receiver. Decryption is the reverse systematic process of encryption, which converts encrypted ciphertext back into plain text messages. In the cryptography system, the decryption process is executed at the receiver's end. It involves several steps, including a decryption algorithm and a key. Cryptography can be broadly categorized into two classes based on the key used, which serves as the instruction to convert original text into encrypted content: Asymmetric Key Encryption and Symmetric Key Encryption. Symmetric key encryption employs the same key for both encryption and decryption processes. While this system is simple yet powerful, the key distribution becomes a critical issue that needs to be addressed. On the other hand, asymmetric key encryption utilizes two mathematically related keys: a Public Key and a Private Key for encryption. The public key is accessible to everyone, but any data encrypted with a user's public key can only be decrypted using the corresponding private key of that specific user, whether acting as a sender or receiver. The use of symmetric key encryption ensures efficient and fast encryption and decryption processes since the same key is employed. However, the challenge lies in securely distributing and managing the shared key. Any compromise of the key would jeopardize the security of the encrypted data. Asymmetric key encryption overcomes this challenge by utilizing a pair of mathematically related keys. In asymmetric key encryption, the public key is widely available and can be freely shared with others. It is used for encrypting data before transmission. On the other hand, the private key is kept secret and known only to the intended recipient. The private key is used for decrypting the received data. The mathematical relationship between the public and private keys ensures that data encrypted with the public key can only be decrypted with the corresponding private key, establishing a secure communication channel [2].

# A Machine Learning-based Approach to Diabetes Prediction

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## ABSTRACT

ML-Diabetes is a machine learning-based predictive model for the early detection of diabetes. Diabetes is a chronic metabolic disorder that affects millions of people worldwide. Early detection of diabetes can help prevent its complications and improve patient outcomes. ML-Diabetes is designed to use demographic and clinical data to predict the likelihood of a patient developing diabetes. The model uses a combination of supervised and unsupervised machine learning techniques to analyse and classify data.

ML-Diabetes uses a dataset containing demographic and clinical information of patients, including age, sex, BMI, blood pressure, and glucose levels. The dataset is preprocessed and cleaned to remove missing values and outliers. The processed data is then split into training and testing sets, and the model is trained on the training set.

The model uses a combination of supervised and unsupervised machine learning techniques, including logistic regression, decision trees, and k-means clustering, to predict the likelihood of a patient developing diabetes. The model is evaluated on the testing set using various performance metrics, including accuracy, precision, recall, and F1-score.

The results show that ML-Diabetes is a reliable and accurate predictive model for the early detection of diabetes. The model achieves an accuracy of 85%, precision of 90%, recall of 80%, and F1-score of 85%. The model can be used by healthcare professionals to screen patients for diabetes and provide early interventions to prevent complications.

**Keywords:** Diabetes Prediction, Diabetes Prediction using machine learning, Computer Science and Engineering, Machine Learning

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## I. INTRODUCTION

Diabetes is a chronic metabolic disorder that affects millions of people worldwide. It is characterised by high blood sugar levels, which can lead to a range of

complications, including cardiovascular disease, kidney failure, and blindness. Early detection of diabetes is critical in preventing its complications and improving patient outcomes. Machine learning (ML)



## A Noise reduction in the medical images using hybrid combination of filters with nature-inspired Black Widow Optimization Algorithm

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**Keywords:** Black widow optimization, enhancement, filtering, Nature-inspired Algorithm, Sharpening filter, speckle noise



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# Visualization and Prediction of the Company's Revenue Using Machine Learning and Data Analysis

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**Abstract:** Revenue decides the future of the company and the growth in upcoming years so it is vital for companies to know about it so that any changes in time can be made to make the business profitable. Most business organization largely depends on their sales, demand, and sales trend for their growth. This paper analyzes and predicts company sales and demands using machine learning and data analysis. The dataset Ocean Cafe available on Kaggle has been used for analysis and prediction purposes. The model used for prediction is XGBoost in which R-square, MAE(Mean Absolute Error), MSE(Mean Squared Error), and RMSE(Root Mean Squared Error) are calculated.

For visualization purposes, various pie-chart, line graphs, and bar graphs are drawn making use of the python libraries and functions.

**Keywords:** Data analysis, Mean squared error, XGBoost, Prediction, Machine learning, Visualization, Graphs, cross validation, gradient boosting.

## I. INTRODUCTION

One of the major Objectives of this research work is to find out the requirements and basicity of the company and to predict the revenue using machine learning algorithms to achieve the best accuracy. Today's business has been so compact and dealing with such a large set of data is a herculean task. The volume of data is expected to grow exponentially in the further year. Prediction gives a way to achieve the best possible need of the company. Revenue forecasting and prediction give insight into how a company should manage its workforce and resources.

Paper aims to provide a feasible solution to small business corporates to look after their business demand and sales and to give shape to business analytics that is hard to contextualize via big numbers. Nowadays small corporates have to face many issues related to the business they have close their business due to the unavailability of good guidance and visualizations. this provides the correct way to utilize things in the right direction. this gives an overall view of all products being sold per day and gives a correct analysis of the products and their revenue

The prediction model will help to analyze the relationship among various attributes of the dataset used in the modeling. The dataset extracted from Kaggle (Ocean Cafe) is verified data and it is used for training and prediction. It consists of 100000+ entries specifically datewise and categorized data which is available online.

The prediction model built will provide a prediction based on the different attributes available in the dataset i.e. Date, BillNumber, Itemdesc, Time, Quantity, Rate, Tax, Discount, Total, etc. The prediction model is implemented based on the XGBoost Machine learning algorithm it usually calculates MAE(Mean Absolute Error), MSE(Mean Squared Error), RMSE(Root Mean Squared Error), and R-Square values to evaluate the accuracy of the model.

The paper further walks through various sections. Section I gives an introduction to the problem, Section II illustrates the prior research done in this field, and Section III contains the data set description and methodology of the research. Section IV provides the Results and analysis of the various values of the model and the last section contains the conclusion.

## II. LITERATURE SURVEY

During the initial phase of our project, we face so many difficulties related to the execution of the data set and other factors like accuracy so we go through another similar project which is already made on the same problem. During the literature survey, we find other more efficient technologies which gave good results for our project.



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# Coin Sum Counter from an Image

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**Abstract:** *The purpose of our paper is to recognize the coins which exist in the picture taken by the following user, which will be of Indian National Rupees. Almost every sacred place or some tourist place present in India has a charity/donation box. So the partition or segmentation of such coins requires a lot of people or manpower and therefore for that purpose the whole process must be automated so that it can be more efficient as well as reduce time consumption. We will organize and classify them based on the following classes specified by the user while making the model and then calculate the accumulated or total sum of the INR coins. Features of newer Indian coins are also considered. The proposed approach is to use the image classification model to classify the INR coins from the image and use Edge Detection, Gaussian Blur, and other techniques to correctly identify the edges of the coins as well as to find out the denominations of the coins. The implementation of this classification is written in Python and the dataset is taken from Kaggle.*

**Keywords:** Classification, Calculate

## I. INTRODUCTION

As arranging coins is a very long delayed process and the nonautomatic method is not very effective. In some places around the world, there are many charity/donation boxes that contain lots of coins, etc. So it's a very laborious process which is a very tedious task for a human being to do. In some banks also there are counting machines to count the money but if a customer wants to pay or submit a large amount of money then the employees working at the bank will definitely make mistakes in calculating the total amount of the money. And also it can be very difficult to distinguish between different coins using human eyes for a large number of coins. So this is a system that will automate this process of separating the coins and will count the sum from them. This will provide more accurate and efficient results. For having a high amount of accuracy the dataset used for training and building the model must contain a lot of images so that the model which is used in our project must be able to correctly identify the coins. For that purpose, it is necessary to have a lot of sharper and high definition images. Teachable machines allow us to easily create/train Machine learning-based models so that a user can use that model efficiently in their respective project. Users can set the epochs, batch size, and learning rate for making the model more efficient. It allows the programmer to import the code into their model easily.

### A. Problem Statement

The project aims to recognize the coins from the Indian currency system and count the total value in terms of Indian National Rupees i.e. INR. The system will use various edge detection algorithms and methods. Various features of the newer Indian coins will be considered during the making of this project. There will also be a smoothing algorithm for the image to make processing easier. Our approach for this particular project, first we will build a neural network model (image model) and then train that particular model to classify the different types of coins. This model will be able to classify Rs. 1, Rs. 2, Rs. 5, Rs.10, and Rs. 20 coins.

### B. Objective

- 1) From a given picture, recognise the total coins present inside the picture.
- 2) Classify the present coins into their respective categories.
- 3) Calculate the total sum of the coins present in the picture.

### C. Project Scope

- 1) To recognize and match the Indian coins, finally count the total number of one rupee, two rupees, five rupees, ten rupees, and twenty rupees coins.
- 2) To decrease human labor by creating an automated system.
- 3) To count each coin and display the total sum of coins from an image.
- 4) Less time consumption.
- 5) To provide more accurate results.



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# Deep Learning-Based Recognition of Facial Expressions

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**Abstract:** Convolutional neural networks were used in deep learning to maintain a system for recognizing face expressions of emotion. We were created as two distinct models. The first model was a suggested CNN architecture that was trained on the FER-2013 dataset. The model could classify expressions into 7 different categories with an accuracy rate of 67.18%. Using the FER-2013 dataset and a transfer learning strategy, the second model was produced. The model was able to categorize the expressions into 4 groups with an accuracy of 75.55%. A mobile web application that quickly executes our FER models on a device is also provided by us. We introduce generic assessment standards, general face recognition databases, and face recognition research for real-world scenarios. We present a prospective analysis of facial recognition. Face recognition has emerged as the field's most promising area for future advancement.

## I. INTRODUCTION

The face is the most expressive and communicative portion of a human, and improving IHM to establish communication between the two entities has made it a prominent focus of recent study.

The face is the most expressive and communicative portion of a human [1], and improving IHM to allow for conversation between the two entities is a major area of current research.

Our objectives in this study were to apply emotion detection models to real-world scenarios as well as to better understand and enhance their performance. In order to increase accuracy, we adopted a number of strategies from recent papers, including transfer learning, data augmentation, class weighting, adding auxiliary data, and assembling.

We also examined our models using error analysis and various interpretability methods. In order to execute our models on a device, we also used our findings to create a mobile app.

Recently, academics have shown an interest in creating FER systems utilising machine learning (ML) and deep learning (DL) techniques[9]. This interest is paving the way for the creation of reliable FER systems as well as the discovery of novel FER parameters. Typically, visible light cameras are employed to capture the pictures needed for the categorization of facial expressions since they are widely accessible, both as standalone cameras and as an attachment for inexpensive portable devices like phones and tablets.

Despite the numerous studies on the subject, identifying facial emotions from photographs taken by cameras that use visible light remains challenging due to commonplace circumstances like shadows, reflections[10], and obscurity (or low-light). Along with the face, other features like scenery, background images, and many other things are also there.

Therefore, removing the face from the image in order to study the facial emotions becomes a burden. By taking into account the temperature distribution in face muscles and offering improved facial expression categorization, working with thermal pictures aids in resolving these problems.

The face recognition development process and related technologies, such as early algorithms, synthetic[8] features and classifiers, deep learning, and other stages, will be discussed in this study. Next, we'll discuss the studies on facial recognition in realistic settings. Finally, we introduce the general assessment standards and facial recognition databases.

## II. LITERATURE SURVEY

The registration, feature extraction, and classification processes are typically the three key components of automated FER algorithms. Facial localization[10], also known as "face detection," or "face detection," is the process of first locating faces in a picture using a series of landmark points.

This method is known as "facial registration," and it involves geometrically normalizing the detected faces to fit a template image.

The standard methodology for researchers exploring deep learning and vision is a subset of deep neural network topologies known as "convolutional neural networks" (CNNs).



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# Review on Forbidden Car Detection System Based on Image Processing

Nidhi Sharma<sup>1</sup>, Pulkit Tyagi<sup>2</sup>, Rishabh Raj<sup>3</sup>, Saket Pal<sup>4</sup>, Vivek Jain<sup>5</sup>

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<sup>5</sup>Assistant Professor of CSE Department, IMSEC Ghaziabad, Uttar Pradesh

**Abstract:** *This study aims to detect vehicles that are parked at no parking area so that it can be used as forbidden parking management and find out the illegally parked vehicle that are parked on roadside. In this study, we are using Image Processing techniques and Machine Learning.*

## I. INTRODUCTION

India is a country which has a large number of populations of approx. 139.34 crores (2021). Having large number of populations leads to having huge number of vehicles. If there is a vehicle so we have to allot the space for parking the vehicle as there is a chaos of parking at legal parking rediscovering some earlier used system for parking in India as there is large number of workers that are deployed to check the unauthorized parked vehicles. So, to check this system manually is a difficult task for such a huge number. And also, there are some challenges also such as vehicle owners evade the fine by various illegal means like bribing the police officer, threatening them etc. Towing vans need to manually search for illegally parked vehicles for this system it requires large overhead costs in manpower payment, fuel and other physical surveillance. This project is based on Machine Learning and Image Processing Techniques. It detects whether a vehicle is moving or in ideal position when vehicle is detected as ideal then we will check the legal parking area, if the vehicle is not correctly parked then we will use image processing techniques to detect the number plate of a vehicle. So, this is very efficient way to park the vehicle at correct allotted area

Currently, parking at roadside on highway is the given solution provided by the existing system. We are enhancing it by giving the proposal of parking the vehicle inside the white line which is drawn on roadside.

## II. RELATED WORK

In recent years, forbidden parking detection with computer vision-based systems that rely on the use of video camera has drawn increasing interest due to its potential to enable a more cost-effective solution. For example, image segmentation and tracking algorithm was proposed using cost function on each frame of video sequence to detect illegally parked vehicles in real time.

However, this approach tends to give false detection results under the influence of varying illuminance intensity because the process of detecting object and tracking vehicle rely on the initial foreground segmentation results.

- 1) They have done research to automatize the detection of illegally parked vehicles by providing real-time notification regarding the occurrences and locations of illegal parking cases, thereby improving effectiveness of parking rules and regulations enforcement. The iConvPark is implemented on a Raspberry Pi with the use of Convolutional Neural Network as the classifier to identify illegally parked vehicles based on live parking lot image retrieved via an IP camera. The system has been implemented at a university parking lot to detect illegal parking events.
- 2) The image processing techniques consist of colour conversion, image segmentation using Otsu's thresholding, noise removal, image subtraction, image cropping and bounding box feature. The optical character recognition based on template matching approach is used to analyse the printed characters on the segmented license plate image and to produce an output data consisting of characters. Overall, the proposed automatic vehicle license plate recognition system is capable to perform the recognition process by successfully recognizing license plate of 13 cars, from a total of 14 cars.
- 3) They have studied to detect vehicles that are on the side of the parking lot so that it can be used as a smart parking system for parking management and find out information on the availability of parking spaces. In this study, the authors used the Haar Cascade Classifier, and YOLOv3 then compared them to get the best accuracy in detecting parked cars. The test was carried out using ten different scenarios, the highest accuracy obtained in this study was 96.88% using YOLOv3 with a probability of 90%. In contrast, the accuracy obtained by using the Haar Cascade Classifier is 63.34%.

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# A Taxonomy towards fog computing Resource Allocation

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V. Vesuki Rohindevi; Prashat Kumar Srivastava; Nilesh Dubey; Shivam Tivari; Swadehi; Adish Tiwari [All Authors](#)

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**Abstract**

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- 1. Introduction

**Abstract:**  
Fog Computing is the opportunity of an exercise floor that stretches from the exterior edges of the spot information are made to the spot it will in this manner be dealt with, whether that is in the cloud or in a client's server farm. Fog is an more layer of a dedicated undertaking's shut surroundings and is unfalteringly related with application enlisting and the internet of articles

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## STOCK OPTIMIZATION AND CUMULATIVE HYPOTHESIS

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### ABSTRACT

In this article, we use a recurrent neural network (RNN) with long short-term memory (LSTM) to study stock market prediction problems. The purpose of this work is to evaluate the feasibility and effectiveness of LSTMs in stock market forecasting. We implement the LSTM model by testing different configurations. In other words, multi-layer neural networks are built using a combination of data mining. A neural network is trained on stock quotes using a backpropagation algorithm used to predict the closing price of the stock market. Compare the performance accuracy of neural networks using various sampling performance measures. This article also describes the modeling methods and structures of recurrent neural networks.

**Keywords:** Stock Trend, Neural Network, Trading, Forecast, LSTM, RNN.

---

### I. INTRODUCTION

Deep learning (DL) is a class of machine learning algorithms that use techniques to stimulate the human brain's ability to read [1]. Until recently, the lack of training data and computational power made in-depth study less effective on major data pattern recognition problems such as predicting long-term image sequences[1].

Sequence prediction is a problem that involves using historical sequence information to predict the next sequence or values. Sequences can be symbols such as letters in a sentence or real numbers similar to those in the time series [2]. This is considered one of the most difficult problems to solve in the data science industry. These include many problems; from marketing forecasts to finding patterns in stock market data, from understanding film editing to visualizing your style, from language translation to predicting your next phase on your keypad through neural networks [2].

Neural networks are made up of various layers that are interconnected and affect the structure and function of the human brain. Train neural networks by learning from massive amounts of data and using complex algorithms.

These Recurrent Neural Networks (RNN) [2] are a class of neural networks that are useful for modeling sequence data. The RNN operates with the goal of saving a certain layer output and then feeding it the same as the input to predict the next layer output. However, RNNs comprising sigma cells or tanh cells are unable to read the relevant input data if the input gap is large.

There are many machine learning techniques that we can use to implement a prediction model. In the Feedforward neural network, it allows signals to move in only one direction: from input to output and no response (loops), output of any layer does not affect that same layer. In the Recurrent neural network, it allows signals to move in both directions by introducing loops on the network. There is a response (loops), and the response feedback networks are strong, powerful, and potentially very complex. Their "status" is constantly changing until the point of proportion. Stock forecasting requires a strong response network that can consistently follow unpredictable stock trends. This is why we have chosen neural networks for this function [2].

Recent data science breakthroughs have revealed that long-term memory networks for LSTM are considered to be the most effective solutions to almost all sequence prediction problems [3] [4]. The stock market is in the news every day. Every time you reach a new peak or fall, you feel it. The development of effective algorithms

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| Deep Learning

**Enhanced Deep Learning Hybrid Model of CNN  
Based on Spatial Transformer Network for Facial  
Expression Recognition**

Wahneema Lubiano (1), Ajay Vikram Singh, and Rajen Agrawal

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## Content intelligence technology: A business transformation tool in emerging economies

Manjula Jain, Sandeep Gupta, Shilpi Gupta & Mayank Kumar Pandey

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## **Content intelligence technology : A business transformation tool in emerging economies**

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## Noise reduction in the medical images using hybrid combination of filters with nature-inspired Black Widow Optimization Algorithm



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### Keywords:

Black widow optimization, enhancement, filtering, Nature-Inspired Algorithm, Sharpening filter, speckle noise

**Abstract:** This paper proposes an image filtering method to remove the noises in medical images in a controlled manner. To achieve this goal, the optimal parameters of the conventional filters are determined using the nature-inspired black widow (BWO) optimization algorithm to remove the noise efficiently. The BWO algorithm is chosen over other optimization algorithms because it quickly explores the optimal parameter values due to its procreate and cannibalism steps. The procreate step explores new solutions, whereas the cannibalism steps remove the inappropriate solutions while exploring the optimal solution. In the proposed method, speckle and sharpening filters are considered. In the proposed method, initially, medical images are read. After that, they are enhanced using the power law method because images are either low or high contrast. In the power law method, the gamma value plays an important role. Therefore, the optimal gamma value is determined using the BWO algorithm as done for the filter values. After that, noise addition is performed on them and removed them using the speckle filter. Further, the edges of the image are filtered using the sharpening filter. The proposed method is validated on the standard dataset images downloaded from Kaggle. It is found that the proposed method enhances the image and removes the noise in a controlled manner. Besides that, it achieves better Mean Square Error (MSE) and Peak Signal to Noise Ratio (PSNR) in the output.

### Introduction

In the medical field, digital image processing is crucial for the early detection of potentially life-threatening disorders (Aslam et al., 2020). In the present era, numerous ultrasounds, x-ray and other similar instruments, generate innumerable medical images regularly (Goel et al. 2016). These images contain critical information about various diseases that doctors analyse to treat patients. However, these images contain unwanted noises (Maity et al., 2015). These noises are generated due to image sensors affected due to environmental conditions such as low light, conflict in the transmission channel and dust particles (Maity et al., 2015).

The most important noise that is presented in the medical images includes “salt and pepper”, “impulse”,

“gaussian noise”, and “speckle noise” (Sanchez et al., 2012; Ravishankar et al., 2017; Ali, 2018; Gupta et al., 2018). Out of these noises, speckle noise is common in ultrasound images and it gradually distorts an image. In addition, it causes uneven pixel distribution. The following equation describes speckle noise as the sum of multiplicative and additive noise (Arulpandy and Pricilla, 2020):

$$G(i, j) = g(i, j) * \gamma(i, j) + \eta(i, j) \quad (1)$$

In Eq. (1),  $G(i, j)$  is the observed image,  $\gamma(i, j)$  is a multiplicative noise,  $g(i, j)$  is the noise-free image, and  $\eta(i, j)$  is additive noise. Due to this noise edges, texture, and lines of the images are affected. Various filter methods are used to remove this noise, such as mean



## Multimodal Medical Image Fusion Method using Stationary Wavelet Transform and Yellow Saddle Goatfish Algorithm

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### ABSTRACT

The main motive of multimodal medical image fusion method is to improve the image content and preserve information by fusing the two or more images of the same or difference modalities. To achieve this goal, in this paper, we have designed a multimodal medical image fusion method using Stationary Wavelet Transform (SWT) and Yellow Saddle Goatfish (YSG) algorithm. Initially, two images are read and SWT is applied on it to extract its coefficients. Next, YSG algorithm is applied to determine the optimal weight values of the coefficients that used for fusion purposes. After determining the optimal weight values, fusion is performed. In the last, inverse transform is performed to obtain the final fused image. The subjective and objective evaluation of the proposed method is done on the standard dataset. The subjective evaluation shows the fused image provides better visual quality. On the other side, objective evaluation shows that the proposed method achieves better results over the existing methods in terms of root mean square error (RMSE), peak signal to noise ratio (PSNR), mutual information (MI), structural similarity index measure (SSIM), and entropy.

**Keywords:** Image Fusion, Multimodal Medical Image, Stationary Wavelet Transform, Yellow Saddle Goatfish.

### I. INTRODUCTION

Clinical decision-making has benefited greatly from advancements in the healthcare business, including numerous imaging sensors [1]. It is unusual for a single modality to provide all of the information needed to make a diagnosis. As a result, input from many sensors may be merged to create a new picture that is able to communicate the story of the subject more clearly. In the area of computer intelligence and image processing, image fusion is a prominent study topic. Remote sensing [2], infrared [3-4] and clinical diagnostics are only a few of the many uses it has. Meanwhile, the necessity for image fusion in the present medical systems, such as percutaneous image-guided interventions [5] and image-guided procedures [6], has increased owing to the development in the diversity of acquisition methods. Experts (such as radiologists, oncologist, and interventionists) would benefit from the ability to merge many diagnostic modalities into a single depiction that may aid in their diagnosis and decision-making. There are several obstacles to overcome while developing fusion algorithms, not just because of the theoretical background but because of the nature of medical pictures, which are often poorly contrasted and confusing. Literature provides a wide range of definitions. Medical image fusion using multiple modality pictures that are geometrically linked is known as "multi-modality medical image fusion," or "MMIF" for short. Composing a composite fused picture with enhanced quality and prominent characteristics is the primary goal. There are four types of fusion situations. This includes (1) multi-temporal, (2) multi-view, (3) multi-focus, and (4) multi-modality integration. The complementary data in each source picture provides a more informative representation of the scene, hence combining various imaging modalities is the primary benefit. This makes it easier to get an accurate diagnosis and improves decision-making, all while saving on storage space and resources.

In the literature, images are processed in the spatial and frequency domains [7]. The image pixels are directly processed in the spatial domain. The most preferred spatial domain algorithms are Intensity Hue Saturation (IHS), Principal Component Analysis (PCA), and Brovey method. On the other side, image pixels are transformed into frequency domain. After that, frequency domain coefficients are fused and inverse transform is taken to obtain final fused image in the output. However, spatial domain produces spatial distortion in the fused images [7]. Therefore, frequency domain is more preferred in the image fusion methods. The most preferred frequency domain methods are Discrete Fourier Transform (DFT), Discrete Wavelet Transform (DWT), and Discrete Cosine Transform (DCT), and Contourlet Transform (CT). Out of these methods, DWT is the most preferred method for image fusion. However, it faces shift invariance issue [8]. To overcome this issue, we have explored other frequency domain methods in the literature and found that stationary wavelet transform (SWT) solves this problem [8]. SWT method is different from





## Generative Adversarial Network and Bayesian Optimization in Multi-class Support Vector Machine for Intrusion Detection System

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**Abstract:** Network Intrusion detection performances are highly affected by imbalance data problems due to the presence of less number of attack information in the dataset. Deep learning models are applied in existing methods to improve the efficiency that has limitations of overfitting problems. The Generative Adversarial Network (GAN) – Bayesian optimization Multi-class Support Vector Machine (BMSVM) is proposed to overcome imbalance and overfitting problems in intrusion detection systems. The Min-Max Normalization method is applied to normalize the input data to reduce the differences in features. GAN model is applied to generate minority class to balance the data instances to train the model. The proposed GAN-BMSVM model is compared with the classical sampling method, optimization, and classifier in the intrusion detection model in terms of Accuracy, Detection Rate (DR), and False Alarm Rate (FAR). The classical sampling methods are Near-miss, SMOTE and Autoencoder; traditional classifiers are KNN, RF, SVM, DNN and LSTM, and classical optimizations are PSO and WOA. The existing researches such as HCRNN, HLD, DONN, FL-NIDS and CNN-LSTM are used to evaluate the efficiency of GAN-BMSVM model. The GAN-BMSVM model has achieved 99.58% and 85.38 % accuracy for NSL-KDD and UNSW-NB15 dataset respectively, which is higher than the existing CNN-LSTM model.

**Keywords:** Bayesian optimization, Generative adversarial network, Imbalance, Multi-class support vector machine, Network intrusion detection.

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### 1. Introduction

Network issues are growing concern with security challenges and operating system domain in the network. The security efforts are having a similar shift in experiencing it and the local centralized approaches are evolved with distributed network approaches. This has made an effort to cope with the interconnected platforms from the heterogeneous networks to obtain the solution [1-4]. Intrusion

Detection provides security as it is evolving with the network environments. The attack scenarios are analyzed and the formal description finds the events which are needs to be monitored. The formal way of automatically determining the intrusion is by collecting the data for support intrusion analysis which instruct the components to look after the events involved in run-time attack detection. The IoT is prone to distinct security issues due to internet infrastructure as it was taken place during the

# Malware Detection System using Machine Learning and Honeypot Technique

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**Abstract:** Expanding smart phone technology and developing mobile cloud technology are examples of the most recent wireless technology. Future mobile cloud computing will have many benefits, but it will also make it simple for hackers to seize total control of many other users. Data security is crucial. Even though data protection is meant to be secure, the largest drawback for customers is that when a computer is connected to the internet, a thief can easily take data from the targeted target. A mix of Hybrid Intrusion Detection System (HyInt) and Honey pot networks has been added to the Mobile Cloud Environment to increase security and reduce both known and unexpected assaults. The execution of the study work provides a distinct perspective on the security and high-quality outputs of the algorithm that was lacking from earlier investigations. To show the consistency of the suggested algorithm, a thorough statistical analysis was done as part of the research. There is still a lot to learn about the cloud-based intrusion detection system, according to the implementation and evaluation outcomes. In a highly secure cloud environment created for use by the military and banks, the new technology can be utilised to effectively trace network activities.

**Keywords:** Intrusion Detection System, Honeypot, Cloud Environment.

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## 1. Introduction

In order to find new assaults that Intrusion Detection Systems or network firewalls would not be able to find using the prior static protection rule method, a honeypot can be employed in network security. Designing IDS (Intrusion Detection Systems) and Firewalls must take corporate defence procedures for avoiding the honeypot into account. Computer networks are vulnerable to a number of attacks that could make them insecure or stop them from serving their intended purpose. Network security barriers and safeguards are upsetting attackers and invaders more



# An Evaluation and Adoption of Blockchain in Crowd funding

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## Abstract:

Modern financial funding systems have particular difficulties in the process of managing investments. It is simple to choose the proper project when investing. Managing funds is essential once the correct project has been chosen. We must look for cutting-edge technologies and environmentally friendly money management practises in order to do this. The banking ecosystem is being reinvented by blockchain technology, which also enables conventional financial institutions to operate more effectively on their own. The main concept is to use the Blockchain technology to build decentralised transaction ledger functionality. All kinds of contracts and property could be registered, verified, and transferred via blockchain. In this work, all financial services are being reimagined as crypto pals using Blockchain-based decentralised frameworks. Peer-to-peer fundraising is the notion. With the use of blockchain technology, this effort eliminates the need for a middleman and implements a reliable fund usage system. This paper examines various opportunities, benefits, strategies, and technical difficulties of using Blockchain technology in smart funding and provides frameworks for important Blockchain-based smart funding applications. With more effective checks and balances, this system starts crowd funding cryptocurrency initiatives in a decentralised manner.

2588

**Keywords:** Blockchain applications, Crowd Funding, Financial Transactions, Smart Funding  
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## I. Introduction

In the history of financial transactions trust partner is the key aspect. This can be implemented through banks, coins, currency, credit card and with many other. But all these mediums are vulnerable in

one or other aspect. As e-commerce, e-wallet purchase increasing in the value and in the volume of transactions, huge volumes of data created with IoT based transactions. To ensure reliability in all



Review

# Long-Term Health Consequences of SARS-CoV-2: Assumptions Based on SARS-CoV-1 and MERS-CoV Infections

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**Abstract:** Coronavirus Disease-2019 (COVID-19) is one of the worst pandemics in the history of the world. It is the third coronavirus disease that has afflicted humans in a short span of time. The world appears to be recovering from the grasp of this deadly pandemic; still, its post-disease health effects are not clearly understood. It is evident that the vast majority of COVID-19 patients usually recovered over time; however, disease manifestation is reported to still exist in some patients even after complete recovery. The disease is known to have left irreversible damage(s) among some patients and these damages are expected to cause mild or severe degrees of health effects. Apart from the apparent damage to the lungs caused by SARS-CoV-1, MERS-CoV, and SARS-CoV-2 infection, COVID-19-surviving patients display a wide spectrum of dysfunctions in different organ systems that is similar to what occurs with SARS-CoV-1 and MERS diseases. The major long COVID-19 manifestations include the following aspects: (1) central nervous system, (2) cardiovascular, (3) pulmonary, (4) gastrointestinal, (5) hematologic, (6) renal and (7) psycho-social systems. COVID-19 has a disease display manifestation in these organs and its related systems amongst a large number of recovered cases. Our study highlights the expected bodily consequences of the pandemic caused by SARS-CoV-2 infection based on the understanding of the long-term effects of SARS-CoV-1 and MERS-CoV.

**Keywords:** SARS-CoV-1; MERS-CoV; SARS-CoV-2; manifestations; health consequences



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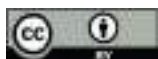
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## 1. Introduction

The COVID-19 disease was declared a pandemic by WHO at the beginning of 2020; since then, it has led to widespread health, social and economic damages worldwide. COVID-19 is an illness caused by the virus known as severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). COVID-19 is an enveloped, positive single-stranded RNA virus that not only infects humans, but also a wide range of animals [1,2]. The virus enters the host cells via the binding of its spike proteins (made up of glycoproteins) to the human cell-surface receptor ACE2 (angiotensin-converting enzyme 2), abundantly present in the epithelial cells of the nasal cavity and alveoli [3]. A study from Johns Hopkins University found that case fatality rates, i.e., percentage of morbidity amongst confirmed COVID-19 patients, varies between 1–7%. This variation significantly relies on one or a combination of several established factors, such as testing efficacy, population ages and local pandemic response policies [2,4]. For instance, case fatality rates in Italy are <3% in the population younger than 60 years of age and more than 30% fatality in the groups aged 80 years or above [5]. However, with rapid vaccination and the development of herd immunity worldwide, the pandemic is rapidly shrinking in the world. Thus, most of the world population has recovered from COVID-19, while some patients, i.e., infected from COVID-19, are likely experiencing long-term after-effects of the SARS-CoV-2 over major

Review

# Xeno-Estrogenic Pesticides and the Risk of Related Human Cancers

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**Abstract:** In recent decades, “environmental xenobiotic-mediated endocrine disruption”, especially by xeno-estrogens, has gained a lot of interest from toxicologists and environmental researchers. These estrogen-mimicking chemicals are known to cause various human disorders. Pesticides are the most heavily used harmful xenobiotic chemicals around the world. The estrogen-mimicking potential of the most widely used organochlorine pesticides is well established. However, their effect is not as clearly understood among the plethora of effects these persistent xenobiotics are known to pose on our physiological system. Estrogens are one of the principal risk modifiers of various disorders, including cancer, not only in women but in men as well. Despite the ban on these xenobiotics in some parts of the world, humans are still at apparent risk of exposure to these harmful chemicals as they are still widely persistent and likely to stay in our environment for a long time owing to their high chemical stability. The present work intends to understand how these harmful chemicals may affect the risk of the development of estrogen-mediated human cancer.

**Keywords:** endocrine disruption; persistence; xenobiotics; disorders



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## 1. Introduction

Xenobiotics (xeno: foreign; biotic: life form) are chemicals of synthetic origin that are foreign to living systems. These chemicals are not part of the normal metabolic activity of living organisms and therefore may interfere with the functioning of the physiological system. These unwanted chemicals inside the body are known to have harmful effects on functioning and are responsible for diseases in humans. One such detrimental effect caused by some of these chemicals is xeno-estrogenicity [1].

‘Xeno-estrogenicity’ (xeno: foreign; estrogenicity: resembling natural estrogens) denotes the property of foreign chemicals being able to produce responses in physiological systems comparable to estrogens produced by the body by different mechanisms. Xeno-estrogens are a group of chemicals that disrupt the endocrine system by mimicking the activity of natural estrogens or producing a similar response in the body by other mechanisms. Majorly known persistent organochlorine pesticides (OCPs) and other classes of chemicals present in the environment are known to bind estrogen receptors and produce a physiological response equivalent to the hormone in various organs and tissues [2]. Therefore, these chemicals can produce adverse effects such as increasing the risk of estrogen-mediated cancers [3]. These chemicals can easily enter the human body due to their physiochemical characteristics. They not only widely persist in our environment, including water, soil, and food, but also exhibit high volatility at environmental temperatures [4]. Moreover, a much greater risk is rendered by such chemicals due to their biomagnification through to the top

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## Mobility aware load balancing using Kho-Kho optimization algorithm for hybrid Li-Fi and Wi-Fi network

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Wireless Networks (2023)

45 Accesses | Metrics

### Abstract

Recently, light fidelity (Li-Fi) technology becomes important for rapid data transmission in the network. Integration of different communication technologies can be used to address the traffic limitations posed by increasing number of Internet users. Hybrid Wi-Fi/Li-Fi networks (HLWN) make use of rapid Li-Fi data transmission and Wi-Fi coverage. So, the combination of them can resolve the limitations of both technologies and enhance the efficiency of the overall network. At the same time, the choice of access point (AP) remains a difficult task as the coverage regions of various networks overlapped with one another. Based on instant channel data, the traditional load balancing schemes allocate every client to a certain AP, offering the optimum solutions at a time instance. But it can result in several handoffs for clients and degrade the throughput performance. Therefore, this article develops a Mobility aware LB using Kho-Kho optimization algorithm (MALB-KKOA) for HLWN. The presented MALB-KKOA technique is investigated in two aspects such as It is permissible to have both several AP associations (MA) and a single AP association (SA) (MA). In the SA phase, every client is aided by an AP either Li-Fi or Wi-Fi where the MALB-KKOA model allocates every client to a particular network over a time duration to reduce handover. On the other hand, in the MA phase, every client is concurrently assisted by Li-Fi as well as Wi-Fi, and no vertical handover takes place. In addition, the MALB-KKOA model is mainly based on the approaches utilized by the players in a tag-team game named Kho-Kho. Moreover, the MALB-KKOA model computes an objective function for the minimization of packet loss and delay. The experimental validation of the MALB-KKOA model is tested and the results signified its promising performance over other recent approaches.

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Article

# Efficient Prioritization and Processor Selection Schemes for HEFT Algorithm: A Makespan Optimizer for Task Scheduling in Cloud Environment

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Sachin Gupta, S. Iyer, S. Agarwal, G. Manoharan, P. Algarni, A.D. Aldehaim, K. Raahemifar, K. Efficient Prioritization and Processor Selection Schemes for HEFT Algorithm: A Makespan Optimizer for Task Scheduling in Cloud Environment. *Electronics* 2022, 11, 2557. <https://doi.org/10.3390/electronics11162557>

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**Abstract:** Cloud computing is one of the most commonly used infrastructures for carrying out activities using virtual machines known as processing units. One of the most fundamental issues with cloud computing is task scheduling. The optimal determination of scheduling criteria in cloud computing is a nondeterministic polynomial-time (NP)-complete optimization problem, and several procedures to manage this problem have been suggested by researchers in the past. Among these methods, the Heterogeneous Earliest Finish Time (HEFT) algorithm is recognized to produce optimal outcomes in a shorter time period for scheduling tasks in a heterogeneous environment. Literature shows that HEFT gives extraordinary results in terms of quality of schedule and execution time. However, in some cases, the average computation cost and selection of the first idle slot may not produce a good solution. Therefore, here we propose modified versions of the HEFT algorithm that can obtain improved results. In the rank generation phase, we implement different methodologies for calculating ranks, while in the processor selection phase, we modify the way of selecting idle slots for scheduling the tasks. This paper suggests enhanced versions of the HEFT algorithm under user-required financial constraints to minimize the makespan of a specified workflow submission on virtual machines. Our findings also suggest that enhanced versions of the HEFT algorithm perform better than the basic HEFT method in terms of lesser schedule length of the workflow problems running on various virtual machines.

**Keywords:** cloud computing; NP-complete; task scheduling; HEFT

## 1. Introduction

The cloud, or distributed computing worldwide, works on a “pay for every utilization” pattern where clients use services available on the cloud without realizing the hosting specifics and distribution policies [1–3]. This gives appropriate, on-request, and worldwide access permission to a common collection of assets [4] (i.e., computing machines, interconnecting networks, storage space, net facilities, and so forth.) for a shortened time to shop

# A Survey on the State of Art Approaches for Disease Detection in Plants

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**Abstract**— Agriculture is the main factor for economy and contributes to GDP. The growth of the economy of many countries is based on agriculture. As a result, the yield factor, quality and volume of agricultural products, play a critical role in economic development. Plant diseases and pests have become a major determinant of crop yields throughout the years, as such illnesses in plants offer a serious threat and impediment to higher yields or production in the agriculture industry. As a result, From the outset, it becomes the major duty to correctly monitor the plants, to detect diseases thoroughly, and to determine methods of controlling or monitoring these plant diseases pests in order to achieve a higher rate of production growth and minimal crop damage. Using machine vision, deep learning methods and tools for extracting and classifying features, It could be possible to build a reliable disease detection system. Numerous researchers have created and deployed various ways for detecting plant diseases and pests. The potential of these methods has been examined in this work.

**Keywords**- Artificial neural network(ANN); deep learning; plant disease

## 1. INTRODUCTION

Machine learning's subset of deep learning, which employs specialized artificial neural networks. It's also a form of brain simulator. In the scientific world, this technique is quite popular. We used to have a lot of data but not enough processing capacity, but now we have a technology called Deep Neural Network that can analyse a lot of data [1]. Approximately 100 billion neurons in the human brain are linked by thousands of their neighbors. However, how these neurons are replicated in a computer remains a mystery. As a result, it creates a node-based or neuron-based artificial neural network [2]. It has input and output neurons, as well as many neurons coupled in the hidden layer.

In India, plant disease is mostly used in research. The diagnosis, or the recognition of symptoms, indications, and other indicators, necessitates both intuitive judgments and scientific approaches. Agriculture employs 70% of India's population, either directly or indirectly. As a result, the Indian economy is built on agriculture. Plant disease, of course, plays a main role in destroying plants and so diminishing agricultural goods both in terms of number and

quality. Bacteria, viruses, and fungus are all responsible for plant illnesses that not only limit plant growth but can cause crop destruction [3, 4]. As per the study of grape plant [26] ,Black rot, Blight, Black measles, and Healthy are the various classes as per figure 1.

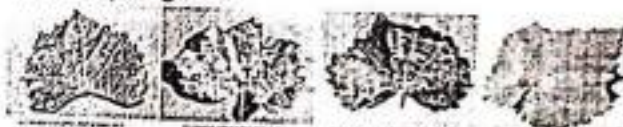


Figure 1. (a) Black rot affected (b) Blight affected (c)Black Measles affected (d) Healthy grape leaves

Study of plant illnesses involves the fields of examining visually detectable characteristics of plants, disease monitoring, and treatment options. In the beginning, most of the tasks of monitoring, diagnosing, and evaluating manual treatment of leaf and plant diseases was required by experts in these fields [5]. As a result, they necessitated a great amount of effort, a lengthy processing time, and a significant financial expenditure. In reality, precise diagnosis and Leaf disease classification can aid in prevention and reduction of agricultural drawbacks. Because different diseases affect different plant leaves, different methodologies must be



## Social Distance Detection Method Using Machine Learning Algorithm in Covid-19

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**Abstract:** The motivation in the back of this paper is, consequently, to present a profound gaining knowledge of stage to social distance following using an upward point of view. The shape utilizes the YOLOv3 object acknowledgment worldview to distinguish people in video successions. The exchange studying method is additionally executed to increase the exactness of the version. To assess social distance infringement between individuals, we applied a guess of actual distance to pixel and set an part. An infringement restriction is laid out to evaluate whether or how not the space esteem penetrates the bottom social distance aspect. Moreover, the following calculation is utilized to differentiate people in video preparations to such an extent that the person who disregards passes the social distance boundary is likewise being observed. Tests are finished on diverse video groupings to test the productivity of the version. The precision of 92% and 93% completed with the aid of the popularity model with out and with pass studying, personally. The following precision of the model is 95%.

**Key words:** Machine Learning, Deep Learning, You Only Look Once, Region-based Convolution Neural Networks, Multi-object tracking, Multi-Type Tree

### 1. Introduction

Since December 2019, the coronavirus has spread to many countries globally from Wuhan, China. The World Health Organization (WHO) declared it a pandemic illness on March 11, 2020, as the epidemic expanded through 114 countries and resulted in 4000 fatalities and 118,000 active cases (WHO W.H. Association, 2020). They detailed more than 35,537,491 affirmed COVID-19 cases on October 7, 2020, including 1,042,798 passings. Figure 1 depicts the most recent number of pandemic-related contaminations (W.C.D.C Dashboard).

Numerous medical care associations, researchers, and clinical experts are looking for legitimate antibodies and medications to beat this destructive infection, albeit no advancement is accounted for to-date. To prevent the infection from spreading, the worldwide local area is searching for substitute ways. For an extended period of time, those

# A Comprehensive Survey of Different Approach for Text Summarization

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These days, data is expanding incredibly in all domains such as mass media, research, banking, sports, etc. Due to the explosion of data, data have lost information but very only some as treated as valuable knowledge. To obtain this important data automatically from this document we need a text summarizer that is competent to obtain this valuable information automatically and reduce the length of the document specifically for textual data without dropping any necessary information. The text summarization is focused on the summary produced. The approaches for summary generation are divided into two groups generally known as extractive and abstractive summarization

The extractive method is based on extracting the maximum number of rank sentences from the data assembled through important words and sentences then putting them together to form a summary. Further, abstractive summarization is dependent on knowing the important facts about the text and later expressing those concepts, in other words, sometimes the word is not in the e-mail text. This is the newest research field for NLP, ML, and NN. This article investigates and reviews the numerous methods for summarization and explains the usefulness and weaknesses of the different methods. Also discuss the latest approach by using NN based on LSTM this structural design is known as Encoder-Decoder, underneath the ML methodology.

**Keywords:** Text Summarization, Extractive Summary, Abstractive Summary, NLP, Neural Network, LSTM

## 1. Introduction:

Summarization is a method of compiling and assembling key information from a document into a short summary of the main content [1]. According to Mani and Maybury [2], text summarization is the most common way of refining the most significant data from a source (or on the other hand sources) to generate a compressed rendition for a particular client (or user) and assignment (or errands). Before discussing summarization first understand the meaning of summary. In 1950[3] describe summary as "A summary is a reduced form of an original document, generally a complete article or book. Summaries are mostly around a passage long, and might be only some paragraphs long subject to the size of the work being compressed". After that in 2002 [4] re-defined the summary as "a text that is generated after considering one or more articles, that communicates crucial knowledge of the initial document(s), that is not more than one-half of the initial document(s) and frequently appreciably fewer than that". Summarization is a powerful and effective way to create a summary of a complex document. The summarization task is divided into two groups, extractive brief, and abstractive brief. The abstractive brief is a current research area where lots of research is going on; but unfortunately, even so, no system (Method) has been achieved an excellent result yet. These summaries were created using data from the document after studying what was expressed in the document and then modifying it into a form expressed through the system. It is accomplished much like humans generate summaries after analyzing the document, while extractive summaries are generated after selecting the essential idioms and sentences from the initial text itself re-organized them and showing them to the user.

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# IMPLEMENTATION OF IRIS RECOGNITION AS A SECURITY MEASURE AGAINST CYBER CRIME IN HYPERLEDGER FABRIC

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## IMPLEMENTATION OF IRIS RECOGNITION AS A SECURITY MEASURE AGAINST CYBER CRIME IN HYPERLEDGER FABRIC

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**Abstract**— This paper is focused on reducing cyber crimes, which are based on identity-based authentication with respect to iris recognition. Today, we all depend on the technology developed for everything, and more new technology will be developed within the next two years. So every person needs a security system for their confidential data. They want to keep secrets. Lots of models are already implemented, such as traditional biometric technology, cryptographic technology, and even cyber crimes have increased very quickly. We proposed a model for digital authentication that provides a unique and safe identity for users because this is the most challenging issue in the mobility era for security, i.e., this model is based on a combination of mathematical algorithms and iris attributes that are unique for each and every person. Iris recognition gives more reliable and efficient security as compared to traditional cryptographic and biometric models.

**Keywords**— Ubiiris, Iris, Hyperledger, CASIA, Security, OTSU.

### I. INTRODUCTION

Today, the big challenge faced in the COVID-19 pandemic is security, and the most important thing is authorization because authorization is the first and most important phase of network security. We know that the world totally depends on technology in this pandemic, and every day new technology is developed, as well as cyber crimes. In India during COVID-19 Feb 2021 approx 378.5 million peoples hunts of cyber crimes mainly which is based on brute- force – attack and side attacks by using mathematical equation and also 3.5 million peoples hunts in

financial sectors and also many attacks through apps such as 'Any desk app' which is used to control users data in this days because authentication security is not strong.

In Jamtara district, Jharkhand which is the cyber hub of the India, they used phishing techniques to fools any people by telling him I am bank manager of any particular PSU bank your account will be closed in within 24 hours so bank send a OTP please tell me that OTP that is the way of techniques they used because the implemented model is based on traditional algorithm such as RSA, Diffi-Hellman, and so on. They know very well about these algorithm techniques, that's why they can easily dial any random number because this algorithm is based on random numbers which have key length is fixed. Jamtara district is also known as Deccan Chronicle because it trains thousands of students in phishing techniques and increases the cyber crime rate every day, which creates big challenging problems in financial sector.

So we proposed a model which is based on iris recognition, known as identity-based authentication. In India lots of organizations such as public and private organizations used traditional security models. In that place, we used the iris approach for more efficient security and hyperledger fabric as double security for all users. There are some examples:

- In financial sectors: In banking sector, we replace user ID, pin, or password in iris templates because a good iris scanner is easily affordable for banks if they replace signature and thumb in iris scanning because iris codes are unique for each and every person; this is more credible for customers and reduces the phishing rate in cyber crime.
- In online reservations: In recent days, there are lots of apps where users book their tickets by using any application. Generally, most of user use MakeMyTrip aap and search cheapest flight and then books but that particular flight every days reschedule. Then they called the customer service number for that specific flight, but they were told to call MakeMyTrip. Customers call care they instruct i am manager of that particular services Please open your phone pay account, BHIM account, or Net banking, and they will send a link to download the Any Desk app, which is a remote controller app, and they deduct all money of that particular customer. In this place if bank uses iris template instead of OTP then cyber theft not access any user accounts and reduce cyber rate. In these places if a bank uses iris template instead of OTP then cyber theft will not access any user accounts and reduce cyber rate.
- In the Digital Money Transfer application: we must use iris scanning in place of an OTP or PIN.
- In the name of Job: Now a days, every state have increased unemployed rate that's why there are 80% student post their resume in many social media, websites such as Indeed, Nokri.com, Facebooks, LinkedIn etc and so on. Then the cyber theft call them are you need job in good packages so I will send you link please registered and charges is 2000 After registration you give telephonic interview if you pass then we send your joining letter but you pay 10 lakh for security money before joining job because your payment is 80k, I will send bank details first you pay security money and send me screenshot in this ways they work of money laundry. There are lots of students who come under cyber crimes by using phishing. In this way the cyber theft tricks customers and access their financial information so The RBI must adopt iris recognition in Banking sectors for protects money laundering, Money Frauds, and all financial crimes and reduce all cyber crimes because all cyber crimes done for only and only for money. And the RBI must be making rules for iris recognition in all financial sectors.

## II. BACKGROUNDS

In 1936, Dr. Frank Burch was given the idea of using the iris for personal identification. He had identified the features of iris texture, which are complex and unique patterns. This part of the eye is used for security purposes. Because the iris is recognised by its characteristics, it is a unique feature for everyone. In the 1980s, the concept was given by Dr. Leonard Flom and Aran Safir [2] that no two iris are the same, even if these iris are in the same person. They researched and documented these concepts with the expectation of using the iris for identifying people, and they were awarded a patent in 1987 for these contributions for security purposes. After some time in 1994, Dr. John Daugman [1-4] implemented these concepts by using some mathematical algorithms using a canny detector for authentication. For the security purpose this model was proposed. Daugman [1-4] uses some classical and popular mathematical approaches for iris recognition, such as the band-pass Gabor filter for normalisation and segmentation of iris image for feature representation. This filter contains the real and imaginary parts of the iris, which are binarized to generate iris code, which is a compact and robust feature for the matching.

### A. IRIS Recognition

The iris recognition system is used for verification, authentication, and identification that is in huge demand in security applications used for access control, authentication, banking systems, border control, forensics, etc. Iris recognition gives high security, more accurate and more reliable biometric identification systems, which are least invasive. Iris contains a random, complex texture and unique features, that's why it makes an ideal biometric recognition system. Irises are different between the same human eyes, and it also different between the both eyes i.e. left eye and right eye even both eye images are the same person. Iris has the ability to accurately measure iris textures and estimate a 1 in 1032 probability of false recognition rate because of a hundred degree rotation, which makes iris invasive in nature.

Now a days , new technology is being developed for real-life applications, in respect to security purposes, the iris recognition system is given a special place due to its high performance , reliability, uniqueness, and accuracy for identification.

There are mainly six phases to the iris recognition system.

1. Image Acquisition: Image collection or acquisition, we capture the image by using CCD cameras, an iris scanner, and also many ubiquitous/IoT recording devices.
2. Image pre-processing In image pre-processing, we remove all unwanted noise to improve image quality, control the size, color, and light of the image, the effect of spots/holes lying on the papillary part of the eye for the segmentation phase.
3. Segmentation: In segmentation, we detect the iris and pupil boundaries by subtracting the outer boundary from the inner boundary of the pupil.
4. Normalization: In normalization, we normalise the image of the iris for inconsistencies by using Rubber sheet Arrangement to normalise the Cartesian coordinates into polar with constant dimensions.
5. Feature extraction: In feature extraction, we extract the features of an image from a normalised image and encode this iris image for suitable recognition.
6. Matching: In matching, we compare the iris sample which is stored in the file's directories

and give the matching scores for verification.

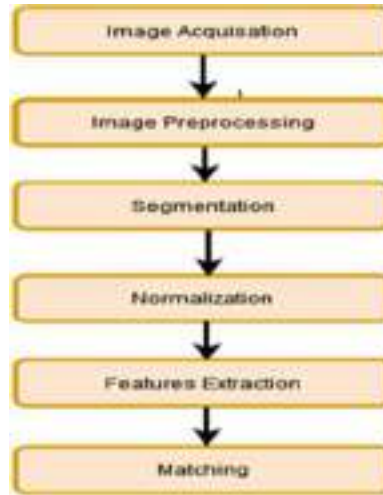


Figure 1. Phases of Iris Recognition

### III. PREVIOUS WORK

Chengqiang and Mei [ 1 ] proposed a method for good iris feature extraction by using the Direct Linear Discriminant Analysis (DLDA) algorithm and the combination of Wavelet Transform (W T) algorithm and Direct Linear Discriminant Analysis for normalisation of the iris. For matching uses Euclidean distance (ED) to classify the iris templates. They experimented on version 2 CASIA databases, which have 1200 images and achieved performance rate 1.44% and approximately 98.56% accuracy.

Kaushik and Prabir [2] proposed a model in which they tried to improve the feature extraction of the iris recognition system through chain code and zigzag collarete parts of the eye. In the segmentation phase we required useful parts of the iris so in this approach they get better efficiency as compared to previous. They used the Gabor wavelet (GW) algorithm for feature extraction and the SVM algorithm for matching. They experimented on version 2 CASIA databases that have 756 eye images and get a success rate approx 99.58%.

Ahmed M Sahran [3] proposed a method in which they used Discrete Cosine Transform (DCT) approach for features extraction of an iris image and Artificial Neural Network (ANN) for matching the image from database templates. This proposed method is tested on CASIA version 2 databases, which have 1200 eye images for 30 people, each people having 40 eye images for both eyes that is 20 for left and 20 for right were used, the dimension of image is 480\*640 pixels. The total image size for this model was 600 and the achieved accuracy rate is 96.00% for the iris recognition.

Tallapragada and Rajan [4] proposed an approach in which they improve the performance rate of the iris recognition system. They used both approaches, i.e. Gray-Level Co-Occurrence Matrix (GLCM) and Haar Wavelet Transform (HWT) techniques, for feature extraction, which is stored in the database. For matching, they extract features by using an Artificial Neural Network (ANN). This proposed model is tested on 100 images of CASIA database and 95% accuracy rate approx.

Kumar, Raja, Chootaray, and Pattnaik [5] proposed a model in which they have adopted Principal Component Analysis (PCA ) for features extraction by using a Discrete Wavelet Transform ( DWT) of Iris pattern Iris code By using morphological techniques in different

principal such as K- Nearest Neighbors(KNN) , Support vector machine (SVM) and Random Forest (RF) on the CASIA database for achieving a different recognition rate or efficiency rate, such as 99.07% for KNN, 98.15% for RF and 97.23% for SVM.

Rashid, Shams and El-Awady [6] gave the new model i.e. based on local Binary Pattern (LBP) techniques for features extraction and matching they used two approaches i.e. Artificial Neural Network (ANN) and Learning Vectors Quantization (LVQ) on three database i.e. CASIA version 1, MMU version 1 and MMU version 2 of images for achieved accuracy rate of 99.87%.

Zhang and Guan [7] proposed a method based on the CASIA database version 1 of 756 images to achieved 99% recognition rate by using Empirical Mode Decomposition (EMD) algorithm for features extraction and by using K - Nearest Neighbors for matching.

Manisha and Sanjay [8] gave a model in which they applied both MMU and BATH database to achieved accuracy performance is 99.95%. For segmentation they used Daugman 's Integro - Differential Operator (IDO ), for normalization Daugman 's Rubber sheet arrangement was used , Haar Transform (HT) for features filters and classification for Hamming Distance ( HD)

Researcher	Database	Method	No. of image	Test image	Tested image	Accuracy
Chengcong and Ma	CASIA V2	IBDA + ED	120	—	—	98.30%
Kavitha and Prabu	CASIA V2	GM + SVM	756	—	—	99.57%
Ahmed M. Sattar	CASIA V2	DCT+ANN	600	60	20	96.00%
Tallegre and Raza	CASIA V3	(GLCM+DWT) + ANN	100	—	—	94.00%
Kumar, Raj, Choudhary and Patra	CASIA V1	(PCA + DWT) + KNN, (PCA + DWT) + RF, (PCA + DWT) + SVM	756	108	648	98.15%, 97.23%
Rashid, Shams and El-Awady	CASIA 1, MMU1 & MMU2	LBP + LVQ & ANN	—	—	—	99.87%
Zhang and Guan	CASIA V1	EMD + KNN	756	90	666	99.00%
Manisha and Sanjay	MMU & BATH	(IDO + HT) + (HD) + ID	—	—	—	99.95%

Table 1 comparison analysis

#### A. Limitation

The proposed model gives good recognition rate and performs accurately of the iris recognition system but still there are some problems:

1. If the image was not detected accurately then segmentation was not perfect, that's why it cannot segment the iris pattern successfully for eye images, so we can not get a secure model.
2. There is a need for a high security but low cost iris recognition system which can be easily affordable by various governments or other organizations from a security perspective.

#### IV. PROPOSED APPROACH

1. Preprocess the given image for removing unnecessary parts like noise, blurred, high



resolution

In image preprocessing we collect the image which are not always “useful” parts (IRIS), but there are some “unnecessary” parts present in the image i.e. blurred, noise, high resolution etc and so on. In this phase we remove the effects of spots/holes laying on the papillary areas so first we convert the original color into grayscale image, then this image is changed into a binary image, and then this image is thresholded by using Otsu thresholding approaches, and also detect the iris and pupil for the next stages.

2. Segmented the given image using CASIA/UBIRIS.

Segmentation is the most important phase for iris recognition because it plays an important role for the system or model performance if improper segmentation can cause the wrong features to be extracted, that’s why it reduces the efficiency of the system. The success of segmentation is dependent on the quality of the eye image. Also, light reflections may be occurring in the iris region that affect the iris pattern. So we use CASIA iris database eye images, which do not have light reflection.

3. Normalize the image

We see in segmentation phase iris is segmented completely of an eye image, then the next phase is normalization in which first we convert the iris pattern into constant dimension which allows the comparisons for features extraction for normalize the ‘rectangular’ forms of the iris templates which have constant radius. In normalization, Daugman’s Rubber Sheet arrangement technique is used for converting a rectangular shape to a cartesian form by fixing the entire radius.

4. Do feature extraction using the OTSU approach.

After successfully completing the normalisation stage for the iris region, the iris pattern is to go for feature extraction. Before extraction, we binarized all the images for better extraction by using adaptive Gaussian and Otsu approaches because feature extraction plays an important role in the iris recognition system. Because the system depends on the IrisCode that is extracted from iris. In this stage, the Gabor filter is used to filter the accurate feature, and a combination of adaptive Gaussian and Otsu techniques are used for binarization.

5. Match the previous and present Image on the basis of matching score

In these steps of iris recognition, we use the Hamming distance (HD) approach to calculate matching scores by comparing the present and previous iris codes, which are stored in the database. If the matching score is 0.00, then this image belongs to the same image, and if the matching score is 0.3244 then the iris image belongs to two different images. Finally, we analysed all bits of the images.

6. Save the score on Hyper-ledger fabric.

In these steps of iris recognition we save all bits of the images on the Hyper-ledger fabric. No alteration can be done of saved data due to hyperledger blockchain, if any body is altered the bits of saved images new block is generated by which we can easily trace what and which time the data is changed. Hyperledger fabric is an open source enterprise permissioned blockchain, so that we may achieve double security. Hyper-ledger fabric is the most trending technology, which provides more security, reliability, and privacy over the cloud.

7. Verify and validate the result.

We have reached the last stage of the iris recognition process, in which we validate the matching score and store it on the Hyperledger fabric. If the administrator of the block chain

confirms that the user in question has permission to participate in the process, then the validation for the process is successful; otherwise, only login credentials are permitted.

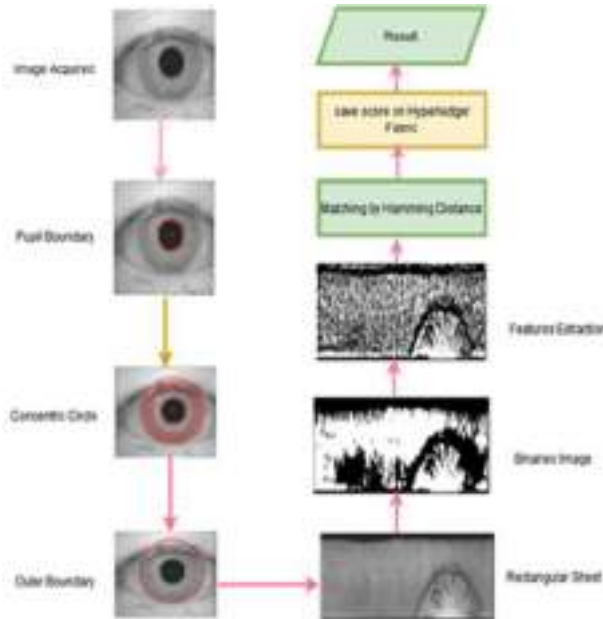


Figure 2: Results of all stages of CASIA database

## V. Methodology

There are many phases in which different algorithm is uses as described in below table

Phases	Algorithm
Pre-processing	By using sensor, digital device
Segmentation	Hough transformation, OTSU approaches
Normalization	Rubber sheet model
Feature Extraction	Gabor filters
Matching	Hamming distance

Table 2.

### A. Segmentation: The Hough Circle Transformation

The Hough Circle Transformation is a widely used algorithm for image processing which is used to detect the geometric shape of a digital image, such as lines, circles, and curves, which can be easily detected by the Hough Circle Transform and can be derive the radius and coordinate centre of the iris and pupil regions. Wildes et al.[1], Kong and Zhang [2], Tisse et al. [3], and Ma et al. [4] proposed segmentation which is based on the Hough Circle Transform. First of all, we generate an edge map, by calculating the average intensity of pixels in the eye image, and then we threshold the obtained results. From this edge maps we get Hough circles variable of circles which is passing through each and every points such as coordinates of center  $(X_c, Y_c)$  and radius  $r$ , that can defined any circle by using given equation

$$X_c^2 + Y_c^2 - r^2 = 0$$

At the point of maximum radius, the coordinates of the circle give the best/maximum point of Hough Circle. So we convert its polar to Cartesian form for finding best point are given in

equation

$$X_c = r \cos(\theta)$$

$$Y_c = r \sin(\theta)$$

Where  $(X_c, Y_c)$  is the mean value of the circles and  $\theta$  is angle of rotation with the axes.

Normalization: Daugman's Rubber Sheet Arrangement

This rubber sheet arrangement is mainly used for iris normalisation for the next step, i.e. feature extraction. The main objective of rubber sheet arrangement is to reset each edge point in the iris region to change into polar coordinates  $(r, \theta)$  where  $r$  is the radius on the interval of  $[1, 0]$  and  $\theta$  is rotation of angle on the interval of  $[0, 2\pi]$ .

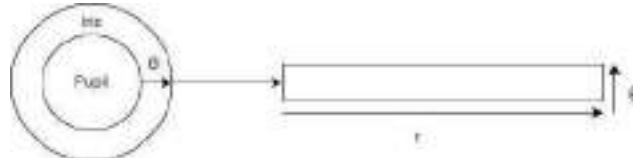


Figure 3: Daugman's Rubber Sheet Arrangement

Then converts the iris region from  $(X, Y)$  Cartesian coordinates in to the polar  $(r, \theta)$  coordinates which are given below

$$I(X, Y) \quad I(r, \theta) \dots \dots \dots$$

Where

$$X(r, \theta) = X_c \cos(\theta) \dots \dots \dots$$

$$Y(r, \theta) = Y_c \sin(\theta) \dots \dots \dots$$

Where  $I(X, Y)$  = image of the iris

$(X, Y)$  = Cartesian coordinates

$(r, \theta)$  = Polar coordinates

$(X_c \& Y_c)$  and  $(X \& Y)$  are the coordinates of iris and pupil with respect to  $\theta$ .

The rubber sheet arrangement has a problem with pupillary dilation, an unwanted region, and inconsistencies in size, so in order to remove this, we normalised the iris template in constant dimensions.

Features Extraction: - Gabor Filters

Gabor filters are generally applicable for feature extraction, which provides optimal solutions for the recognition of points and special frequencies. A Gabor filter is formed by applying the sine/cosine wave with the Gaussian theorem because this is able to localise in both space and recurrence. A sine wave is absolutely localised in recurrence, but not localised in space. By low quality of image of localization space, through with loss of localization in frequency. Gabor filters contain two parts, i.e., the real, which is specified by a cosine modulated Gaussian algorithm and gives even symmetric components, and another is an imaginary part, which is specified by a sine wave modulator and gives odd asymmetric components.

The Gabor filter is the standard algorithm for image processing, comes after Dennis Gabor, which is based on linear filters used for edge detection. Gabor filter use 2- Dimensional filter which is given below in equation is:-

$$G(x, y) = \exp\left(-\frac{x'^2 + y'^2}{2\sigma^2}\right) \cos\left(i\left(\frac{2\pi x'}{\lambda} + \psi\right)\right)$$

Where  $x' = x \cos(\theta) + y \sin(\theta)$

$$Y' = -x\sin(\theta) + y\cos(\theta)$$

This equation shows the real and imaginary parts, which depend on the sign of the 2D filters.

Matching:- Hamming Distance

The Hamming Distance is an algorithm for classification that can recognise how many matching scores or bits are in the match between two iris samples or not. By using the hamming Distance(HD) algorithm of two bits samples , we can check whether the two patterns were generated from the same irises or from different irises for finding the correct matching score. The Hamming Distance Algorithm is the sum of bits i.e. the sum of the exclusive-OR operation between two template bits, that is A and B over N, which is the total number of bit patterns. The equation is given below:

$$HD = \frac{1}{N} \sum_{i=1}^n Xi (XOR) Yi$$

Because each individual iris pattern has unique characteristics with the high degree of the freedom, every iris pattern will create an Iris-Pattern that is different from each other which is generated by other iris pattern and also if we compare two iris pattern of the same iris will be high matching score i.e. 0.00000 and we compare two iris pattern of the different iris will give the matching score i.e. 0.34677.

**B. Results**

In this step, we pick a circle with the largest radius, which is in red, to compute concentric circles of the Hough Circle transform then prints these concentric circles in red color. The intensity of each pixel of the concentric circle is plotted in a graph to find a bigger radius for actual iris detection, as given below.

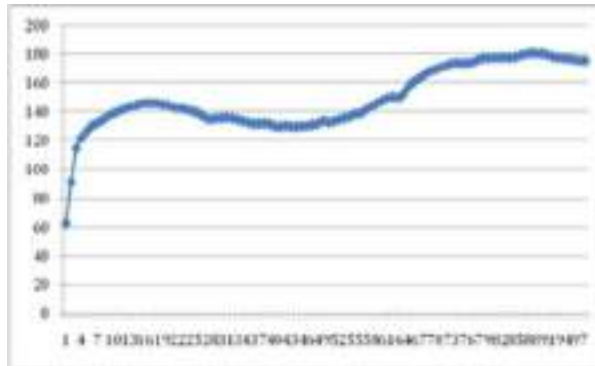


Figure: 4 Average intensity of radius at point 64 give best images at this point is in increasing orders

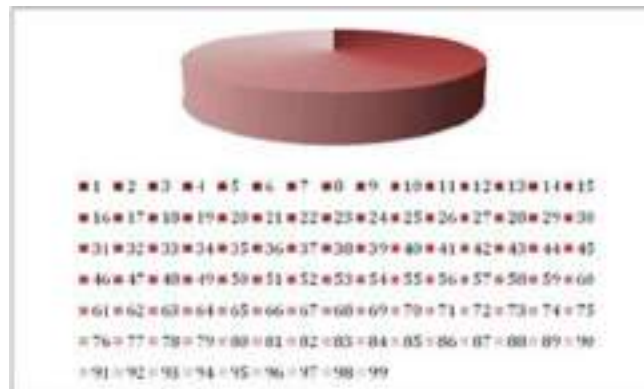


Figure: 5

In the figure 5 pie chart diagram, numbers 1 to 64 have correct image detection, which gives correct segmentation; that's why we have the best image quality for feature extraction, and numbers 65 to 99 have poor image quality, that's why we can't properly find iris templates.

#### VI. Future Work Application

There are many different applications in different places during COVID-19, such as:

- **Biometric Attendance:** Due to COVID-19, many places use fingerprint biometric attendance. This is not possible, so we can use iris biometric attendance instead of fingerprints for such places. But it is not possible to use every place of the iris scanner due to its highly cost effectiveness so we make a less cost effective application app which can be easily installed and easily controlled by organizations for verification.
- **In Financial Institution:** we know that today era is digital era that's why in India has increased rapidly cyber crime due to unaware of cyber crimes regarding transactions because mostly customers are belongs in villages and they are uneducated person. Mostly, these people are targeted by cyber criminals due to their unawareness, so in the future, banks must use iris recognition for authentication of users instead of a pin or password. Banks should be developing software which is less cost-effective but more reliability.

**In Airport:** If we use the iris recognition system in every airport, then we will recognise the illegal and unauthorised person who makes duplicate passports for their own profit. Further we can save the Iris data of any person on the block chain so that nobody can not alter or replace given information that is secured for the first time on the block chain technology. Like HyperLedger ledger fabric, HyperLedger ledger fabric is an open source enterprise permission block chain. Block chain supports the double security to the iris recognition model we would implement in future.



Figure 6.

#### VII Conclusion

In this model of iris recognition system, with the help of block chain technology, i.e., hyper ledger fabric, which gives better efficiency and a robust system for verification and authentication for security purposes, this model was based on two databases of gray-scale eye images, namely the CASIA database and the UBIRIS database, for better efficiency and to verify the performance of the iris recognition system, and implemented on "Python" for a less cost-effective system. The main objective of this model is to reduce cyber-crimes in financial sectors, the defence sector, healthcare, education, e-voting, e-governance, etc., by implementing iris recognition techniques for customers' safe transactions and ensuring that no

transaction can be accessed by any unauthorised users.

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**IMS ENGINEERING COLLEGE  
, GHAZIABAD**



**REPORT**

**December 2022 – November 2023**



# **Information and Communication Technology Academy of Tamil Nadu**



**ICTACT - Information and Communication Technology Academy of Tamil Nadu is a society formed by a consortium of Government of India, Government of Tamil Nadu & Confederation of Indian Industry (CII) and National Association of Software Services Companies (NASSCOM) in India. With training of teachers and students as the primary objective, ICT Academy has been working through a seven pillar program in the areas of Faculty Development, Student Skill Development, Entrepreneurship Development, Youth Empowerment, Industry- Institute Interaction, Digital Empowerment and Research & Publications. Through its various initiatives, ICT Academy has been part of strengthening the India's four important visions on Skill India, Digital India, Startup India and Make in India.**

# ANNUAL MEMBERSHIP



## Certificate of Membership


This is to certify that

**IMS ENGINEERING COLLEGE, GHAZIABAD, UTTAR  
PRADESH**

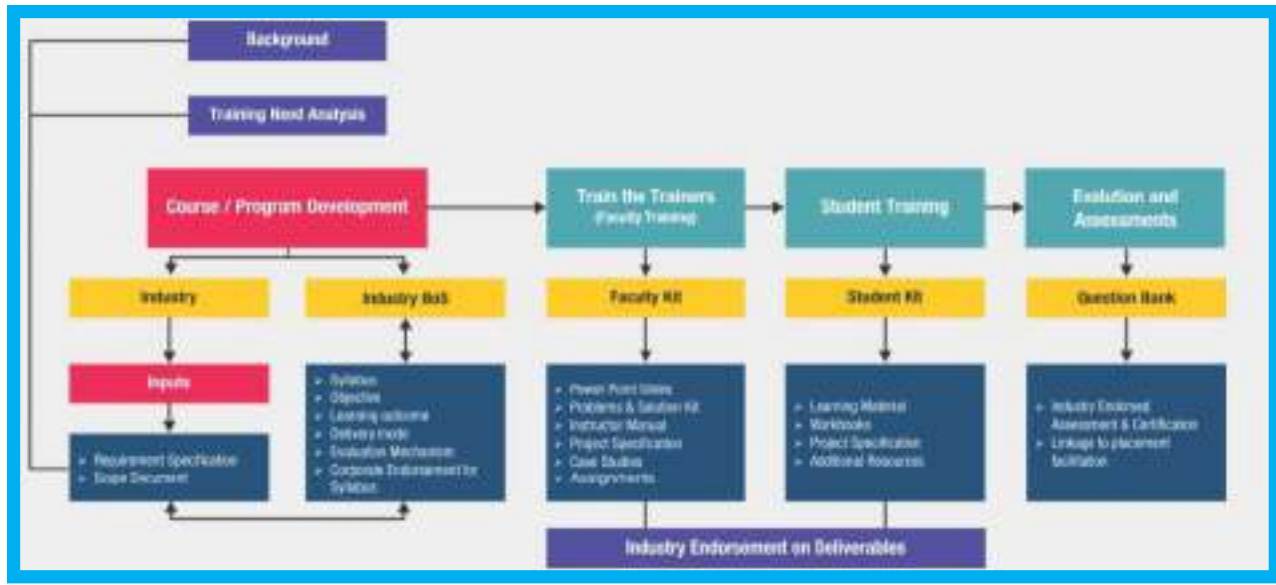
is an Institutional Member of ICT Academy

Membership No: 141722  
Membership Period: 16 Dec 2022 to 16 Dec 2023  
New Delhi, India



  
Hari Balachandran  
Chief Executive Officer

# FACULTY DEVELOPMENT PROGRAM



Participation in Faculty development programmes would enable faculty members to update their research and pedagogical skills. Higher education institutions are starting to adapt and respond to professionals already in employment, mature learners and the demand from students enrolled for skills for employability programs. With the aim of equipping faculty members with required skills and knowledge, ICT Academy pursues the Faculty Development Program as its primary objective.

## Honeywell Digital Youth Summit

A poster for the Honeywell Digital Youth Summit 2023. At the top, it features the Honeywell logo on the left and the ICT Academy logo on the right. The central text reads "HONEYWELL DIGITAL YOUTH SUMMIT" in large, bold letters, with "12 JANUARY 2023 - 10:00 AM - 11:30 AM" below it. A red banner contains a paragraph of text: "Honeywell Digital Youth Summit 2023 is an event organized by ICT Academy as part of Honeywell Student Empowerment Program. The summit enables the students of higher education to connect, learn and network with industry leaders virtually. The event focuses on how new technologies and innovative solutions affect the future of work. Experts from the industry will discuss the technology trend in the industry and the job opportunities there. This summit will help students to identify the skills and knowledge required to thrive in the digital workplace." Below this, the "Event Format" is shown as a circular flow: Tech Panel Discussion -> HR Panel and Motivation session -> Q&A Session. To the right, it asks "Who Can Participate?" and states "Students enrolled in the Honeywell Student Empowerment Program". The "SPEAKERS" section lists 12 individuals with their names, titles, and photos. At the bottom, there is a URL: [www.ictacademy.in/projects/honeywell\\_dys.aspx](http://www.ictacademy.in/projects/honeywell_dys.aspx) and social media icons for LinkedIn, Facebook, and Instagram.

Event Date	Event Name	Venue	Name	Designation
12-Jan-23	Honeywell Digital Youth Summit	Virtual	Mo Rizwan	Computer Science and Engineering
12-Jan-23	Honeywell Digital Youth Summit	Virtual	Chirag Goel	CSE
12-Jan-23	Honeywell Digital Youth Summit	Virtual	Dheeraj Patel	CSE
12-Jan-23	Honeywell Digital Youth Summit	Virtual	Utkarsh Srivastava	IT
12-Jan-23	Honeywell Digital Youth Summit	Virtual	Ayushman	COMPUTER SCIENCE AND ENGINEERING

# HONEYWELL INDIA YOUTH TECKATHON 2023



Event Date	Event Name	Name	Designation	Email
15-Aug-23	HONEYWELL INDIA YOUTH TECKATHON 2023	Varun Kapoor	Computer science	varunkpr290@gmail.com

## **Student Empowerment Program (Phase 3) - A CSR Initiative by Honeywell**



**The technologies of the fourth industrial revolution are being adopted by multiple public sector and private companies worldwide. Students, the future workforce, getting skilled in these technologies is a great challenge because of affordability, access, and availability of infrastructure in their region. To train the youth and women students on advanced technology skills and prepare them for the future of work, Honeywell has partnered with ICT Academy to establish 25 Center of Excellence for Women Empowerment and 25 Center of Excellence for Youth Empowerment. Through the center of excellence, 5,000 higher education students will be trained on advanced technologies such as cloud, big data, networking, RPA, artificial intelligence, and machine learning and will be made industry-ready resources. The project aims to benefit the students of higher education institutions in Tamil Nadu, Karnataka, and Maharashtra.**

S.No	Student Name	Email-id	MobileNo	Against	course	venue
1	Shubhi Bhatnagar	shubhibhatnagar68@gmail.com	9548502628	IMS ENGINEERING COLLEGE GHAZIABAD	Microsoft Data Analyst Associate (DA-100)	IMS Engineering College
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3	Ayushmaan Sahu	ayushmaansahu2001@gmail.com	9336449193	IMS ENGINEERING COLLEGE GHAZIABAD	Microsoft Data Analyst Associate (DA-100)	IMS Engineering College
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# Capgemini





Empowering women through education is indispensable for achieving growth and advancing development in any country. In this context, skill development training programs will play a crucial role. When women learn a new skill, it develops their confidence, creates an income, and develops self-esteem in the eyes of their families and society. The skill training enables women to enter the workforce and become more independent.

In this age of technology, the workforce is constantly evolving for a sustainable career in the industry. Since industry expectations keep changing, equipping oneself with domain-specific technical skills has become essential for new portfolios in the job market.

To develop India's graduating women as skilled and job-ready resources, ICT Academy, in association with Capgemini, organizes the Women Transformation Program to train women students of engineering institutions in advanced IT skills. This program aims to bridge the need of aspirants deprived of opportunities due to financial constraints and those who cannot access new economy jobs.

<b>Sl No</b>	<b>Name of the Student</b>	<b>Department</b>	<b>Mobile No</b>	<b>Email Address</b>	<b>Course Name</b>
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## Cybersecurity Training for Educators & Students of Higher Education



**The cybersecurity field presents diverse career opportunities. Potential jobs include information security analyst, chief information security officer, security architect, and security engineer. The most popular industries that employ cybersecurity professionals include computer systems design and related services; management of companies and enterprises; credit intermediation and related activities; and management, scientific, and technical consulting services. As companies continue to emphasize on cybersecurity and heightened employee awareness, the focus on cybersecurity has increased more than ever. However there seems to be a huge supply-demand gap, this has led to an increase in hiring for available positions on permanent or contractual basis. The demand for roles such as Security Engineers, Cybersecurity Analysts and Cybersecurity Engineers is on the rise. India is expected to have over 1.5 million unfulfilled job vacancies in**

cybersecurity by 2025. The second highest in the APAC Region after China. But finding skilled professionals in Cyber Security remains a formidable challenge.

As per the UNSDGs Goal No. 4 Quality Education, and Goal No. 8. Decent Work and Economic Growth, this problem needs intervention.

ICT Academy has partnered with Microsoft Philanthropies to conduct cybersecurity training programs for higher education students and faculty members. This program will help to create cybersecurity professionals. The program will be delivered in rural and sub-urban regions. Through this initiative, ICT Academy has been strengthening the India's important visions on Skill India and Digital India.

100 Institutions will be identified (50 institutions from Tamil Nadu & Karnataka, remaining 50 from Telangana, Assam, Uttarakhand, Delhi NCR and Rajasthan).

S.No	First Name	Gender	EmailID	MobileNo	course	venue
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6	Saket	Male	saket304@gmail.com	9672418362	Cyber Security	IMS ENGINEERING COLLEGE, GHAZIABAD
7	Gaurav	Male	kkushgaurav@gmail.com	9565848460	Cyber Security	IMS ENGINEERING COLLEGE

65	Ankit	Male	akverma12897@gmail.com	8953330558	Cyber Security	IMS ENGINEERING COLLEGE, GHAZIABAD
66	Tushar	Male	guptatushar8401@gmail.com	7275292568	Cyber Security	IMS ENGINEERING COLLEGE, GHAZIABAD

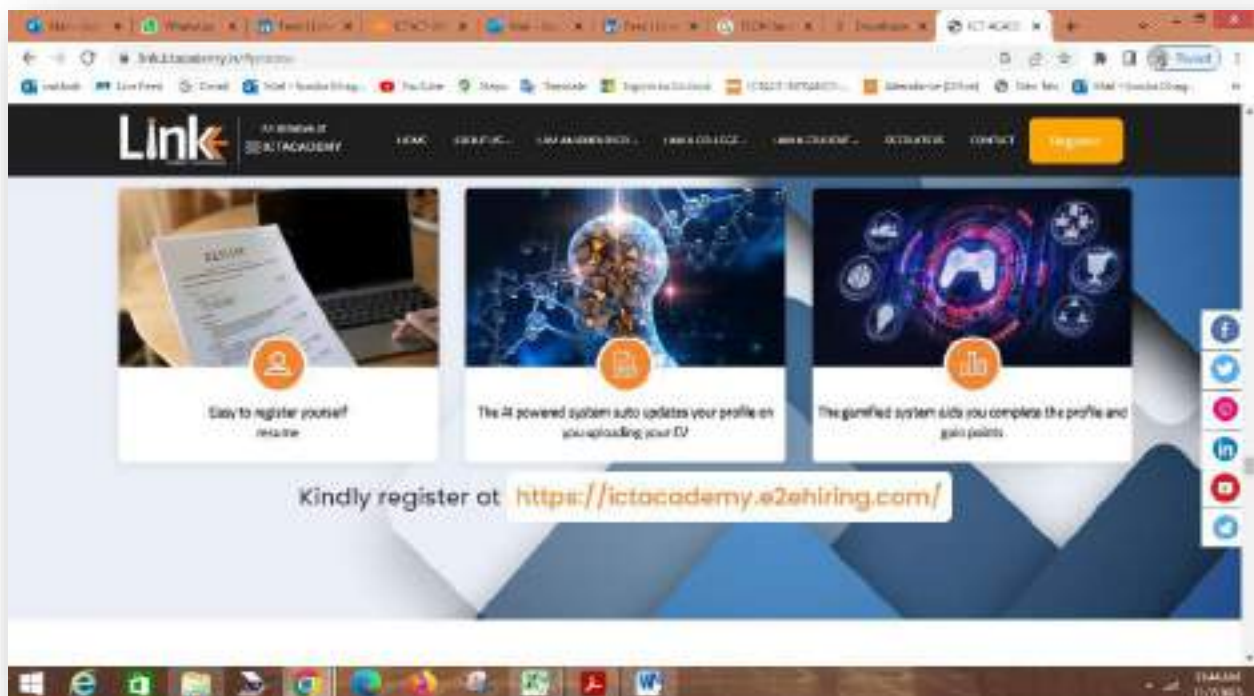
## Microsoft Philanthropies

We at Microsoft believe that technology is a powerful force for good in a rapidly changing world, and we are working to ensure that everyone has access to the opportunities it provides. The purpose of Microsoft Philanthropies is to bring the benefits of technology to drive sustainable social impact and enable economic opportunity for all. We achieve that by building capacity, driving action and influencing policy for our programmatic priorities that continue being the following:

Sl No	Name of the Student	DOB	Gender	Mobile No	Email Address	Course
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3	Mo Rizwan	6/19/2000	Male	7068830597	morizwan.cse@gmail.com	Cyber Security
4	Avi Jaiswal	2/19/2001	Male	9839429697	avi.jaiswal3571@gmail.com	Cyber Security
5	Shivang Sharma	9/27/2003	Male	8799772502	maanusharma1900@gmail.com	Cyber Security

23	Ashish Kumar Kandu	Male	B.Tech	7897216036	ashishkumarkandu7071@gmail.com	Cyber Security
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27	Ishan Sharma	Male	B.Tech	8130562864	sh01shalini@gmail.com	Cyber Security

## Placement Drive



**ICT Academy has been conducting various off campus placement activities for IT/ITeS/ BFSI companies across India since inception. The venerable association of ICT Academy with more than 1200 higher education institutions across India as its members has facilitated numerous campus recruitment drives to be conducted efficiently and professionally. In the years past, ICT**

Academy has supported various organizations including CTS, EMC, HCL, CSS Corp, Sutherland, SPI Global, Ajuba, Lenovo, Rane, Mobius Knowledge Services, Hinduja Global Solutions, TNQ Books & Journals, Equiniti ICS, Integra, Digital Nirvana, SIM Technologies, Cogzidel Technologies, Aagna Corporate Services etc. The precedence for ICT Academy in organizing the placement drive and its success leads to the launch of LINK - A comprehensive Job Portal.

### Virtual Placement Drive

*Pay pal*

*Genpact*

*College Dekho*

*GeeksforGeeks*

*CorroHealth*

*Mahindra Finance*

*Learning Routes Pvt Ltd*

## **ICT Academy Bridge 2023 - Delhi Edition**

**53<sup>RD</sup> EDITION**

INFORMATION TECHNOLOGY AND DIGITAL SERVICES DEPARTMENT  
GOVERNMENT OF TAMIL NADU

**ICTACADEMY™**

**BRIDGE'23**  
BUILDING HUMAN CAPITAL ACCELERATING GROWTH, ENABLING ACCESS

**16 OCTOBER 2023 (09:30 am - 05:00 pm)**  
**HYATT REGENCY, NEW DELHI**

**A High Impact Industry-Institute Interaction Event**

**CHIEF GUEST**

**Dr Palanivel Thiaga Rajan**  
Hon'ble Minister for Information Technology & Digital Services  
Government of Tamil Nadu

**SPEAKERS**

**Prof T G Sitharam**  
Chairman  
All India Council for Technical Education

**Hari Balachandran**  
Chief Executive Officer  
ICT Academy

**Dr Anbu Rathinavel**  
Chief Design Officer  
Intellect Design Arena & Head and Co-founder School of Design Thinking

**Ankit Kakkar**  
Director - Technical Services  
Engineering, MongoDB

**Dr G Sainarayanan**  
Technology Director  
HCL Technologies

**Shalu Manan**  
Global Talent Supply Chain & TalentMatch Leader, Genpact

**Partners & Sponsors**

Gold Partners: AUTODESK, MongoDB, ORACLE Academy

Industry Partner: CII (Confederation of Indian Industry)

Technology Partners: AKXELUSS MAYENS, enthutech

Academic Partner: mi et

Exhibitors: enthutech, SCHOOL OF DESIGN THINKING

bridge.ictacademy.in

In the next five years, almost 25% of jobs are expected to change, says a report from World Economic Forum. Technology, green transition, value chain restructuring, and macroeconomic conditions are the major factors that affect job trends. For resilient economic growth, it is significant to prepare Gen Z with the skills they need for the future of work. On the other hand, the priorities of the Gen Z population are different as their focus is on workplace equity, quality of jobs, the opportunity for continued learning, and upward mobility that benefit them.

ICT Academy Bridge is the convergence of policymakers, industry leaders, and academic leaders to explore the right skills strategy to develop Gen Z for the future of work and the need to invest in people that would augment resilient economic growth. On the theme, 'Building Human Capital, Accelerating Growth, Enabling Access' - the summit helps the higher education institutions across India to focus on the acute problems that the current education system faces to prepare students for a future of rapidly changing work demands. The





## **IMS ENGINEERING COLLEGE, GHAZIABAD**

### **NOTICE**

**From: TID DEPTT**

**To: ALL CONCERN**

**Ref No: TID/Sep-2023/4**

**Date: - 29/09/2023**

**Dear 4<sup>th</sup> Year Students**  
**Greetings from TID!**

It is bring to your kind notice that **Orientation Program of Pre Placement Training is scheduled as per following slots which is mentioned below. Speakers of Orientation Program for Pre Placement Training will be from Shape my skills Team.**

#### **Schedule for Wednesday [03/10/2023]**

<b>S.No.</b>	<b>Branch &amp; Section</b>	<b>Timing</b>	<b>Venue</b>
<b>1</b>	<b>CSE [1,2,3,4]</b>	<b>10:00 AM to 11:00 AM</b>	<b>Auditorium</b>
<b>2</b>	<b>CS[1,2]+IT[1,2]</b>	<b>11:30 PM to 12:30 PM</b>	<b>Auditorium</b>

If any Doubt regarding above agendas kindly let me call.

With Regards,

**Prof. (Dr.) Prabhat Kumar Srivastava**  
**Prof. In-Charge TID**  
**IMS Engineering College, Ghaziabad, U.P.**



**IMS Engineering College**  
NH-09, Adhyatik Nagar, Near Dasna, Distt. Ghaziabad, U.P.  
Tel: (0120) 4940000

**Department of Computer Science & Engineering**

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**Industrial Visit to "Training & Basket Pvt. Ltd. Noida"**



Coordinator Name	:	Mr. Amit Katoch Mr. Aditya Sam Koshy
Academic Year	:	2022-23
Email ID	:	amit.katoch@imsec.ac.in
Contact Number	:	8700050745, 9846015887
File Open Date	:	07-11-2022
File Closed Date	:	22-11-2022



**IMS Engineering College**  
NH-09, Adhyatmik Nagar, Near Dasna, Distt. Ghaziabad, U.P.  
Tel: (0120) 4940000

**Department of Computer Science & Engineering**

### INDEX

Sr. No.	Document Name
1.	Vision and Mission of the Institute and Department
2.	Objective of the Industrial Visit
3.	Proposal & Approval from Honourable Director Sir
4.	Notice for students
5.	Flyer of Industrial Visit
6.	Participant Attendance
7.	Impact Analysis of Industrial Visit
8.	Report of Industrial visit with Photograph



**IMS Engineering College**  
NH-09, Adhyatmik Nagar, Near Dasna, Distt. Ghaziabad, U.P.  
Tel: (0120) 4940000

## **Department of Computer Science & Engineering**

### **Vision and Mission of the Institute and Department**

#### **Vision of the Institute**

“To make IMS EC a leading and continuously evolving educational institution that provides a transformative learning experience for its students to become global leaders and also engage all stakeholders in the process of achieving its goals.”

#### **Mission of the Institute**

- To imbibe in the students of IMSEC a desire for lifelong learning.
- To develop and use pedagogy based on participative and experiential learning.
- To undertake research, projects and consultancy assignments.
- To inculcate in its students the qualities of Leadership, Professionalism, and Technical Competence for achieving sustainable development.
- To enable students to become socially responsible individuals by inculcating in them a sense of human values and concern for the environment.

#### **Vision of the Department**

To provide globally competent professionals in the field of Computer Science & Engineering embedded with sound technical knowledge, aptitude for research and innovation with ethical values to cater to the industrial & societal needs.

#### **Mission of the Department**

M1: To provide quality undergraduate education in both the theoretical & applied foundations of Computer Science Engineering.

M2: Conduct research to advance the state of the art in Computer Science & Engineering and integrate the research results as innovations.

M3: To inculcate team building skills and promote life-long learning with a high societal and ethical values.



**IMS Engineering College**  
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Tel: (0120) 4940000

## **Department of Computer Science & Engineering**

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### **Objective of the Industrial visit:**

- To make students familiar with technology and the resources used in web development.
- To educate on various processes involved in software engineering and languages used for implementation.
- Discussion on the difficulties challenges in the web development and collaborative front end and back-end working.

---

**Fwd: Industrial Visit Proposal for IMS | Training Basket**

---

Vibhor Harit <vibhordev@gmail.com>  
To: hodcse@imsec.ac.in

Mon, Nov 7, 2022 at 11:47 AM

----- Forwarded message -----

From: **Training Basket** <marketing@trainingbasket.in>  
Date: Mon, Oct 17, 2022 at 1:09 PM  
Subject: Industrial Visit Proposal for IMS | Training Basket  
To: vibhordev@gmail.com <vibhordev@gmail.com>  
Cc: Nayan Verma <nayan@trainingbasket.in>

Respected Mam,

As discussed with you regarding industrial visit for CSE students i am sharing the proposal with you for your kind information .

The suitable dates provided by the organization is 14,16,17 Nov 2022.

Thanks & Regards

.....  
Vibhor Harit

Dear Sir,

Greetings from **TRAINING BASKET** !

We are seeking an opportunity under your guidance to organize an Industrial visit with a technology Workshop for your students which shall provide them with theoretical and practical knowledge about IT technologies.

I hereby take this opportunity to introduce our company.

#### **About Us**

Blogic Software Technology Private Limited (Formerly known as Amazing Training Basket Pvt Ltd commonly used as brand name under "Training Basket") offers advanced IT training & certifications to individuals and organizations in technologies in Cisco, Redhat, AWS, Azure, Cisco, Software Programming Languages and Web Technologies.

During our journey we partnered with Redhat, Cisco, Times TSW and Comptia to provide quality content and global certifications for our students.

We are running successfully and completely operating in offline and online mode from our campus 4500 sqft. registered office located in Noida Electronic City Sec 62.

#### **Our progress so far**

We have successfully trained around 50000+ students and delivered through online and offline and webinars, workshops and seminars touched around 100000+ students in Delhi, Noida , Ghaziabad and Uttarakhand in the last 3 years.

## Key Takeaways for your College Students-

1. Introduction & Knowledge transfer shared by our subject matter expert against the latest technology
2. The real-time Industry exposure & experience will be shared by the mentor
3. Every participant will be getting a Training Participation Certificate at the end of the training and project completion

## Key Points for the Workshop:-

- Workshop Technology Name: College will confirm
- Workshop Confirm Date: College will confirm
- Timing: College will confirm

## Requirements for the Industrial visit from college are as follows:

- a. Industrial visit date: College will decide
- b. Timings: 11:00am
- c. Name of the Faculty/ HOD from college management who will handle the event.
- d. It is advisable that students should be in proper uniform. Our maximum capacity we can accommodate is upto 80 pax.

Note Lunch shall be provided to college faculty and students will be provided snacks at our location.

## Benefits of the students:

1. Technical Workshop will be complimentary for the students.
2. Introduction & Knowledge shared by the expert against the upcoming technology.
3. The real-time Industry exposure & experience will be shared by the mentor at the end of the session.

## Our List of Programs -

### TECHNOLOGIES FOR CS/IT & BCA/MCA STUDENTS

#### IT-MS Technologies -

1. CCNA Powered by Cisco Network Academy
2. Cloud Computing in AWS and Azure
3. RHCSA (Linux) Powered by Redhat Academy

#### Software Technologies

#### Programming Languages-

4. Java
5. Python Powered by Cisco Network Academy
6. .Net
7. Android

#### Web Development

8. Python with Django
9. Front End Web Development
10. PHP + MySQL

#### **Data Development Technologies**

11. Machine Learning
12. Data Science

#### **Courses For BBA & MBA students**

13. Digital Marketing

Note - If your desired courses are not available in the above mentioned list kindly let us know we can plan accordingly.

**We have successfully conducted several Corporate/ Institutional/Workshops Training.**

- GALGOTIAS UNIVERSITY- GREATER NOIDA
- BENNETT UNIVERSITY - GREATER NOIDA
- CGI COLLEGE - BHARATPUR RAJASTHAN
- ALIGARH MUSLIM UNIVERSITY- ALIGARH
- RKGEC - GHAZIABAD
- NIET - ALWAR
- ADVANCED ENGINEERING COLLEGE - PALWAL
- MANAV RACHNA INTERNATIONAL UNIVERSITY- FARIDABAD
- VIDYA KNOWLEDGE PARK- MEERUT
- GAUTAM BUDH UNIVERSITY- GREATER NOIDA
- VISHVESHWARYA GROUP OF INSTITUTIONS- DADRI
- SATYA COLLEGE OF ENGINEERING AND TECHNOLOGY- PALWAL
- IMS UC CAMPUS - DASNA GHAZIABAD
- ABES EC - LALKUAN GHAZIABAD

I hope the above clarifies; let me know if you have any questions, I will be glad to assist.

Regards,

**Priyanju Rai**

**Institutional Coordinator (Business Development)**

Mobile : +91-9654103946

Email : [marketing@trainingbasket.in](mailto:marketing@trainingbasket.in)

10,000+ Trained Students | 3000+ Students Placed |  
250+ Enterprise Clients | 10+ Years Edu-Excellence |  
100+ Courses | 500+ Recruiter Connect

With warm Regards .



**Fwd: Industrial Visit Proposal for IMS | Training Basket**

Fri, Nov 11, 2022 at 1:44 PM

Vibhor Harit <vibhordev@gmail.com>  
To: Training Basket <marketing@trainingbasket.in>  
Cc: hodcse@imsec.ac.in

**Respected Mam,**  
I am pleased to inform you that the request of Industrial Visit of our Computer Science and Engineering students is approved by the institute therefore the schedule will be as follows:

**Date of Visit: 18/Nov/2022 (Friday)**

**Total No. of Students: 50**

**Total No. of Faculty :2 (max)**

**Timings: 10:30**

**Technology: Java (web development), Android development**

We look forward to your favorable consideration and would feel elated to have long term association with your organization.

*Kindly, acknowledge our mail.*

.....  
Thanking you,

Vibhor Harit

Assistant Professor (CSE Department)

IMS Engineering College (Ghaziabad)

+91-9997475094

[Quoted text hidden]



**TRAINING BASKET**  
QUALIFY FOR TOMORROW

# Industrial Visit Gallery

Training Basket organizes Industrial Visits regularly for the students to get a real-time exposure to the industry along with Introductory knowledge transfer of the latest technologies.

Our University & College Affiliations



[www.trainingbasket.in](http://www.trainingbasket.in)



# IMS ENGINEERING COLLEGE, GHAZIABAD

## NOTICES

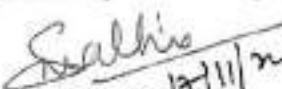
From: HOD CSE	To: : All 2 <sup>nd</sup> Yr. CSE1 Students
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RefNo: CSE/2022-23/NOVEMBER/17/20

Date: 17.11.2022

An Industrial Trip has been organised for 2nd year CSE1 students. You all shall be visiting Training Basket Pvt. Ltd. Company in Noida Sec-62. All of you are requested to come in **proper College Uniform with Id Cards**. Students are requested to **avoid taking any leave tomorrow**. We shall leave Campus at 9:30 A.M. and be back by 1:00P.M.

All students report to college ON-Time Tomorrow.

  
Prof. (Dr.) Sonali Mathur  
HOD (CSE)

**Professor & HOD  
Department of CSE  
IMS Engineering College  
Ghaziabad**

Copy to:

1. All the Faculty members through Whatsapp and Email
2. 2<sup>nd</sup> Yr. CSE1 Class Coordinator
3. 2<sup>nd</sup> Yr. CSE1 Students through Whatsapp.
4. Notice Board



**IMS ENGINEERING COLLEGE, GHAZIABAD**

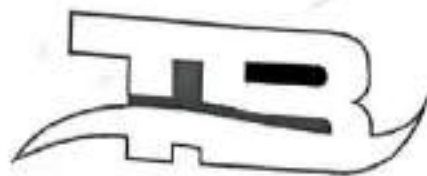
MAAC Accredited & NBA Accredited Programs  
Approved by AICTE, New Delhi & Affiliated to AKTU, Lucknow  
Under the aegis of IMS Society, Ghaziabad



# Department of Computer Science & Engineering

## Industrial Visit

to



**TRAINING BASKET**  
QUALIFY FOR TOMORROW

# Training & Basket Pvt. LTD, Noida

## 18<sup>th</sup> Nov. 2022



### COORDINATORS

**Mr. Vibhor Harit, Mr. Amit Katoch, Mr. Aditya Sam Koshy**

NH-09, Adhyatmik Nagar, Distt: Ghaziabad, Uttar Pradesh-201015

Admission Enquiry: +91-9821396581/82/83 | Landline Number: 0120-4940000 | Whatsapp Number: +91-9821396583

Toll Free: 1800-102-8393 | Email ID: enquiry@imsec.ac.in | www.imsec.ac.in

**IMS ENGINEERING COLLEGE, GHAZIABAD**  
**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**  
**INDUSTRIAL TRAINING VISIT AS ON 18.11.2022**

S.No.	Admission ID	Roll No.	Batch	Name	Signature	
1	A2021CSE7951	2101430100001	B1	AAKASH TOMER		
2	A2021CSE7720	2101430100008	B1	ABHISHEK SINGH KASHYAP		
3	A2021CSE7869	2101430100011	B1	ADAVYA SUMAN		
4	A2021CSE7880	2101430100012	B1	ADITI KAUSHIK		
5	A2021CSE7642	2101430100015	B1	AJAY VEER VIKRAM VERMA		
6	A2021CSE7934	2101430100017	B1	AKASH TIWARI		
7	A2021CSE7821	2101430100022	B1	AMAN PANDEY.		
8	A2021CSE7619	2101430100023	B1	AMAN PRAJAPATI		
9	A2021CSE7643	2101430100025	B1	ANADH GUPTA		
10	A2021CSE7945	2101430100026	B1	ANANT YASH		
11	A2021CSE7662	2101430100028	B1	ANKIT MAURYA		
12	A2021CSE7930	2101430100029	B1	ANKUR RANA		
13	A2021CSE7630	2101430100030	B1	ANMOL MISHRA		
14	A2021CSE8028	2101430100036	B1	ARCHIT CHAUHAN		
15	A2021CSE7844	2101430100040	B1	ASHISH GAUTAM		
16	A2021CSE7886	2101430100045	B1	ASTHA DUBEY		
17	A2021CSE7805	2101430100052	B1	BHUMIKA KAUSHIK		
18	A2021CSE7937	2101430100054	B1	DAKSH GUPTA		
19	A2021CSE7927	2101430100058	B1	DEEKSHA GANGWAR		
20	A2021CSE7919	2101430100065	B1	DISHA GARG		
21	A2021CSE7729	2101430100068	B1	DIWAKAR PATEL		
22	A2021CSE7993	2101430100075	B1	HARSH GOYAL		
23	A2021CSE8010	2101430100079	B1	HARSHIT SHUKLA		
24	A2021CSE8188	2101430100082	B1	HEMLATA .		
25	A2021CSE7723	2101430100092	B1	JANHWEER .		
26	A2021CSE7903	2101430100094	B1	KESHAV KUMAR.		
27	A2021CSE7820	2101430100097	B1	LOVELY AGARWAL		
28	A2021CSE7722	2101430100098	B1	MAHAK .		
29	A2021CSE8105	2101430100115	B2	NAVNEET SINGH DESHWAL		
30	A2021CSE7730	2101430100121	B2	OJASHWA SRIVASTAVA		
31	A2021CSE7663	2101430100124	B2	PARTH SARTHI		
32	A2021CSE7623	2101430100126	B2	POOJA VERMA		
33	A2021CSE7676	2101430100138	B2	RAGHAV JINDAL		



**IMS Engineering College**  
NH-09, Adhyatmik Nagar, Near Dasna, Distt. Ghaziabad, U.P.  
Tel: (0120) 4940000

## **Department of Computer Science & Engineering**

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### **Impact Analysis of Industrial Visit**

- To help students understand web development and technologies used for it.
- To make students understand front-end and back-end languages and able to differentiate between them.
- Educating the importance of a programming language and how Java is one of the better options for learning a language.
- To help students understand difference between Python and other programming languages, so they can distinguish between them and relate the features of each of them.



**IMS Engineering College**  
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Tel: (0120) 4940000

## Department of Computer Science & Engineering

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### Summary Report

A batch of 3rd semester students of Department of Computer Science & Engineering along with faculties Mr. Amit Katoch and Mr. Aditya Sam Koshy visited 'Training Basket' The I-Thum Tower Noida Sector-62 for an Industrial visit.

This visit was mainly focussed on to understand the concepts of Web Development & Java technologies. Mrs. Priya Anju trainer and coordinator there explained about the organization, their methods of working with different technologies, the difference between different programming languages used for the application development and their advantages and disadvantages. She also explained about the python and how it has been used in web development. After the tour, a presentation was arranged about the networking devices like modems, switches and how they are used. Overall, the session was interactive and beneficial for the students.





**IMS Engineering College**  
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Tel. (0120) 4940000

**Department of Computer Science & Engineering**

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# IMS ENGINEERING COLLEGE, GHAZIABAD

NAAC Accredited & NBA Accredited Programme | Approved by AICTE, New Delhi & Affiliated to AKTU, Lucknow

Training & Internship Division  
is organizing

## Pre Placement Orientation Session

in association with

### ShapeMySkills Pvt. Ltd.

for

## B. Tech 4th Year Students

**Speaker**

### Mr. Ranu Mishra

Business Head

**Faculty coordinator**

### Dr. Prabhat Kumar Srivastava

(Head Training and Internship Division)



**Venue - Auditorium C-block**



03<sup>rd</sup> October 2023



10:00 AM 12 :00 NOON

NH-09, Adhyatmik Nagar, Distt: Ghaziabad, Uttar Pradesh-201015

Landline Number: 0120-4940000 | Toll Free: 1800-102-8393

Email ID: enquiry@imsec.ac.in | www.imsec.ac.in

# IMS ENGINEERING COLLEGE, GHAZIABAD

## WORK ORDER

<b>From: IMS Engineering College, Ghaziabad</b>	<b>To: Mr. Kuldeep Dixit, Business Head, ShapeMy Skills</b>
---	---

Ref. No.: DIR/FEB/2023/

Date: 03<sup>rd</sup> March, 2023

**Subject: Work Order to ShapeMy Skills for their Placement Oriented Training.**

This letter aims to confirm the proposal for the Placement Oriented Training through ShapeMy Skills.

The proposal has been approved with the following term & conditions:

<b>Training Schedule:</b> 60 hours of placement oriented training ( <i>Hands-on technical training, and doubts solving</i> ) to 3 <sup>rd</sup> year students, in the present academic year (2022-23) @ INR 2,000/- per Student.
<b>Mode of Payment:</b> <b>1<sup>st</sup> Installment:-</b> 20% payment at the delivery of 20 hours <b>2<sup>nd</sup> Installment:-</b> 20% payment at the delivery of 40 hours <b>3<sup>rd</sup> Installment:-</b> 20% payment at the delivery of 50 hours <b>4<sup>th</sup> Installment:-</b> 40% payment at the delivery of 60 hours and before certificate distribution.
<b>Complimentary Programs:</b> 1. Additional online tests (5) - Complementary. 2. Four Complementary Sessions on Emerging Technologies to final year students 2023 pass out Batch. 3. 10 Hour Boot camp program for 2024 pass out Batch. 4. Separate Industrial Training Certificates, Internship Certificates and Project Certificate to the Participant.
<b>Conditions:</b> 1. Dashboard Attendance must be share before 1 <sup>st</sup> Installment. 2. Daily Attendance/Topics Covered report must be share of every Training Day. 3. Must Share Course Contents & Student Progress report before every Installment.

Prof. (Dr.) Vikram Bali  
Director

(Dr. Prabhat K. Srivastava)  
Professor Incharge - TID

13372



# IMS ENGINEERING COLLEGE, GHAZIABAD

## NOTICES

From: HOD CSE	To: Director Sir
---------------	------------------

Ref No: CSE/2022-23/APRIL/26/38

Date: 26.04.2023

SUB: WORKSHOP ON DEMYSTIFYING DATA SCIENCE USING PYTHON

The Department of Computer Science and Engineering would like to organise a 1 Day free workshop on Demystifying Data Science using Python for the CSE 2<sup>nd</sup> year Students.

Ms. Avneet Kaur Corporate Trainer from Cetpa Infotech Private Limited (Noida) shall conduct the workshop on 28<sup>th</sup> April, 2023 from 8.50 am to 10:00 am to 1:00 pm in the Auditorium, C Block.

The topics which shall be covered in the workshop of Network Management are:

- Introduction Python and Data Science
- Python Libraries
- Introduction to Numpy
- Pandas
- Matplotlib
- Processes of Data Analytics

Request you to kindly grant approval for the conduction of the Workshop.

*Sonal Mathur*  
26/4/23

Prof. (Dr.) Sonali Mathur  
HOD (CSE)

Professor & Head  
Department of Computer Science  
I.M.S. Engineering Coll  
Ghaziabad

*Approved*  
*[Signature]*  
8-5-23

08.05.2023



**IMS Engineering College**  
NH-09, Adhyatmik Nagar, Near Dasna, Distt. Ghaziabad, U.P.  
Tel: (0120) 4940000

**Department of Computer Science & Engineering**

**Speaker of Seminar:**



**Department of Computer Science and Engineering**  
is organizing

# WORKSHOP

on

*Demystifying Data Science using Python*

**Trainer**

**Ms. Avneet Kaur**  
Corporate Trainer



- 📅 28<sup>th</sup> April 2023 (Friday)
- 🕒 10:00 AM - 01:00 PM
- 📍 Auditorium, Block-C

**Coordinator**

**Mr. Vibhor Harit**  
Assistant Professor, CSE

NH-09, Adhyatmik Nagar, Distt. Ghaziabad, Uttar Pradesh-201015

Application Enquiry: +91-9821396581/82/83 | Landline Number: 0120-4940000 | Whatsapp Number: +91-9821396583  
Toll Free: 1800-102-8393 | Email ID: enquiry@imsec.ac.in | www.imsec.ac.in

**IMS ENGINEERING COLLEGE, GHAZIABAD**  
**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**  
**JOINT ATTENDEANCE SHEET 2022-24 (EVEN SEMESTER)**

S.No.	Roll No.	Batch	Name	Signature
1	210140100001	01	ADARSH KUMAR	[Signature]
2	210140100002	01	ADITHYAN SANKARANARAYANAN	[Signature]
3	210140100003	01	ADITHYAN SANKARANARAYANAN	[Signature]
4	210140100004	01	ADITHYAN SANKARANARAYANAN	[Signature]
5	210140100005	01	ADITHYAN SANKARANARAYANAN	[Signature]
6	210140100006	01	ADITHYAN SANKARANARAYANAN	[Signature]
7	210140100007	01	ADITHYAN SANKARANARAYANAN	[Signature]
8	210140100008	01	ADITHYAN SANKARANARAYANAN	[Signature]
9	210140100009	01	ADITHYAN SANKARANARAYANAN	[Signature]
10	210140100010	01	ADITHYAN SANKARANARAYANAN	[Signature]
11	210140100011	01	ADITHYAN SANKARANARAYANAN	[Signature]
12	210140100012	01	ADITHYAN SANKARANARAYANAN	[Signature]
13	210140100013	01	ADITHYAN SANKARANARAYANAN	[Signature]
14	210140100014	01	ADITHYAN SANKARANARAYANAN	[Signature]
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17	210140100017	01	ADITHYAN SANKARANARAYANAN	[Signature]
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19	210140100019	01	ADITHYAN SANKARANARAYANAN	[Signature]
20	210140100020	01	ADITHYAN SANKARANARAYANAN	[Signature]
21	210140100021	01	ADITHYAN SANKARANARAYANAN	[Signature]
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30	210140100030	01	ADITHYAN SANKARANARAYANAN	[Signature]
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44	210140100044	01	ADITHYAN SANKARANARAYANAN	[Signature]
45	210140100045	01	ADITHYAN SANKARANARAYANAN	[Signature]
46	210140100046	01	ADITHYAN SANKARANARAYANAN	[Signature]
47	210140100047	01	ADITHYAN SANKARANARAYANAN	[Signature]



**IMS Engineering College**  
NH-09, Adhyatmik Nagar, Near Dasna, Distt. Ghaziabad, U.P.  
Tel: (0120) 4940000

## Department of Computer Science & Engineering

48	2101430100190	B2	YASHIKA SHARMA
49	2101430100191	B2	YASHIKA SHARMA
50	2101430100193	B2	YASHIKA SHARMA
51	2101430100195	B2	YASHIKA SHARMA
52	2101430100197	B2	YASHIKA SHARMA
53	2101430100200	B2	YASHIKA SHARMA
54	2101430100204	B2	YASHIKA SHARMA
55	2101430100208	B2	YASHIKA SHARMA

*Handwritten notes:*  
For...  
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13323



CSE

# IMS ENGINEERING COLLEGE, GHAZIABAD

## NOTICES

From: HOD CSE	To: Director Sir
---------------	------------------

Ref No: CSE/2022-23/APRIL/26/38

Date: 26.04.2023

### SUB: WORKSHOP ON NETWORK MANAGEMENT WITH ETHICAL H

The Department of Computer Science and Engineering would like to organise a 1 Day free workshop on **Network Management with Ethical Hacking** for the CSE 3rd year Students.

Mr. Santu Purkait of Netcamp Solutions Private Limited shall conduct the workshop on **1st May, 2023 from 8.50 am to 10.50 pm and then 1.30 pm to 3.30 pm** in the Auditorium, C Block.

The topics which shall be covered in the workshop of Network Management are:

- Introduction to Networking and Network Management
- Structured Cabling
- Introduction to IP, Subnetting and Vism
- Routing
- Basic Unix Concepts
- Commands and Utilities
- KDE (Linux)
- Networking with Linux (with Installation)
- Telnet and Ftp configuration
- DNS configuration
- Apache web server configuration
- Live dns, web server and ftp configuration

Request you to kindly grant approval for the conduction of the Workshop.

*Sonali Mathur*  
26/4/23  
Prof. (Dr.) Sonali Mathur  
HOD (CSE)  
Professor & Head  
Department of Computer Science  
I.M.S., Engineering College  
Ghaziabad

*Approved*  
*[Signature]*  
22-4-2023

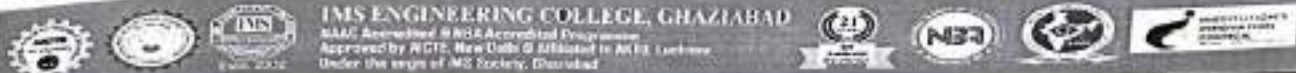




**IMS Engineering College**  
 NH-09, Adhyatmik Nagar, Near Dasna, Distt. Ghaziabad, U.P.  
 Tel: (0120) 4940000

**Department of Computer Science & Engineering**

**Flyer of Seminar:**



**Department of Computer Science and Engineering**  
 is organizing a

**Workshop on**  
**Network**  
**Management with**  
**Ethical Hacking**



**Expert** **Mr. Santu Purkait**  
 Netcamp Solutions Private Limited

**MONDAY**  
**1<sup>st</sup>**  
**May 2023**

**08:50 AM to 10:50 AM**  
**01:30 PM to 03:30 PM**

**Venue**  
**Auditorium**  
**Block-C**

NH-09, Adhyatmik Nagar, Distt. Ghaziabad, Uttar Pradesh-201015  
 Admission Enquiry: +91-9821396581/82/83 | Landline Number: 0120-4940000 | Whatsapp Number: +91-9821396583  
 Toll Free: 1800-102-8353 | Email ID: enquiry@imsec.ac.in | www.imsec.ac.in

IMS ENGINEERING COLLEGE, GHAZIABAD  
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING  
3RD YEAR CSE1 ATTENDANCE SHEET 2022-23 (EVEN SEMESTER)

SUBJECT:

WORKSHOP TITLE - Network Mgmt with Ethical Hacking Date: 01-May 2023

S.No.	Roll No.	Batch	Name	Signature
1	2001430100001	B1	AADHYA GUPTA	
2	2001430100002	B1	AASTHA AGARWAL	
3	2001430100003	B1	AASTHA TIWARI	
4	2001430100004	B1	AAYUSHI CHAUHAN	
5	2001430100005	B1	ABHI JAISWAL	
6	2001430100006	B1	ABHINAV BALIYAN	
7	2001430100007	B1	ABHINAV CHAUHAN	
8	2001430100008	B1	ABHINAV KUMAR	
9	2001430100009	B1	ABHINAV SAXENA	
10	2001430100010	B1	ABHINAV PATEL	
11	2001430100011	B1	ABHISHEK	
12	2001430100012	B1	ABHISHEK	
13	2001430100013	B1	ABHISHEK CHATRUVEDI	
14	2001430100014	B1	ABHISHEK KUMAR YADAV	
15	2001430100015	B1	ABHISHEK KUMAR SINGH	
16	2001430100016	B1	ABHISHEK PARAS	
17	2001430100017	B1	ABHISHEK SINGH	
18	2001430100018	B1	ADITYA KUMAR	
19	2001430100019	B1	ADITYA KUMAR	
20	2001430100020	B1	ADITYA KUMAR YADAV	
21	2001430100021	B1	ADITYA MAHESHWARI	
22	2001430100022	B1	ADITYA PRATAP MALL	
23	2001430100023	B1	ADITYA PRATAP SINGH	
24	2001430100024	B1	ADITYA RAJPOOT	
25	2001430100025	B1	ADITYA SINGH	
26	2001430100026	B1	ADITYA SINGH	
27	2001430100027	B1	ADITYA VERMA	
28	2001430100028	B1	AJAY	
29	2001430100029	B1	AKASH GUPTA	
30	2001430100031	B1	AKASH PATHAK	
31	2001430100032	B1	AKSHAT AGARWAL	
32	2001430100033	B1	AKSHIT SEHWAG	
33	2001430100034	B2	AMANKANT PATHAK	
34	2001430100035	B2	AMAN KUMAR	
35	2001430100037	B2	AMAN KUMAR SHUKLA	
36	2001430100038	B2	AMAN UPADHYAY	
37	2001430100039	B2	AMARDEEP KUMAR	
38	2001430100040	B2	AMARTYA RAI	
39	2001430100041	B2	ANAGH SHARMA	
40	2001430100042	B2	ANANYA GUPTA	
41	2001430100043	B2	ANKIT YADAV	
42	2001430100044	B2	ANKITA SINGH	
43	2001430100045	B2	ANKUR YADAV	
44	2001430100046	B2	ANMOL MISHRA	
45	2001430100047	B2	ANSH SHARMA	
46	2001430100048	B2	ANSHIKA SAINI	
		B2	ANSHU SHARMA	

48	2001430100050	B2	ANUBHAV KUMAR	Anubhav Kumar
49	2001430100051	B2	ANUBHAV KUMAR SRIVASTAVA	Anubhav
50	2001430100052	B2	ANUBHAV SINGH CHAHR	Anubhav Anubhav
51	2001430100053	B2	ANUBHAV VARSHNEY	Anubhav
52	2001430100054	B2	ANUPRIYA YADAV	Anupriya Yadav Anubhav
53	2001430100055	B2	ANURAG SRIVASTAVA	Anurag Anurag
54	2001430100056	B2	APARANA SHARMA	Aparana
55	2001430100057	B2	ARIJUN JAKHAR	Arijun Arijun
56	2001430100058	B2	ARPITA SINGH	Arpita
57	2001430100059	B2	ARUN KUMAR	Arun Arun
58	2001430100061	B2	ARYANT AGRAHARI	Aryant
59	2101430109008	B2	SHIKHAR AGRAHARI	Shikhar
60	2101430109010	B2	TANU	Tanu
61	2101430109007	B2	PRINCE BHARDWAJ	Prince
62	2101430109003	B2	ANSHU KUMAR VERMA	Anshu K. Verma
63	2101430109005	B2	ANUJ KUMAR SINGH	Anuj

(37)

46

class hacking

IMS ENGINEERING COLLEGE, GHAZIABAD  
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING  
3RD YEAR CSE2 ATTENDANCE SHEET 2022-23 (EVEN SEMESTER)

SUBJECT

Date 01-May 2023

S.No.	Roll No.	Batch	Name	Signature
1	2001430100062	B1	ARYMAN SINGH	
2	2001430100063	B1	ASHHAD KHALIL FAROOQI	
3	2001430100064	B1	ASHI TYAGI	
4	2001430100065	B1	ASHOK YADAV	
5	2001430100066	B1	ASHUTOSH RANA	
6	2001430100067	B1	ASTHA SINGH	
7	2001430100068	B1	ASTITVA SHUKLA	
8	2001430100069	B1	AYUSH PRAKASH	
9	2001430100070	B1	AYUSH PRATAP SINGH	
10	2001430100071	B1	AYUSH SINGH	
11	2001430100072	B1	AYUSH TIWARI	
12	2001430100073	B1	AYUSH VERMA	
13	2001430100074	B1	AYUSHI SAHANI	
14	2001430100075	B1	BHAGYA PRATAP SINGH	
15	2001430100076	B1	BHAVYA PRATAP SINGH	
16	2001430100077	B1	CHANEK RAJPUT	
17	2001430100079	B1	CHITRANSHA VARSHNEY	
18	2001430100080	B1	DEEPANSHU KUMAR	
19	2001430100081	B1	DEEPENDRA SINGH	
20	2001430100082	B1	DEVANSH PRADHAN	
21	2001430100083	B1	DEVESH DWIVEDI	
22	2001430100084	B1	DHANAKSHI VERMA	
23	2001430100085	B1	DHRUV PALMAR	
24	2001430100086	B1	DIKSHA MITTAL	
25	2001430100087	B1	DIVYAM	
26	2001430100088	B1	DIVYANSH RUHELA	
27	2001430100089	B1	DIVYANSH SRIVASTAVA	
28	2001430100090	B1	DIVYANSH TYAGI	
29	2001430100092	B1	GUNGUN GUPTA	
30	2001430100093	B1	HANSIKA JAIN	
31	2001430100094	B1	HANSRAJ SINGH	
32	2001430100095	B2	HARDIK KULSHRESHTHA	
33	2001430100096	B2	HARI OM JAISWAL	
34	2001430100097	B2	HARSH CHAUHAN	
35	2001430100098	B2	HARSH CHOUDHARY	
36	2001430100099	B2	HARSHIT PANDEY	
37	2001430100100	B2	HARSHIT PRATAP RAO	
38	2001430100101	B2	HARSHVARDHAN SINGH NEGI	
39	2001430100102	B2	HIMANSHU TIWARI	
40	2001430100103	B2	HITEN CHOUDHARY	
41	2001430100105	B2	JITESH PRATAP YADAV	
42	2001430100106	B2	KANAK SINGH	
43	2001430100107	B2	KANAV KISHOR	

44	2001430100108	B2	KARAN CHAUDHARY	<i>Karan</i>
45	2001430100109	B2	KARTIKEYA GUPTA	<i>Kartikeya</i>
46	2001430100110	B2	KAVYANSH JAIN	<i>Kavyansh</i>
47	2001430100111	B2	KHUSHI JAIN	<i>Khushi</i>
48	2001430100112	B2	KSHITIZ RAGHUVANSHI	<i>Kshitiz</i>
49	2001430100113	B2	KSHITIZ SINGH	<i>Kshitiz</i>
50	2001430100114	B2	KUSHAGRA AGRAWAL	<i>Kushagra</i>
51	2001430100115	B2	KUSHAGRA SINGH	<i>Kushagra</i>
52	2001430100116	B2	LAKSHAY VERMA	<i>Lakshay</i>
53	2001430100117	B2	LAKSHMI SHWAR SHAH	<i>Lakshmi</i>
54	2001430100118	B2	LALIT MOHAN	<i>Lalit Mohan</i>
55	2001430100119	B2	LALIT SHARMA	<i>Lalit Sharma</i>
56	2001430100120	B2	MADHULI DWIVEDI	<i>Madhuli</i>
57	2001430100121	B2	MANJARNIKA CHAUDHAN	<i>Manjarnika</i>
58	2001430100122	B2	MANISHA JASWAL	<i>Manisha</i>
59	2001430100123	B2	MAYANI CHAUDHARY	<i>Mayani</i>
60	2001430100124	B2	MAYANI GUPTA	<i>Mayani</i>
61	2001430100125	B2	MAYANI SHARMA	<i>Mayani</i>
62	2001430100127	B2	MEHAK SANGAL	<i>Mehak</i>
63	2001430120054	B1	MANYI SHARMA	<i>Manyi</i>
64	2001430120047	B2	KHUSHI BANSAL	<i>Khushi</i>

$$(43) + 5 = (48)$$

(48)

# Network Mgmt with Ethical Hacking

**IMS ENGINEERING COLLEGE, GHAZIABAD**  
**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**  
**3RD YEAR CSE3 ATTENDANCE SHEET 2022-23 (EVEN SEMESTER)**

SUBJECT:

Date: 01 - May 2023

S.No.	Roll No.	Batch	Name	Signature
1	2001430100128	B1	MOHAMMAD SADIQUE IQBAL	
2	2001430100129	B1	MOHAMMAD SHAHROZ	Mo Shahroz
3	2001430100130	B1	MOHD UVAISH	
4	2001430100131	B1	MOKSH GUPTA	
5	2001430100132	B1	MRITUNJAY PATEL	
6	2001430100133	B1	NAMAN RAJPUT	
7	2001430100134	B1	NAMAN RAJPUT	
8	2001430100135	B1	NAVIKA KAUSHIK	
9	2001430100137	B1	NIKHIL RANA	Nikha
10	2001430100138	B1	NIMISH GROVER	
11	2001430100139	B1	NITYA NAND UPADHYAY	
12	2001430100140	B1	OM PRAKASH KUSHWAHA	Om Prakash Kushwaha. Om Veerwal
13	2001430100141	B1	OM VEERWAL	Pankajit
14	2001430100142	B1	PARIKSHIT .	
15	2001430100143	B1	PARTH SHARMA	Pawan
16	2001430100144	B1	PAWAN .	Pawan
17	2001430100145	B1	PEEUSH GUPTA	
18	2001430100146	B1	PIYUSH MATHURIA	
19	2001430100147	B1	PIYUSH SINGH	Poo Singh
20	2001430100148	B1	POOJA .	
21	2001430100149	B1	PRACHI SHUKLA	Prachi
22	2001430100150	B1	PRAGYA CHOUDHARY	Pragya
23	2001430100151	B1	PRAGYA DUBEY	

47	2001430100178	B2	RITIKA GREWAL	Ritika
48	2001430100179	B2	RITUNJAYA .	Ritun
49	2001430100180	B2	ROHAN GAUR	
50	2001430100181	B2	ROHAN TYAGI	Rohan
51	2001430100182	B2	RUMI .	Rumi
52	2001430100183	B2	RUSHIMA SRIVASTAVA	Rushika Srivastava
53	2001430100184	B2	SAHIL RAJ	Sahil
54	2001430100185	B2	SALIL TAYAL	
55	2001430100186	B2	SAMINA HASHMI	
56	2001430100187	B2	SANGAM GARG	Sangam
57	2001430100189	B2	SANSKAR JAIN	Sanskar
58	2001430100190	B2	SARTHAK CHAUDHARY	Sarthak
59	2001430100191	B2	SARTHAK GUPTA	Sarthak
60	2001430100192	B2	SARTHAK SRIVASTAVA	
61	2101430109006	B2	KM KAJOL	Km Kajol
62	2101430109004	B2	ANUJ KUMAR	Anuj Kumar

(29) + 3 = (32)

1

# Network Mgmt with Ethical Hacking

IMS ENGINEERING COLLEGE, GHAZIABAD  
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING  
3RD YEAR CSE4 ATTENDANCE SHEET 2022-23 (EVEN SEMESTER)

SUBJECT:

Date: 01-May 2023

S.No.	Roll No.	Batch	Name	Signature
1	1901430100194	B2	SHAGUN	Shagun
2	1814310231	B2	UTKARSH RATHORE	Utkarsh
3	2001430100193	B1	SATYAM KUMAR	Satyam
4	2001430100194	B1	SAURABH SUMAN JHA	Saurabh
5	2001430100195	B1	SEJAL SINGH	
6	2001430100196	B1	SHARISHTH TYAGI	
7	2001430100197	B1	SHASHANK AHLAWAT	
8	2001430100198	B1	SHASHANK KUMAR MALL	
9	2001430100199	B1	SHASHWAT KAPOOR	
10	2001430100200	B1	SHIVA SHARMA	Shiva
11	2001430100201	B1	SHIVA SHARMA	
12	2001430100202	B1	SHIVAM KUMAR	
13	2001430100203	B1	SHIVAM PATHAK	Shivam
14	2001430100204	B1	SHIVANSH SINGHAL	Shobh
15	2001430100205	B1	SHOBHA SHISHODIA	Shobha
16	2001430100206	B1	SHORYA AGARWAL	Shubham
17	2001430100207	B1	SHUBHAM AGARWAL	Shubham
18	2001430100208	B1	SHUBHAM CHAUDHARY	Shubham Chaudhary
19	2001430100209	B1	SHUBHAM SAHANI	
20	2001430100210	B1	SHUBHI KULSHRESTHA	Shubhi
21	2001430100212	B1	SHWETANSH SRIVASTAVA	Shweta
22	2001430100213	B1	SIDDHANT CHAURASIYA	Siddhant
23	2001430100214	B1	SNEHA BANA	Sneha
24	2001430100215	B1	SOMYAKANT DASH	Somyakant
25	2001430100216	B1	SRIKANTI	
26	2001430100217	B1	SUBRAT SINDHU	Subrat
27	2001430100218	B1	SUMIT PANWAR	Sumit
28	2001430100218	B1	SURAJ RAJ	Suraj
29	2001430100219	B1	SURYANSH GUPTA	Suryansh
30	2001430100220	B1	SWASTI JAIN	
31	2001430100221	B1	TANISH SAXENA	
32	2001430100222	B1	TANISHKA CHAUDHARY	Tanisha
33	2001430100223	B1	TARK GAUR	Tark
34	2001430100224	B1	TARUN SINGH	Tarun
35	2001430100225	B1	TUSHAR PANDEY	Tushar
36	2001430100226	B1	TUSHAR YADAV	Tushar
37	2001430100227	B2	UJJWAL SINGHAL	Ujjwal
38	2001430100228	B2	UTKARSH SHARMA	Utkarsh
39	2001430100229	B2	VARSHA SHARMA	Varsha
40	2001430100230	B2	VIBHAV SHUKLA	Vibhav
41	2001430100231	B2	VICTOR SHAH	Victor
42			VIKASH CHAUDHARY	Vikash



44	2001430100235	B2	VIKAS .	
45	2001430100236	B2	VIKAS YADAV	Vikas Yadav
46	2001430100237	B2	VIKASH KUMAR SINGH	Vikash
47	2001430100238	B2	VINEET GILL	Vineet Gill
48	2001430100239	B2	VINEET SHARMA	Vineet Sharma
49	2001430100240	B2	VISHAKHA SRIVASTAVA	Vishakha
50	2001430100241	B2	VISHAL GARG	Vishal Garg
51	2001430100242	B2	VISHAL GUPTA	
52	2001430100243	B2	VISHAL SINGH	Vishal
53	2001430100244	B2	VIVEK PRATAP SINGH	
54	2001430100245	B2	VIVEK RANA	
55	2001430100246	B2	YADVENDRA SHARMA	Yadvendra
56	2001430100247	B2	YASH CHAUHAN	Yash Chauhan
57	2001430100248	B2	YASH GOEL	Yash Goel
58	2001430100249	B2	YASH KUMAR GUPTA	Yash Kumar Gupta
59	2001430100250	B2	YASH PATEL	Yash Patel
60	2001430100251	B2	YASH SISODIA	
61	2001430100252	B2	YASH TAYAL	
62	2001430100253	B2	YASH VERDHAN GUPTA	Yash Verdhhan Gupta
63	2101430109002	B2	ANKIT KUMAR YADAV	Ankit Kumar Yadav
64	2101430109001	B2	ABHISHEK KUMAR	Abhishek Kumar
65	2101430109009	B2	SHIVAM JAISWAL	Shivam Jaiswal

(35) + 5 = (40)



**National Institute of  
Technical Teachers Training and Research  
Chandigarh**

**(MINISTRY OF EDUCATION, GOVERNMENT OF INDIA)**

**Certificate**

**Mayurika Saxena**  
**IMS Engineering College, Ghaziabad,**  
**Ghaziabad-U.P, Uttar Pradesh**

participated in Three-days workshop on

on

**Engineering Materials Design and Simulations**  
from

**15/02/2023 to 17/02/2023**

conducted online by

**Department of Applied Science,**  
**NITTTR Chandigarh**

Coordinator

Head of the Department

Director



**National Institute of  
Technical Teachers Training and Research  
Chandigarh**

**(MINISTRY OF EDUCATION, GOVERNMENT OF INDIA)**

**Certificate**

**Mayurika Saxena**  
**IMS Engineering College, Ghaziabad,**  
**Ghaziabad-U.P, Uttar Pradesh**

participated in Three-days workshop on

on

**Engineering Materials Design and Simulations**  
from

**15/02/2023 to 17/02/2023**

conducted online by

**Department of Applied Science,**  
**NITTTR Chandigarh**

Coordinator

Head of the Department

Director



# IMS Engineering College, Ghaziabad

NAAC Accredited & NBA Accredited Programme  
Approved by AICTE, New Delhi & Affiliated to AKTU, Lucknow  
Under the aegis of IMS Society, Ghaziabad

## CERTIFICATE OF PARTICIPATION

This is to certify that

*Mayurika Saxena*

from

**IMS Engineering College, Ghaziabad**

has successfully completed Five days online Faculty Development Program on “**Research Methodology And Publication Ethics**” during **30<sup>th</sup> Jan - 3<sup>rd</sup> Feb, 2023**, organized by The Department of Computer Science and Department of Biotechnology at IMS Engineering College, Ghaziabad, Uttar Pradesh, India.

Dr. Sonia Juneja  
HoD-CS

Dr. Avinash Singh  
HoD-BT

Dr. Vikram Bali  
Director



# IMS Engineering College, Ghaziabad

NAAC Accredited & NBA Accredited Programme  
Approved by AICTE, New Delhi & Affiliated to AKTU, Lucknow  
Under the aegis of IMS Society, Ghaziabad



## CERTIFICATE OF PARTICIPATION

This is to certify that Ms. Mayurika Saxena  
from IMS Engineering College, Ghaziabad has successfully completed one-week  
online faculty development program on **“Emerging Trends in Electronics and Communication  
for IoT Applications”** during **4<sup>th</sup> July - 8<sup>th</sup> July, 2022**, organized by Department of Electronics and  
Communication Engineering at IMS Engineering College, Ghaziabad, Uttar Pradesh, India

Handwritten signature of Dr. Ajay Kumar in blue ink.

Dr. Ajay Kumar  
Coordinator

Handwritten signature of Dr. Jyoti Guglani in blue ink.

Dr. Jyoti Guglani  
Convener, HOD-ECE

Handwritten signature of Dr. Vikram Bali in green ink.

Dr. Vikram Bali  
Director



# IMS Engineering College, Ghaziabad

NAAC Accredited & NBA Accredited Programme  
Approved by AICTE, New Delhi & Affiliated to AKTU, Lucknow  
Under the aegis of IMS Society, Ghaziabad



## CERTIFICATE OF PARTICIPATION

This is to certify that Ms. Mayurika Saxena  
from IMS Engineering College has successfully completed Five Days  
online faculty development program on **“Emerging Technologies with applications in Electronics  
and Communication-2022”** during **31<sup>th</sup> Oct - 4<sup>th</sup> Nov, 2022**, organized by Department of Electronics  
and Communication Engineering at IMS Engineering College, Ghaziabad, Uttar Pradesh, India

Handwritten signature of Dr. Balwant Singh in black ink.

Dr. Balwant Singh  
Coordinator

Handwritten signature of Mr. Jaya Nidhi Vashishtha in blue ink.

Mr. Jaya Nidhi Vashishtha  
Co-Coordinator

Handwritten signature of Dr. Jyoti Guglani in blue ink.

Dr. Jyoti Guglani  
Convener, HoD-ECE

Handwritten signature of Dr. Vikram Bali in green ink.

Dr. Vikram Bali  
Director

S. No. JMI/EED/STC-2022-2023 /110



**One Week Online AICTE-QIP Sponsored Short Term Course**  
**on**  
**“ISSUES AND CHALLENGES OF GRID CONNECTED RENEWABLE**  
**ENERGY SOURCES (ICGCRE-23)”**



Organized by  
**Department of Electrical Engineering, Jamia Millia Islamia, New Delhi**

***Certificate of Award***

This is to certify that **Dr./Ms./Mr. Dr. Vijay Kumar** from IMS ENGINEERING COLLEGE, GHAZIABAD has participated and successfully completed the AICTE-QIP sponsored Short Term Course (STC) on ‘*Issues and Challenges of Grid Connected Renewable Energy Sources (ICGCRE-23)*’ held during **21<sup>st</sup>-25<sup>th</sup> February, 2023** through online mode.

Handwritten signature of Prof. Majid Jamil.

**(Prof. Majid Jamil)**  
STC & QIP Coordinator

Handwritten signature of Prof. Munna Khan.

**(Prof. Munna Khan)**  
Head



# Certificate of Participation

This is to certify that **Dr. Vijay Kumar of IMSEC Ghaziabad** has participated in the Six Day Online Faculty Development Program on “Control Engineering in Electric Vehicles” conducted by Department of Electrical and Electronics Engineering in association with SRM TRPEC IEEE Students Branch and IIC from 13.03.2023 to 18.03.2023.

  
HOD/EEE

  
Principal





# IMS Engineering College, Ghaziabad

NAAC Accredited & NBA Accredited Programme  
Approved by AICTE, New Delhi & Affiliated to AKTU, Lucknow  
Under the aegis of IMS Society, Ghaziabad



## CERTIFICATE OF PARTICIPATION

This is to certify that Dr. Vijay Kumar  
from IMS Engineering College Ghaziabad has successfully completed one-week online  
faculty development program on “**Emerging Trends in Electronics and Communication for  
IoT Applications**” during **4<sup>th</sup> July - 8<sup>th</sup> July, 2022**, organized by Department of Electronics and  
Communication Engineering at IMS Engineering College, Ghaziabad, Uttar Pradesh, India

Handwritten signature of Dr. Ajay Kumar in blue ink.

Dr Ajay Kumar  
Coordinator

Handwritten signature of Dr. Jyoti Guglani in blue ink.

Dr. Jyoti Guglani  
Convener, HOD-ECE

Handwritten signature of Dr. Vikram Bali in green ink.

Dr. Vikram Bali  
Director



IMS Engineering College, Ghaziabad

NAAC Accredited & NBA Accredited Programme  
Approved by AICTE, New Delhi & Affiliated to AKTU, Lucknow  
Under the aegis of IMS Society, Ghaziabad



# CERTIFICATE OF APPRECIATION



This Certificate is awarded to

*Dr. Balwant Singh*

IMS Engineering College, Ghaziabad

for his work as

**Coordinator**

in

Five Days online faculty development program on

“Emerging Technologies with applications in Electronics and Communication-2022”

during 31<sup>st</sup> Oct - 4<sup>th</sup> Nov, 2022,

Organized by

**Department of Electronics and Communication Engineering**

**IMS Engineering College, Ghaziabad, Uttar Pradesh, India**

Dr. Jyoti Guglani  
Convener, HoD-ECE

Dr. Vikram Bali  
Director



# IMS Engineering College, Ghaziabad

NAAC Accredited & NBA Accredited Programme  
Approved by AICTE, New Delhi & Affiliated to AKTU, Lucknow  
Under the aegis of IMS Society, Ghaziabad

## CERTIFICATE OF PARTICIPATION

This is to certify that

*Dr. Balwant Singh*

from

**IMS ENGINEERING COLLEGE GHAZIABAD**

has successfully completed Five days online Faculty Development Program on “**Research Methodology And Publication Ethics**” during **30<sup>th</sup> Jan - 3<sup>rd</sup> Feb, 2023**, organized by The Department of Computer Science and Department of Biotechnology at IMS Engineering College, Ghaziabad, Uttar Pradesh, India.

Dr. Sonia Juneja  
HoD-CS

Dr. Avinash Singh  
HoD-BT

Dr. Vikram Bali  
Director



**ALL INDIA COUNCIL FOR TECHNICAL EDUCATION**  
**NELSON MANDELA MARG, VASANT KUNJ, NEW DELHI**

*Certificate of Participation*

This is to certify that **Dr. Balwant Singh** from **IMS Engineering College, Ghaziabad** has participated and successfully completed the **5-day Online FDP** on the theme **“Inculcating Universal Human Values in Technical Education”** organized by **All India Council for Technical Education (AICTE)** from **26th December to 30th December 2022.**

**Dr. Rajneesh Arora**  
**Chairman**  
**National Coordination Committee for Induction Program**

**Prof. Rajive Kumar**  
**Member Secretary, AICTE**



# IMS Engineering College, Ghaziabad

NAAC Accredited & NBA Accredited Programme  
Approved by AICTE, New Delhi & Affiliated to AKTU, Lucknow  
Under the aegis of IMS Society, Ghaziabad



## CERTIFICATE OF PARTICIPATION

*Dr. Balwant Singh*

This is to certify that \_\_\_\_\_  
from IMS Engineering College, Ghaziabad has successfully completed one-week  
online faculty development program on “**Emerging Trends in Electronics and Communication  
for IoT Applications**” during **4<sup>th</sup> July - 8<sup>th</sup> July, 2022**, organized by Department of Electronics and  
Communication Engineering at IMS Engineering College, Ghaziabad, Uttar Pradesh, India

Handwritten signature of Dr. Ajay Kumar in blue ink.

Dr. Ajay Kumar  
Coordinator

Handwritten signature of Dr. Jyoti Guglani in blue ink.

Dr. Jyoti Guglani  
Convener, HOD-ECE

Handwritten signature of Dr. Vikram Bali in green ink.

Dr. Vikram Bali  
Director



# IMS Engineering College, Ghaziabad

NAAC Accredited & NBA Accredited Programme  
Approved by AICTE, New Delhi & Affiliated to AKTU, Lucknow  
Under the aegis of IMS Society, Ghaziabad



## CERTIFICATE OF PARTICIPATION

This is to certify that Balwant Singh  
from IMS Engineering College, Ghaziabad

has successfully completed Five-days online faculty development program on “**Cloud Based GIS Applications**” during **1<sup>st</sup> Aug - 5<sup>th</sup> Aug, 2022**, organized by Department of Information Technology and Department of Computer Science and Engineering at IMS Engineering College, Ghaziabad, Uttar Pradesh, India

Prof. (Dr.) Sonali Mathur  
Convener, HOD CSE

Prof. (Dr.) Sachi Gupta  
Convener, HOD-IT

Prof. (Dr.) S. N. Rajan  
Program Chair, Dean Academic

Dr. Vikram Bali  
Director



# Ajay Kumar Garg Engineering College, Ghaziabad

Department of Electronics & Communication Engineering

Online Five Days FDP

on

**Electronics & Communication Technologies for Futuristic Applications**

## CERTIFICATE OF PARTICIPATION

This is to certify that **Dr. Balwant Singh** from **IMS Engineering College, Ghaziabad, Uttar Pradesh, India** has participated as **Attendee** in the **Faculty Development Program on Electronics & Communication Technologies for Futuristic Applications** held from 28 November - 02 December 2022 at Ajay Kumar Garg Engineering College, Ghaziabad, Uttar Pradesh, India.

**Dr. Neelesh K. Gupta**  
Coordinator

**Dr. P.K. Chopra**  
Convenor

**Dr. R.K. Agarwal**  
Director General

CERTIFICATE NO : PS-AI-MAR2023-0083

**PANTECH SOLUTIONS®**  
Technology Beyond the Dreams

# CERTIFICATE OF PARTICIPATION

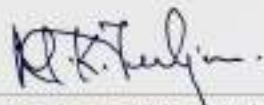
**NAME** : BALWANT SINGH

**COLLEGE** : IMS ENGINEERING COLLEGE GHAZIABAD

has Successfully Completed  
AI MASTER CLASS (30 DAYS)

at Pantech Prolabs India Pvt Ltd

From : JAN 23,2023 to : FEB 25 ,2023



M.K.JEEVARAJAN

DIRECTOR

PANTECHSOLUTIONS

[www.pantechsolutions.net](http://www.pantechsolutions.net)





**Dr B R Ambedkar National Institute of Technology, Jalandhar**

# **PARTICIPATION CERTIFICATE**

Presented to

**Mr ATUL KUMAR KUSHWAHA**

of

**IMS ENGINEERING COLLEGE, GHAZIABAD**

for successful completion of *One Week Online Faculty Development Programme* on “*IoT Induced Artificial Intelligence for Emerging Computing Paradigms*” organized by *Department of Information Technology* from *04-08 October, 2022*.

**Er. D K Gupta**  
**(Convener & Head-IT)**

**Dr. Samayveer Singh**  
**(Convenor)**

**Dr. Nisha Chaurasia**  
**(Coordinator)**

**Dr. Mohit Kumar**  
**(Coordinator)**



# IMS Engineering College, Ghaziabad

NAAC Accredited & NBA Accredited Programme  
Approved by AICTE, New Delhi & Affiliated to AKTU, Lucknow  
Under the aegis of IMS Society, Ghaziabad



## CERTIFICATE OF PARTICIPATION

This is to certify that Atul Kumar Kushwaha  
from IMS ENGINEERING COLLEGE, GHAZIABAD has successfully completed Five Days  
online faculty development program on “**Emerging Technologies with applications in Electronics  
and Communication-2022**” during **31<sup>th</sup> Oct - 4<sup>th</sup> Nov, 2022**, organized by Department of Electronics  
and Communication Engineering at IMS Engineering College, Ghaziabad, Uttar Pradesh, India

Handwritten signature of Dr. Balwant Singh in black ink.

Dr. Balwant Singh  
Coordinator

Handwritten signature of Mr. Jaya Nidhi Vashishtha in blue ink.

Mr. Jaya Nidhi Vashishtha  
Co-Coordinator

Handwritten signature of Dr. Jyoti Guglani in blue ink.

Dr. Jyoti Guglani  
Convener, HoD-ECE

Handwritten signature of Dr. Vikram Bali in green ink.

Dr. Vikram Bali  
Director



# IMS Engineering College, Ghaziabad

NAAC Accredited & NBA Accredited Programme  
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## CERTIFICATE OF PARTICIPATION

This is to certify that Mr. Atul Kumar Kushwaha  
from IMS Engineering College, Ghaziabad has successfully completed one-week  
online faculty development program on **“Emerging Trends in Electronics and Communication  
for IoT Applications”** during **4<sup>th</sup> July - 8<sup>th</sup> July, 2022**, organized by Department of Electronics and  
Communication Engineering at IMS Engineering College, Ghaziabad, Uttar Pradesh, India

Handwritten signature of Dr. Ajay Kumar in blue ink.

Dr. Ajay Kumar  
Coordinator

Handwritten signature of Dr. Jyoti Guglani in blue ink.

Dr. Jyoti Guglani  
Convener, HOD-ECE

Handwritten signature of Dr. Vikram Bali in green ink.

Dr. Vikram Bali  
Director



Elite

# NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to  
**ATUL KUMAR KUSHWAHA**  
for successfully completing the course



## Design of Power Electronic Converters

with a consolidated score of **76** %

Online Assignments	23.46/25	Proctored Exam	52.5/75
--------------------	----------	----------------	---------

Total number of candidates certified in this course: **181**

Feb-Apr 2023  
(8 week course)

**Prof. T. V. Bharat**  
Head, Centre for Educational Technology  
NPTEL Coordinator, IIT Guwahati



Indian Institute of Technology Guwahati



Roll No: NPTEL23EE38S33590138

To validate the certificate



No. of credits recommended: 2 or 3



Elite

# NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to  
**ATUL KUMAR KUSHWAHA**  
for successfully completing the course

## Facts Devices

with a consolidated score of **61** %

Online Assignments	25/25	Proctored Exam	36/75
--------------------	-------	----------------	-------

Total number of candidates certified in this course: **130**

**Prof. Sanjeev Manhas**  
Coordinator, Continuing Education Centre  
IIT Roorkee

**Feb-Apr 2023**  
**(8 week course)**

**Prof. Priti Maheshwari**  
NPTEL Coordinator  
IIT Roorkee



Indian Institute of Technology Roorkee



Roll No: NPTEL23EE58S53590123

To validate the certificate



No. of credits recommended: 2 or 3



Elite

# NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to  
**ATUL KUMAR KUSHWAHA**  
for successfully completing the course

## MATLAB Programming for Numerical Computation

with a consolidated score of **62** %

Online Assignments	18.69/25	Proctored Exam	43.5/75
--------------------	----------	----------------	---------

Total number of candidates certified in this course: **219**

**Prof. Devendra Jalihal**

Chairperson,

Centre for Outreach and Digital Education, IITM

**Jan-Apr 2023**

**(12 week course)**

**Prof. Andrew Thangaraj**

NPTEL, Coordinator

IIT Madras



Indian Institute of Technology Madras



Roll No: NPTEL23CH42S43590279

To validate the certificate



No. of credits recommended: 3 or 4



Elite

# NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to  
**ATUL KUMAR KUSHWAHA**  
for successfully completing the course

## Smart Grid: Basics to Advanced Technologies

with a consolidated score of **73** %

Online Assignments	22.19/25	Proctored Exam	51/75
--------------------	----------	----------------	-------

Total number of candidates certified in this course: **613**

**Prof. Sanjeev Manhas**  
Coordinator, Continuing Education Centre  
IIT Roorkee

Jan-Apr 2023

(12 week course)

**Prof. Priti Maheshwari**  
NPTEL Coordinator  
IIT Roorkee



Indian Institute of Technology Roorkee



Roll No: NPTEL23EE60S63590269

To validate the certificate



No. of credits recommended: 3 or 4



# Ajay Kumar Garg Engineering College, Ghaziabad

Department of Electronics & Communication Engineering

Online Five Days FDP

on

**Electronics & Communication Technologies for Futuristic Applications**

## CERTIFICATE OF PARTICIPATION

This is to certify that **Dr. Ajay Kumar** from **IMS Engineering College, Ghaziabad, Uttar Pradesh, India** has participated as **Attendee** in the **Faculty Development Program on Electronics & Communication Technologies for Futuristic Applications** held from 28 November - 02 December 2022 at Ajay Kumar Garg Engineering College, Ghaziabad, Uttar Pradesh, India.

**Dr. Neelesh K. Gupta**  
Coordinator

**Dr. P.K. Chopra**  
Convenor

**Dr. R.K. Agarwal**  
Director General





# VIT<sup>®</sup>

Vellore Institute of Technology  
(Deemed to be University under section 3 of UGC Act, 1956)  
CHENNAI



## Certificate of Participation

This is to certify that Dr./Prof./Mr./Ms. .... *Dr. Ajay Kumar* ..... of  
..... *IMS Engineering college Ghaziabad Uttar Pradesh India* ..... has  
participated in three day FDP programme “**Design and Fabrication of VLSI and  
Nanomaterial-based Sensors**” organized by VIT Chennai from 4<sup>th</sup> to 7<sup>th</sup> March 2023  
at Vellore Institute of Technology, Chennai.

**Dr. Ravi Tiwari**

**Dr. Sourabh Paul**

**Dr. Susan Elias**



## ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070

### AICTE Training and Learning (ATAL) Academy

## *Certificate*

This is certified that **Ajay Kumar, Assistant Professor** of **IMS Engineering College, Ghaziabad, Uttar Pradesh** participated & completed successfully AICTE Training And Learning (ATAL) Academy **Blended/Hybrid FDP** on "**Integration of WSN & IOT for agriculture**" from **2023-01-02-2023-01-07** to **2023-01-09-2023-01-13** at **JSS ACADEMY OF TECHNICAL EDUCATION**.

A handwritten signature in blue ink, appearing to read "Mamta".

Advisor-I, ATAL Academy  
Mamta Rani Agarwal



A handwritten signature in blue ink, appearing to read "Dilip".

Coordinator



# IMS Engineering College, Ghaziabad

NAAC Accredited & NBA Accredited Programme  
Approved by AICTE, New Delhi & Affiliated to AKTU, Lucknow  
Under the aegis of IMS Society, Ghaziabad



## CERTIFICATE OF PARTICIPATION

This is to certify that Dr. Ajay Kumar  
from IMS Engineering college, Ghaziabad has successfully completed Five Days  
online faculty development program on **“Emerging Technologies with applications in Electronics  
and Communication-2022”** during **31<sup>th</sup> Oct - 4<sup>th</sup> Nov, 2022**, organized by Department of Electronics  
and Communication Engineering at IMS Engineering College, Ghaziabad, Uttar Pradesh, India

Handwritten signature of Dr. Balwant Singh in black ink.

Dr. Balwant Singh  
Coordinator

Handwritten signature of Mr. Jaya Nidhi Vashishtha in blue ink.

Mr. Jaya Nidhi Vashishtha  
Co-Coordinator

Handwritten signature of Dr. Jyoti Guglani in blue ink.

Dr. Jyoti Guglani  
Convener, HoD-ECE

Handwritten signature of Dr. Vikram Bali in green ink.

Dr. Vikram Bali  
Director



**ALL INDIA COUNCIL FOR TECHNICAL EDUCATION**  
**NELSON MANDELA MARG, VASANT KUNJ, NEW DELHI**

*Certificate of Participation*

This is to certify that **Dr. Pavan Gangwar** from **IMS Engineering College, Ghaziabad** has participated and successfully completed the **3-day Face-to-Face FDP** on the theme **“Inculcating Universal Human Values in Technical Education”** organized by **All India Council for Technical Education (AICTE)** at **IMS Engineering College, Ghaziabad UP, Ghaziabad** from **12th May to 14th May 2023**.

**Dr. Rajneesh Arora**  
Chairman  
National Coordination Committee for Induction Program

**Prof. Rajive Kumar**  
Member Secretary, AICTE



Certificate No: ICT-10572/23

# National Institute of Technical Teachers Training and Research Chandigarh

MINISTRY OF EDUCATION, GOVERNMENT OF INDIA

## Certificate



*This is to certify that*

**DR. PAVAN GANGWAR**

**IMS ENGINEERING COLLEGE, GHAZIABAD  
UTTAR PRADESH**

*Participated in the AICTE Recognized Faculty Development Programme*

**on**

**Smart Grid and Integration of Distributed Generation**

*Conducted by*

**Electrical Engineering Department**

**from**

**28/08/2023 to 01/09/2023 (One Week)**

**at**

**NITTTR, Chandigarh**



  
**Coordinator**

  
**Director**



Mahatma Gandhi University, Kerala

Ministry of Human Resource Development  
Government of India



# GLOBAL INITIATIVE FOR ACADEMIC NETWORKS

## Certificate of Participation

**Dr. PAVAN GANGWAR**

*This is to certify that Prof./Dr./Mr./Ms.*

*from* **TMS Engineering College, Ghaziabad, U.P.**

*participated in the course*

**Responsible Conduct of Research – An Overview of Ethical Principles  
for Scientific Researchers-196048G01.**

*from*

**8th August-13th August, 2023**

*R... U..*

Dean

*[Signature]*

Local Coordinator



*[Signature]*

Course Coordinator



Learn on arm



This is to certify that  
**Dr. Pavan Gangwar**  
from  
IMS Engineering College Gahziabad  
has participated in the workshop:

## VLSI to System Design: Silicon to End Application Approach

Organized by - All India Council for Technical Education (AICTE),  
Arm Education and STMicroelectronics  
from July 31<sup>st</sup> to 4<sup>th</sup> August 2023

Dr Ramesh Unnikrishnan  
Advisor-II,  
Training and Learning Bureau,  
All India Council for Technical  
Education (AICTE)

Arnaud Julienne  
Vice President,  
Microcontrollers and Digital ICs Group,  
IoT/AI Competence Center and Digital Marketing,  
China and APeC, STMicroelectronics

Guru Ganesan  
President and Managing Director,  
Arm India

Dr Khaled Benkrid  
Senior Director,  
Education and Research,  
Arm Ltd



**AMRITA**  
VISHWA VIDYAPEETHAM

FOUNDED BY KRISHNAIAH SWAMI ACHARYA IN 1983

School of  
Artificial Intelligence

# CERTIFICATE

---

## OF PARTICIPATION

# Dr. Pavan Gangwar

For his/her active and invaluable participation during the conduct of the  
Five-Day International Workshop on **COMPUTATIONAL INTELLIGENCE 2023 (IWCI'23)**  
held from 07th to 11th August 2023 organized by the **Amrita School of AI**  
**Amrita Vishwa Vidyapeetham, Coimbatore, India**

CONVENER  
Prof. K.P Soman  
Dean, Amrita School of AI

COORDINATOR  
Dr. Arun K Raj  
Asst. Prof. (Research)  
Amrita School of AI

COORDINATOR  
Dr. Rahul Satheesh  
Asst. Prof.  
Amrita School of AI





**GALGOTIAS COLLEGE OF ENGINEERING & TECHNOLOGY,  
GREATER NOIDA**  
Department of Computer Science & Engineering (NBA Accredited)



# *Certificate of Participation*

*This is to certify that*

**DR RABAB ANJUM**

IMS ENGINEERING COLLEGE GHAZIABAD

*has participated and successfully completed the 5 days online Faculty Development Program on the theme "AI for Building Speech and Vision Applications Using Python" organized by Galgotias College of Engineering and Technology (GCET, Gr. Noida) from 21<sup>ST</sup> – 25<sup>TH</sup> August, 2023.*

Prof. (Dr.) Sachi Gupta  
FDP Coordinator

Prof. (Dr.) Vishnu Sharma  
HOD - CSE & Allied Specialized Branches

Prof. (Dr.) Mohd. Asim Qadri  
Director, GCET

Gp. Capt. (R) Dr. P K Chopra, VSM  
Director General, GEI





**ALL INDIA COUNCIL FOR TECHNICAL EDUCATION**  
**NELSON MANDELA MARG, VASANT KUNJ, NEW DELHI**

*Certificate of Participation*

This is to certify that **Mr. Mohit Kumar** from **IMS Engineering College, Ghaziabad** has participated and successfully completed the **3-day Face-to-Face FDP** on the theme **“Inculcating Universal Human Values in Technical Education”** organized by **All India Council for Technical Education (AICTE)** at **IMS Engineering College, Ghaziabad UP, Ghaziabad** from **12th May to 14th May 2023**.

**Dr. Rajneesh Arora**  
Chairman  
National Coordination Committee for Induction Program

**Prof. Rajive Kumar**  
Member Secretary, AICTE



**ALL INDIA COUNCIL FOR TECHNICAL EDUCATION**  
**NELSON MANDELA MARG, VASANT KULJ, NEW DELHI**

*Certificate of Participation*

This is to certify that **Dr. Shomini Parashar** from **IMS Engineering College, Ghaziabad** has participated and successfully completed the **5-day online FDP** on the theme **"Inculcating Universal Human Values in Technical Education"** organized by **All India Council for Technical Education (AICTE)** from **18<sup>th</sup> July to 22<sup>nd</sup> July 2022.**

**Dr. Rajneesh Arora**  
Chairman  
National Coordination Committee for Induction Program

**Prof. Rajive Kumar**  
Member Secretary, AICTE

# CERTIFICATE OF PARTICIPATION



THIS CERTIFICATE IS AWARDED TO

**Ms. DHANSHRI**



सत्यमेव जयते

for successful PARTICIPATION in the  
**WEBINAR ON DESIGN AND LAYOUT OF WIND FARMS**  
organized as part of the 8<sup>th</sup> EVENT of Azadi ka Amrit Mahotsav  
to commemorate the 75 years of progressive Independent India  
held on 15<sup>th</sup> February 2023



नीचे NIWE

organized by  
**National Institute of Wind Energy (NIWE)**  
Chennai

with the support of  
**Ministry of New and Renewable Energy (MNRE)**  
Government of India



# IMS Engineering College, Ghaziabad

NAAC Accredited & NBA Accredited Programme  
Approved by AICTE, New Delhi & Affiliated to AKTU, Lucknow  
Under the aegis of IMS Society, Ghaziabad



## CERTIFICATE OF PARTICIPATION

*Bhanu Verma*

This is to certify that \_\_\_\_\_  
from IMS Engineering College, Ghaziabad

has successfully completed Five-days online faculty development program on “**Cloud Based GIS Applications**” during **1<sup>st</sup> Aug - 5<sup>th</sup> Aug, 2022**, organized by Department of Information Technology and Department of Computer Science and Engineering at IMS Engineering College, Ghaziabad, Uttar Pradesh, India

Prof. (Dr.) Sonali Mathur  
Convener, HOD CSE

Prof. (Dr.) Sachi Gupta  
Convener, HOD-IT

Prof. (Dr.) S. N. Rajan  
Program Chair, Dean Academic

Dr. Vikram Bali  
Director



## CERTIFICATE OF PARTICIPATION

is hereby awarded to

**Ms. Bhanu Verma**

from the Department of **Computer Science** in **IMS Engineering College Ghaziabad** for participation in the "**One-day Online Workshop on Entrepreneurship & Intellectual Property Rights**" organized by Uttar Pradesh Institute of Design, Noida (A constituent institute of Dr. A. P.J. Abdul Kalam Technical University, Lucknow), India on 23<sup>rd</sup> July 2022.

---

**DR. KUMAR SAMBHAV**

Convener

---

**PROF. VIRENDRA PATHAK**

Chairperson



# IMS Engineering College, Ghaziabad

NAAC Accredited & NBA Accredited Programme  
Approved by AICTE, New Delhi & Affiliated to AKTU, Lucknow  
Under the aegis of IMS Society, Ghaziabad



## CERTIFICATE OF PARTICIPATION

*Harsiddhi*

This is to certify that \_\_\_\_\_  
from IMS Engineering College, Ghaziabad, Uttar Pradesh  
has successfully completed Five-days online faculty development program on “**Cloud Based GIS Applications**” during **1<sup>st</sup> Aug - 5<sup>th</sup> Aug, 2022**, organized by Department of Information Technology and Department of Computer Science and Engineering at IMS Engineering College, Ghaziabad, Uttar Pradesh, India

Prof. (Dr.) Sonali Mathur  
Convener, HOD CSE

Prof. (Dr.) Sachi Gupta  
Convener, HOD-IT

Prof. (Dr.) S. N. Rajan  
Program Chair, Dean Academic

Dr. Vikram Bali  
Director

CERTIFICATE NO : PS-AI-MAR2023-0249

**PANTECH SOLUTIONS**  
Technology Beyond the Dreams

## CERTIFICATE OF PARTICIPATION

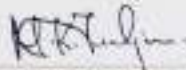
**NAME** : AWDHESH KUMAR

**COLLEGE** : IMS ENGINEERING COLLEGE, GHAZIABAD

has Successfully Completed  
AI MASTER CLASS (30 DAYS)

at Pantech Prolabs India Pvt Ltd

From : JAN 23,2023 to : FEB 25 ,2023



M.K.JEEVARAJAN

DIRECTOR

PANTECHSOLUTIONS

[www.pantechsolutions.net](http://www.pantechsolutions.net)





## Researcher Academy On Campus Certificate of Attendance



This certifies that

**Bhanu Verma**

has attended the following

**Author Workshop -Understanding research metrics & How to  
find relevant journals to publish in**

at AKTU,  
on Monday 26 December, 2022

Presented by Aishwarya naya Customer Consultant

A handwritten signature in black ink, appearing to read "Suzanne BeDell".

Suzanne BeDell

Managing Director, Education  
Reference & Continuity Books

A handwritten signature in black ink, appearing to read "Laura Hassink".

Laura Hassink

Managing Director, Science,  
Technology & Medical Journals





## Researcher Academy On Campus Certificate of Attendance



This certifies that

**Neha Chaudhary Neha**

has attended the following

**Author Workshop -Understanding research metrics & How to  
find relevant journals to publish in**

at AKTU,  
on Monday 26 December, 2022

Presented by Aishwarya noyal Customer Consultant

A handwritten signature in black ink, appearing to read "Suzanne BeDell".

Suzanne BeDell

Managing Director, Education  
Reference & Continuity Books

A handwritten signature in black ink, appearing to read "Laura Hassink".

Laura Hassink

Managing Director, Science,  
Technology & Medical Journals





## Researcher Academy On Campus Certificate of Attendance



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**AWDHESH KUMAR**

has attended the following

**Author Workshop -Understanding research metrics & How to  
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Suzanne BeDell

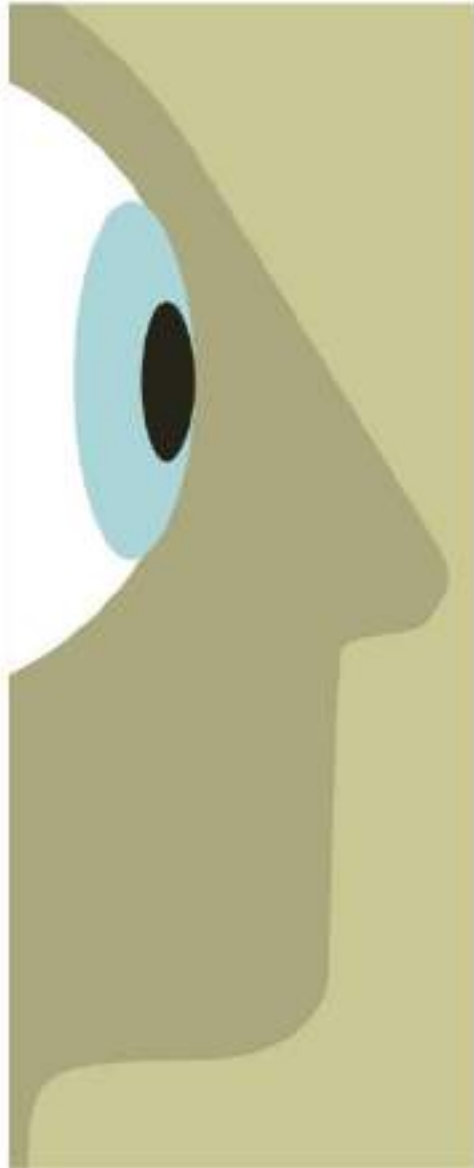
Managing Director, Education  
Reference & Continuity Books

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Laura Hassink

Managing Director, Science,  
Technology & Medical Journals





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Suzanne BeDell

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Reference & Continuity Books

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Managing Director, Science,  
Technology & Medical Journals





# IMS Engineering College, Ghaziabad

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Approved by AICTE, New Delhi & Affiliated to AKTU, Lucknow  
Under the aegis of IMS Society, Ghaziabad

## CERTIFICATE OF PARTICIPATION

This is to certify that

*Bhanu verma*

from

**IMS ENGINEERING COLLEGE, GHAZIABAD**

has successfully completed Five days online Faculty Development Program on “**Research Methodology And Publication Ethics**” during **30<sup>th</sup> Jan - 3<sup>rd</sup> Feb, 2023**, organized by The Department of Computer Science and Department of Biotechnology at IMS Engineering College, Ghaziabad, Uttar Pradesh, India.

Dr. Sonia Juneja  
HoD-CS

Dr. Avinash Singh  
HoD-BT

Dr. Vikram Bali  
Director



# IMS Engineering College, Ghaziabad

NAAC Accredited & NBA Accredited Programme  
Approved by AICTE, New Delhi & Affiliated to AKTU, Lucknow  
Under the aegis of IMS Society, Ghaziabad



## CERTIFICATE OF PARTICIPATION

This is to certify that *Neha Chaudhary*  
from IMS Engineering College, Ghaziabad

has successfully completed Five-days online faculty development program on “**Cloud Based GIS Applications**” during **1<sup>st</sup> Aug - 5<sup>th</sup> Aug, 2022**, organized by Department of Information Technology and Department of Computer Science and Engineering at IMS Engineering College, Ghaziabad, Uttar Pradesh, India

Prof. (Dr.) Sonali Mathur  
Convener, HOD CSE

Prof. (Dr.) Sachi Gupta  
Convener, HOD-IT

Prof. (Dr.) S. N. Rajan  
Program Chair, Dean Academic

Dr. Vikram Bali  
Director



# IMS Engineering College, Ghaziabad

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## CERTIFICATE OF PARTICIPATION

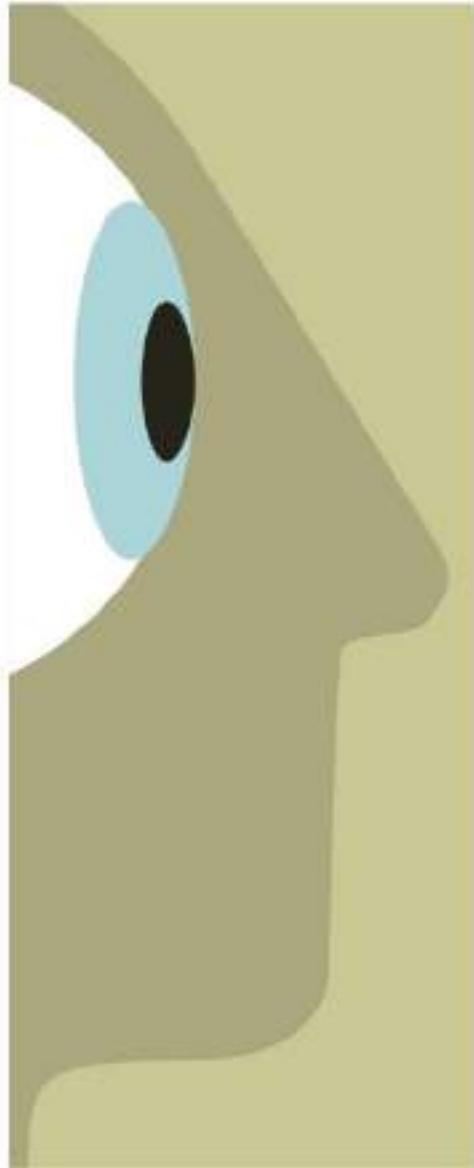
This is to certify that Awdhesh Kumar  
from IMS Engineering College Ghaziabad  
has successfully completed Five-days online faculty development program on “**Cloud Based GIS Applications**” during **1<sup>st</sup> Aug - 5<sup>th</sup> Aug, 2022**, organized by Department of Information Technology and Department of Computer Science and Engineering at IMS Engineering College, Ghaziabad, Uttar Pradesh, India

Prof. (Dr.) Sonali Mathur  
Convener, HOD CSE

Prof. (Dr.) Sachi Gupta  
Convener, HOD-IT

Prof. (Dr.) S. N. Rajan  
Program Chair, Dean Academic

Dr. Vikram Bali  
Director



## Researcher Academy On Campus Certificate of Attendance



This certifies that

**Bhanu Verma**

has attended the following

**Compliment Journals with reference books On Science Direct**

at AKTU,  
on Thursday 28 July, 2022

Presented by Aishwarya noyal Customer Consultant, Lavanya Trikha Inside- SSM

Suzanne BeDell

Managing Director, Education  
Reference & Continuity Books

Philippe Terheggen

Managing Director, Science,  
Technology & Medical Journals







**Excellence Through Innovation**

**Cyber Security Awareness Program**

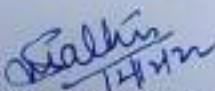
**CYBER SECURITY  
AWARENESS  
PROGRAM**


IN ASSOCIATION WITH



This is to certify that Mr. Awdhesh Kumar.....of  
IMS Engg. College, Ghaziabad, Co-ordinated G. participated in  
Cyber Security workshop organized by Innovative Ideas  
Infotech Society in association with AKTU & UP POLICE  
on 01.12.2022.....

We wish him/her a very bright future.

  
.....  
Administration

  
.....  
Authorized Signatory  
Innovative Ideas Infotech

Serial No: AKTU 1143 1157



INSTITUTION'S  
INNOVATION  
COUNCIL  
(Ministry of Education Initiative)

# IMS Engineering College, Ghaziabad

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## CERTIFICATE OF PARTICIPATION

This is to certify that

*Dhanshri Parihar*

from

**IMS ENGINEERING COLLEGE, GHAZIABAD**

has successfully completed Five days online Faculty Development Program on “**Research Methodology And Publication Ethics**” during **30<sup>th</sup> Jan - 3<sup>rd</sup> Feb, 2023**, organized by The Department of Computer Science and Department of Biotechnology at IMS Engineering College, Ghaziabad, Uttar Pradesh, India.

Dr. Sonia Juneja  
HoD-CS

Dr. Avinash Singh  
HoD-BT

Dr. Vikram Bali  
Director



# IMS Engineering College, Ghaziabad

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Under the aegis of IMS Society, Ghaziabad



## CERTIFICATE OF PARTICIPATION

This is to certify that Ms. Harsiddhi Singhdev  
from IMS Engineering College has successfully completed one-week  
online faculty development program on **“Emerging Trends in Electronics and Communication  
for IoT Applications”** during **4<sup>th</sup> July - 8<sup>th</sup> July, 2022**, organized by Department of Electronics and  
Communication Engineering at IMS Engineering College, Ghaziabad, Uttar Pradesh, India

Handwritten signature of Dr. Ajay Kumar in blue ink.

Dr Ajay Kumar  
Coordinator

Handwritten signature of Dr. Jyoti Guglani in blue ink.

Dr. Jyoti Guglani  
Convener, HOD-ECE

Handwritten signature of Dr. Vikram Bali in green ink.

Dr. Vikram Bali  
Director



# IMS Engineering College, Ghaziabad

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## CERTIFICATE OF PARTICIPATION

This is to certify that Dr. Sonia Juneja  
from IMSEC Ghaziabad has successfully completed Five Days  
online faculty development program on “**Emerging Technologies with applications in Electronics  
and Communication-2022**” during **31<sup>th</sup> Oct - 4<sup>th</sup> Nov, 2022**, organized by Department of Electronics  
and Communication Engineering at IMS Engineering College, Ghaziabad, Uttar Pradesh, India

Handwritten signature of Dr. Balwant Singh in black ink.

Dr. Balwant Singh  
Coordinator

Handwritten signature of Mr. Jaya Nidhi Vashishtha in blue ink.

Mr. Jaya Nidhi Vashishtha  
Co-Coordinator

Handwritten signature of Dr. Jyoti Guglani in blue ink.

Dr. Jyoti Guglani  
Convener, HoD-ECE

Handwritten signature of Dr. Vikram Bali in green ink.

Dr. Vikram Bali  
Director



# IMS Engineering College, Ghaziabad

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## CERTIFICATE OF PARTICIPATION

This is to certify that

*Dr. Sonia Juneja*

from

**IMS ENGINEERING COLLEGE, GHAZIABAD**

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Dr. Sonia Juneja  
HoD-CS

Dr. Avinash Singh  
HoD-BT

Dr. Vikram Bali  
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## Certificate of Engagement

This is to acknowledge with pride

**Mr. Ramkrishna Singh**

Participated In Faculty Knowledge Exchange Program

**Interactive Agenda**

**“Experiential and Innovative Methods of Teaching”**

**Leader Speaker** : Dr. Shalini Khandelwal  
(IBS Gurgaon Campus)

**Host** : IBS Information Team – North  
**Date** : 27-July-2022  
**Venue**: IMS Engineering College, Ghaziabad

Prof. S.C. Sharma  
(Senior Director – IBS Gurgaon Campus)

Ahmedabad | Bangalore | Dehradun | Gurgaon | Hyderabad | Jaipur | Kolkata | Mumbai | Pune



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years  
*of Alliance Education*

## CERTIFICATE OF PARTICIPATION

This is to certify that

Mr. Ram Krishna Singh

has successfully completed the **Faculty Development Program on Recent Advancements in Science and Technology**, held in hybrid mode from March 6-10, 2023, by the Department of Science, Alliance University, Bengaluru.

**Dr. Vipin Prasad**  
Head of Department  
Department of Science

**Dr. Nivedita Mishra**  
Registrar  
Alliance University



No. – DCRUST/AAIL/IDEA/2023/02017



# ATAL ACADEMY & IDEA LAB

Deenbandhu Chhotu Ram University of Science and Technology  
Murthal, (Sonipat): 131039, Haryana-India



AICTE Sponsored Faculty Development Program  
on  
IDEA LAB  
29<sup>th</sup> May – 02<sup>nd</sup> June, 2023



## Certificate

This is to certify that Dr./Mr./Ms. Sonia Juneja, IMS Engineering College has successfully completed one week Faculty Development Program on IDEA Lab, sponsored by AICTE and organized by the ATAL Academy & IDEA Lab, Deenbandhu Chhotu Ram University of Science and Technology (DCRUST), Murthal, Sonapat, Haryana.

**Dr. Pardeep Sharma**  
Program Coordinator  
AAIL, DCRUST

**Dr. Ashok Kumar**  
Program Coordinator  
AAIL, DCRUST

**Prof. Mridul Chawla**  
Program Coordinator  
AAIL, DCRUST

**Prof. Ramesh K. Garg**  
Director  
AAIL, DCRUST



INSTITUTION'S  
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COUNCIL  
Ministry of Education, India

# IMS Engineering College, Ghaziabad

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## CERTIFICATE OF PARTICIPATION

This is to certify that

*Ram Krishna Singh*

from

**IMS Engineering College, Ghaziabad**

has successfully completed Five days online Faculty Development Program on “**Research Methodology And Publication Ethics**” during **30<sup>th</sup> Jan - 3<sup>rd</sup> Feb, 2023**, organized by The Department of Computer Science and Department of Biotechnology at IMS Engineering College, Ghaziabad, Uttar Pradesh, India.

Dr. Sonia Juneja  
HoD-CS

Dr. Avinash Singh  
HoD-BT

Dr. Vikram Bali  
Director



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UNIVERSITY



**ASSOCIATION OF INDIAN UNIVERSITIES  
&  
AMET UNIVERSITY**

**(Academic and Administrative Development Centre)**

*Faculty Development Programme*

**Collaborative Research Practices in Modern Era**

**Certificate of Participation**

*This is to certify that Dr./Mr./Ms. **RAM KRISHNA SINGH** ..... from  
**IMS ENGINEERING COLLEGE GHAZIABAD** ..... on  
successful completion of 9 days Faculty Development Programme on *Collaborative Research Practices in Modern Era* during 13<sup>th</sup> -21<sup>st</sup> February 2023 and rewarded with the grade **A** .....*

**Col. Dr. G. Thiruvassagam**  
Vice-Chancellor  
AMET, Chennai

**Dr. Deepa Rajesh**  
Director-HRDC  
AADC Nodal Officer, AMET

**Dr. Amarendra Pani**  
Joint Director & Head- Research Division  
Association of Indian Universities, New Delhi

**Dr. Pankaj Mittal**  
Secretary General  
Association of Indian Universities, New Delhi



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## CERTIFICATE OF PARTICIPATION

This is to certify that Ram Krishna Singh  
from IMS Engineering College, Ghaziabad

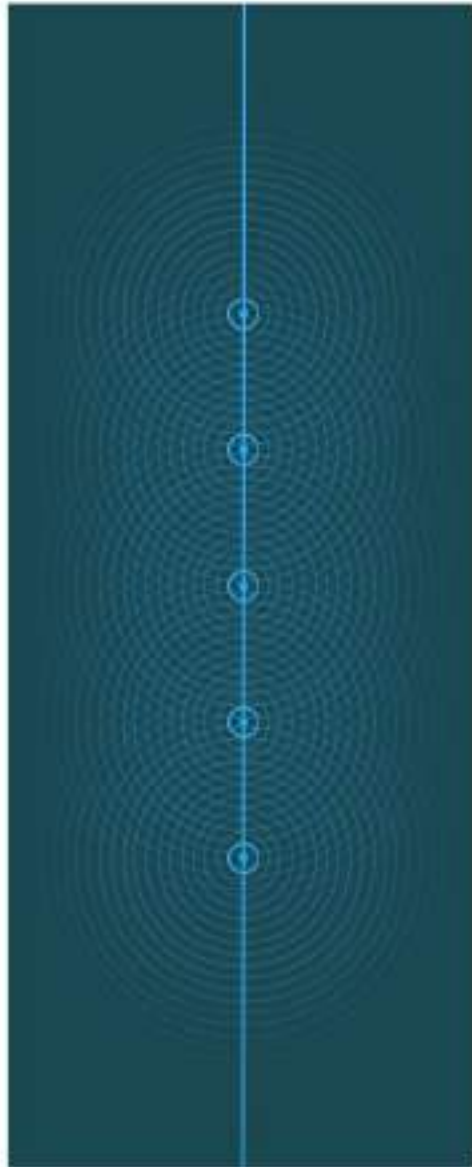
has successfully completed Five-days online faculty development program on “**Cloud Based GIS Applications**” during **1<sup>st</sup> Aug - 5<sup>th</sup> Aug, 2022**, organized by Department of Information Technology and Department of Computer Science and Engineering at IMS Engineering College, Ghaziabad, Uttar Pradesh, India

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Convener, HOD CSE

Prof. (Dr.) Sachi Gupta  
Convener, HOD-IT

Prof. (Dr.) S. N. Rajan  
Program Chair, Dean Academic

Dr. Vikram Bali  
Director



Researcher Academy [researcheracademy.com](https://researcheracademy.com)



## Certificate of Completion

This certifies that

**Bhanu Verma**

has successfully completed the following module

**Fundamentals of open access (15 minutes)**

on Friday 10 February, 2023

Presented by Victoria Eva

Suzanne BeDell

Managing Director, Education  
Reference & Continuity Books

Laura Hassink

Managing Director, Science,  
Technology & Medical Journals





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## CERTIFICATE OF PARTICIPATION

This is to certify that

*Harsiddhi Singhdev*

from

**IMS Engineering College, Ghaziabad**

has successfully completed Five days online Faculty Development Program on “**Research Methodology And Publication Ethics**” during **30<sup>th</sup> Jan - 3<sup>rd</sup> Feb, 2023**, organized by The Department of Computer Science and Department of Biotechnology at IMS Engineering College, Ghaziabad, Uttar Pradesh, India.

Dr. Sonia Juneja  
HoD-CS

Dr. Avinash Singh  
HoD-BT

Dr. Vikram Bali  
Director



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## Certificate of Engagement

This is to acknowledge with pride

**Ms. Neha Chaudhary**

Participated In Faculty Knowledge Exchange Program

**Interactive Agenda**

**“Experiential and Innovative Methods of Teaching”**

**Leader Speaker** : Dr. Shalini Khandelwal  
(IBS Gurgaon Campus)

**Host** : IBS Information Team – North  
**Date** : 27-July-2022  
**Venue**: IMS Engineering College, Ghaziabad

Prof. S.C. Sharma  
(Senior Director – IBS Gurgaon Campus)

Ahmedabad | Bangalore | Dehradun | Gurgaon | Hyderabad | Jaipur | Kolkata | Mumbai | Pune



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## Certificate of Engagement

This is to acknowledge with pride

**Mr. Awdhesh Kumar**

Participated In Faculty Knowledge Exchange Program

**Interactive Agenda**

**“Experiential and Innovative Methods of Teaching”**

**Leader Speaker** : Dr. Shalini Khandelwal  
(IBS Gurgaon Campus)

**Host** : IBS Information Team – North  
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Ahmedabad | Bangalore | Dehradun | Gurgaon | Hyderabad | Jaipur | Kolkata | Mumbai | Pune





## Researcher Academy On Campus Certificate of Attendance



This certifies that

**Neha Chaudhary Neha**

has attended the following

**Improving Research Performance using reference books and journals on the ScienceDirect Platform**

at AKTU,  
on Wednesday 31 August, 2022

Presented by Aishwarya naya Customer Consultant, Lavanya Trikha Inside solutions sales manager

A handwritten signature in black ink, appearing to read "Suzanne BeDell".

Suzanne BeDell

Managing Director, Education  
Reference & Continuity Books

A handwritten signature in black ink, appearing to read "Philippe Terheggen".

Philippe Terheggen

Managing Director, Science,  
Technology & Medical Journals





# IMS Engineering College, Ghaziabad

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## CERTIFICATE OF PARTICIPATION

*Mr. Ram Krishna Singh*

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from IMS Engineering College, Ghaziabad has successfully completed one-week  
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Communication Engineering at IMS Engineering College, Ghaziabad, Uttar Pradesh, India

Handwritten signature of Dr. Ajay Kumar in blue ink.

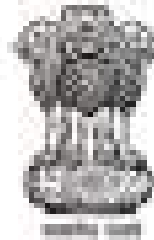
Dr. Ajay Kumar  
Coordinator

Handwritten signature of Dr. Jyoti Guglani in blue ink.

Dr. Jyoti Guglani  
Convener, HOD-ECE

Handwritten signature of Dr. Vikram Bali in green ink.

Dr. Vikram Bali  
Director



Government of India  
Ministry of Commerce and Industry  
Department for Promotion of Industry and Internal Trade  
Office of the Controller General of Patents, Designs and Trade Marks

**CERTIFICATE**

This is to certify that, **MR. AWDHESH KUMAR , FACULTY of IMS ENGINEERING COLLEGE  
GHAZIABAD** has successfully participated in IP Awareness/Training program under


**NATIONAL INTELLECTUAL PROPERTY AWARENESS MISSION**

**on September 19,2022**

Organized by  
**Intellectual Property Office, India**

**Date:September 23,2022**



  
(Prof. (Dr) Urmil P. Pandit)  
CONTROLLER GENERAL OF  
PATENTS, DESIGNS & TRADE MARKS



Government of India  
Ministry of Commerce and Industry  
Department for Promotion of Industry and Internal Trade  
Office of the Controller General of Patents, Designs and Trade Marks

**CERTIFICATE**

This is to certify that, **MS. DHANSHRI PARIHAR , FACULTY of IMSEC** has successfully participated in IP Awareness/Training program under


**NATIONAL INTELLECTUAL PROPERTY AWARENESS MISSION**

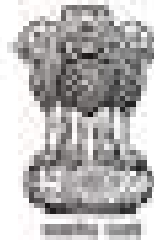
**on September 19,2022**

Organized by  
**Intellectual Property Office, India**

**Date:September 23,2022**



  
**(Prof. (Dr) Urmil P. Pandit)**  
CONTROLLER GENERAL OF  
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Ministry of Commerce and Industry  
Department for Promotion of Industry and Internal Trade  
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**CERTIFICATE**

This is to certify that, **MS. NEHA CHAUDHARY , FACULTY of IMS ENGINEERING COLLEGE** has successfully participated in IP Awareness/Training program under


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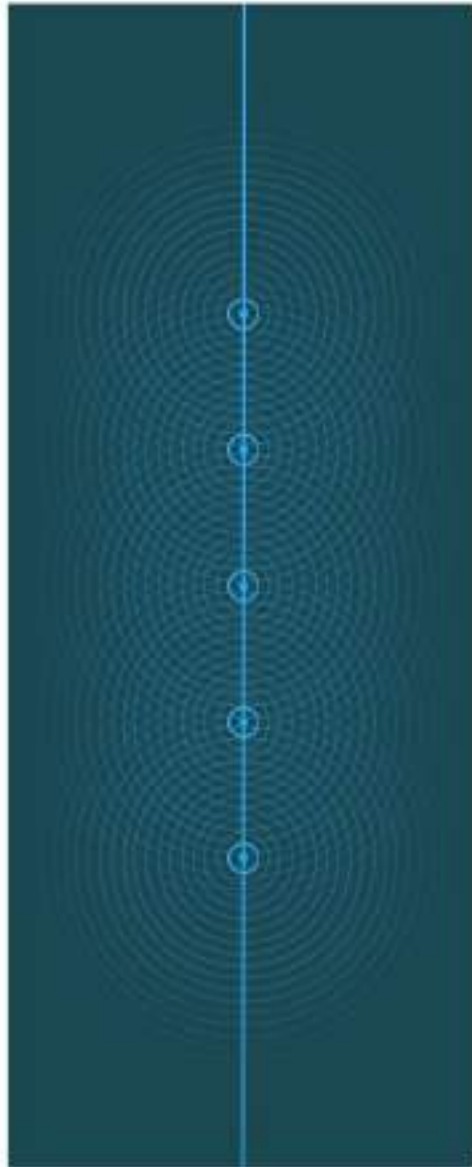
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**Date:September 23,2022**



  
(Prof. (Dr) Urmil P. Pandit)  
CONTROLLER GENERAL OF  
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Researcher Academy researcheracademy.com



## Certificate of Completion

This certifies that

**Bhanu Verma**

has successfully completed the following module

**Why you should know about SNIP & SJR (5 minutes)**

on Tuesday 03 January, 2023

Presented by Ana Morzinger

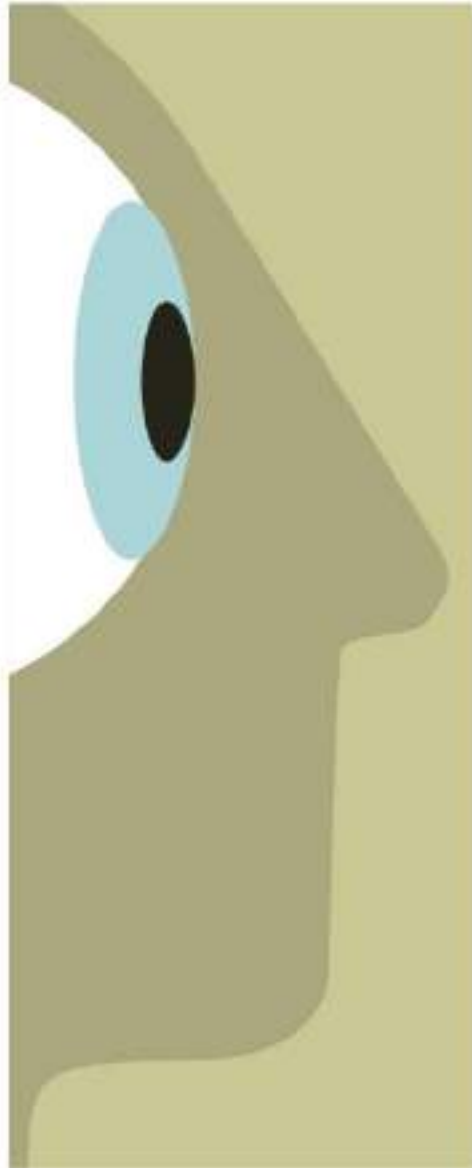
Suzanne BeDell

Managing Director, Education  
Reference & Continuity Books

Laura Hassink

Managing Director, Science,  
Technology & Medical Journals





## Researcher Academy On Campus Certificate of Attendance



This certifies that

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has attended the following

**Managing References made easy using Mendeley**

at Miranda House, University of Delhi,  
on Friday 05 August, 2022

Presented by Aishwarya noyal Customer Consultant

A handwritten signature in black ink, appearing to read "Suzanne BeDell".

Suzanne BeDell

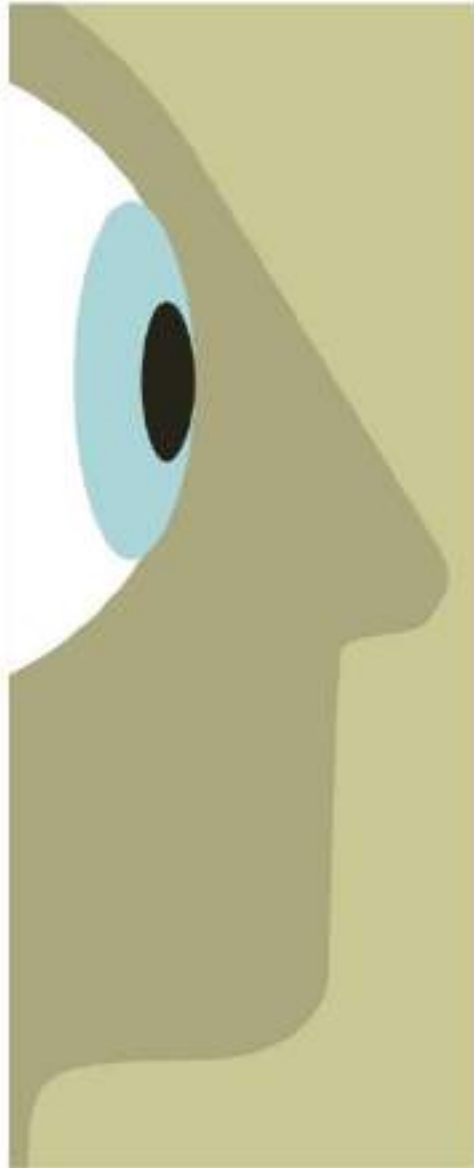
Managing Director, Education  
Reference & Continuity Books

A handwritten signature in black ink, appearing to read "Laura Hassink".

Laura Hassink

Managing Director, Science,  
Technology & Medical Journals





## Researcher Academy On Campus Certificate of Attendance



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has attended the following

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on Friday 05 August, 2022

Presented by Aishwarya noyal Customer Consultant

A handwritten signature in black ink, appearing to read "Suzanne BeDell".

Suzanne BeDell

Managing Director, Education  
Reference & Continuity Books

A handwritten signature in black ink, appearing to read "Laura Hassink".

Laura Hassink

Managing Director, Science,  
Technology & Medical Journals





CERTIFICATE NO : PS-MATLAB2023-0237

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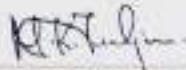
**NAME** : AWDHESH KUMAR

**COLLEGE** : IMS ENGINEERING COLLEGE, GHAZIABAD

has Successfully Completed  
MASTER CLASS ON MATLAB(30 DAYS)

at Pantech Prolabs India Pvt Ltd

From : FEB 2,2023 to : MAR 4,2023



M.K.JEEVARAJAN

DIRECTOR

PANTECHSOLUTIONS

[www.pantechsolutions.net](http://www.pantechsolutions.net)

CERTIFICATE NO : PS-MLMC-2023-0402

**PANTECH SOLUTIONS**  
Technology Beyond the Dreams

## CERTIFICATE OF PARTICIPATION

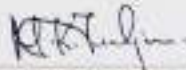
**NAME** : Awdhesh Kumar

**COLLEGE** : IMS ENGINEERING COLLEGE GHAZIABAD

has Successfully Completed  
MASTER CLASS ON MACHINE LEARNING(30 DAYS)

at Pantech Prolabs India Pvt Ltd

From : NOV 21,2022 to : DEC 20,2022



M.K.JEEVARAJAN

DIRECTOR

PANTECHSOLUTIONS

[www.pantechsolutions.net](http://www.pantechsolutions.net)



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Under the aegis of IMS Society, Ghaziabad



IMSEC/FDP/PICSA/2023/09

## Certificate of Participation

This is to certify that

*Ms. Harsiddhi Singhdev*

from

**IMS Engineering College, Ghaziabad**

has successfully completed One week online Faculty Development Program on “**Preeminent and Innovative Technologies in Computer Science and Applications 2023 (PICSA 2023)**”, organized by Department of Computer Science and Engineering from **30<sup>th</sup> Jan - 3<sup>rd</sup> Feb, 2023**, at IMS Engineering College, Ghaziabad, Uttar Pradesh, India.

Prof. (Dr.) Sonali Mathur  
HoD CSE

Dr. Vikram Bali  
Director



# IMS Engineering College, Ghaziabad

## Certificate of Participation

This is to certify that

*Mr. Ram Krishna Singh*

from

**IMS Engineering College, Ghaziabad**

has successfully attended two days online NAAC sponsored National Seminar on  
**“Role of NAAC in Quality Enhancement in Higher Educational Institutions”**,  
organized by Internal Quality Assurance Cell (IQAC) on 28<sup>th</sup> - 29<sup>th</sup> April, 2023, at  
**IMS Engineering College, Ghaziabad, Uttar Pradesh, India.**

Dr. Amit Sharma  
Coordinator

Prof. (Dr.) Vikram Bali  
Director

**IMSEC/IQAC/163**



# IMS Engineering College, Ghaziabad

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Under the aegis of IMS Society, Ghaziabad

## CERTIFICATE OF PARTICIPATION

This is to certify that

*Neha Chaudhary*

from

**IMS Engineering college, Ghaziabad**

has successfully completed Five days online Faculty Development Program on “**Research Methodology And Publication Ethics**” during **30<sup>th</sup> Jan - 3<sup>rd</sup> Feb, 2023**, organized by The Department of Computer Science and Department of Biotechnology at IMS Engineering College, Ghaziabad, Uttar Pradesh, India.

Dr. Sonia Juneja  
HoD-CS

Dr. Avinash Singh  
HoD-BT

Dr. Vikram Bali  
Director

# CERTIFICATE

## OF PARTICIPATION



THIS CERTIFICATE IS AWARDED TO

**Mr. AWDHESH KUMAR**

for successful PARTICIPATION in the

**WEBINAR ON DESIGN AND LAYOUT OF WIND FARMS**

organized as part of the **8<sup>th</sup> EVENT** of Azadi ka Amrit Mahotsav

**to commemorate the 75 years of progressive Independent India**

held on **15<sup>th</sup> February 2023**

organized by

**National Institute of Wind Energy (NIWE)**

Chennai

with the support of

**Ministry of New and Renewable Energy (MNRE)**

Government of India



सत्यमेव जयते



नीवे NIWE



AMET  
UNIVERSITY



विज्ञान ही  
उन्नति का स्रोत  
MINISTRY OF  
SCIENCE AND  
TECHNOLOGY



## Certificate of Participation

MR. RAM KRISHNA SINGH

*This is to certify that .....*

IMS ENGINEERING COLLEGE GHAZIABAD

*has participated in the DST Sponsored Two Weeks Faculty Development Programme on “**Development of Entrepreneurship and Innovation**” from 29<sup>th</sup> May – 9<sup>th</sup> June 2023 in online mode Organized by Academy of Maritime Education and Training Deemed to be University, Chennai.*

**Mr. A. PONMAAKISHAN**  
Incubation Manager

**Dr. T. SASILATHA**  
Professor and Dean  
International Relations



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IMSEC/FDP/PICSA/2023/85

## Certificate of Participation

This is to certify that

*Mr. Awdhesh Kumar*

from

**IMS Engineering College, Ghaziabad**

has successfully completed One week online Faculty Development Program on “**Preeminent and Innovative Technologies in Computer Science and Applications 2023 (PICSA 2023)**”, organized by Department of Computer Science and Engineering from **30<sup>th</sup> Jan - 3<sup>rd</sup> Feb, 2023**, at IMS Engineering College, Ghaziabad, Uttar Pradesh, India.

Prof. (Dr.) Sonali Mathur  
HoD CSE

Dr. Vikram Bali  
Director



CERTIFICATE NO : PS-PL-MAR2023-0368

**PANTECH SOLUTIONS**  
Technology Beyond the Dreams

## CERTIFICATE OF PARTICIPATION

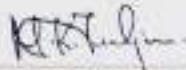
**NAME** : AWDHESH KUMAR

**COLLEGE** : IMS ENGINEERING COLLEGE, GHAZIABAD

has Successfully Completed  
MASTER CLASS ON PYTHON(10 DAYS)

at Pantech Prolabs India Pvt Ltd

From : FEB 23,2023 to : MAR 6,2023



M.K.JEEVARAJAN

DIRECTOR

PANTECHSOLUTIONS

[www.pantechsolutions.net](http://www.pantechsolutions.net)



# IMS Engineering College, Ghaziabad

NAAC Accredited & NBA Accredited Programme  
Approved by AICTE, New Delhi & Affiliated to AKTU, Lucknow  
Under the aegis of IMS Society, Ghaziabad

## CERTIFICATE OF PARTICIPATION

This is to certify that

*Awdhesh Kumar*

from

**IMS ENGINEERING COLLEGE, GHAZIABAD**

has successfully completed Five days online Faculty Development Program on “**Research Methodology And Publication Ethics**” during **30<sup>th</sup> Jan - 3<sup>rd</sup> Feb, 2023**, organized by The Department of Computer Science and Department of Biotechnology at IMS Engineering College, Ghaziabad, Uttar Pradesh, India.

Dr. Sonia Juneja  
HoD-CS

Dr. Avinash Singh  
HoD-BT

Dr. Vikram Bali  
Director



## Researcher Academy On Campus Certificate of Attendance



This certifies that

**Bhanu Verma**

has attended the following

**Research Essentials: Fundamentals of writing research articles  
for high impact journals**

at AKTU,  
on Tuesday 24 January, 2023

Presented by Aishwarya noyal Customer Consultant

A handwritten signature in black ink, appearing to read "Suzanne BeDell".

Suzanne BeDell

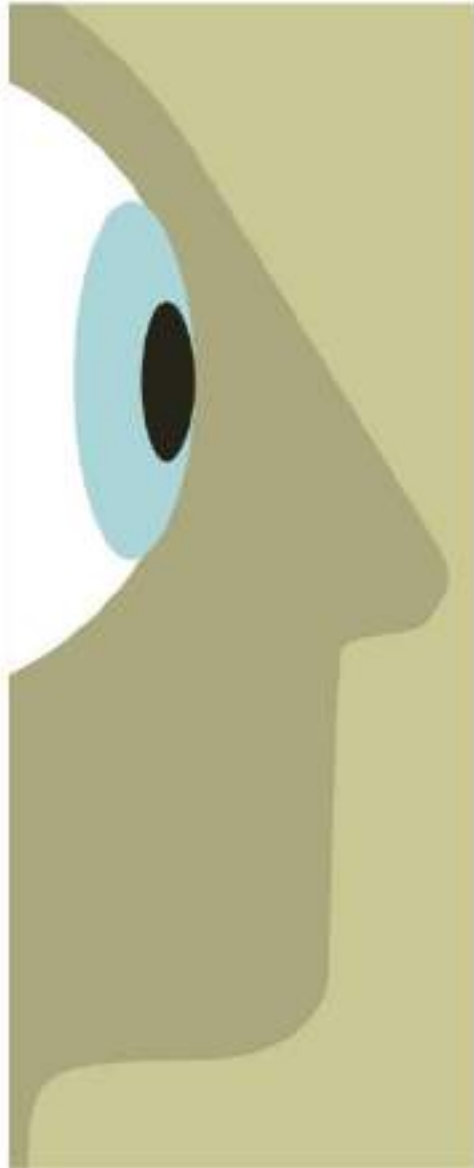
Managing Director, Education  
Reference & Continuity Books

A handwritten signature in black ink, appearing to read "Laura Hassink".

Laura Hassink

Managing Director, Science,  
Technology & Medical Journals





## Researcher Academy On Campus Certificate of Attendance



This certifies that

**Dhanshri Tanshi**

has attended the following

**Research Essentials: Fundamentals of writing research articles  
for high impact journals**

at AKTU,  
on Tuesday 24 January, 2023

Presented by Aishwarya noyal Customer Consultant

A handwritten signature in black ink, appearing to read "Suzanne BeDell".

Suzanne BeDell

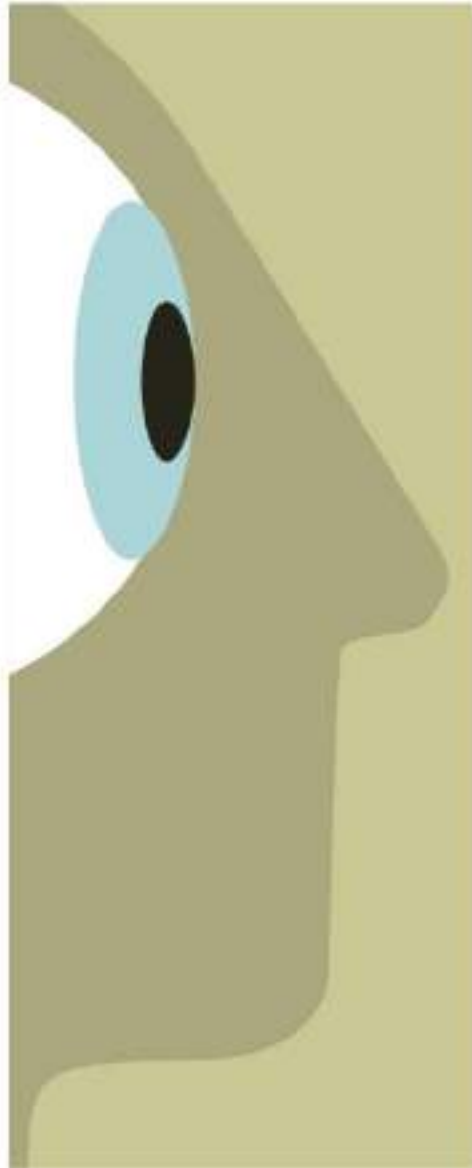
Managing Director, Education  
Reference & Continuity Books

A handwritten signature in black ink, appearing to read "Laura Hassink".

Laura Hassink

Managing Director, Science,  
Technology & Medical Journals





## Researcher Academy On Campus Certificate of Attendance



This certifies that

**Neha Chaudhary Neha**

has attended the following

**Research Essentials: Fundamentals of writing research articles  
for high impact journals**

at AKTU,  
on Monday 21 November, 2022

Presented by Aishwarya noyal Customer Consultant

A handwritten signature in black ink, appearing to read "Suzanne BeDell".

Suzanne BeDell

Managing Director, Education  
Reference & Continuity Books

A handwritten signature in black ink, appearing to read "Laura Hassink".

Laura Hassink

Managing Director, Science,  
Technology & Medical Journals





**SHRI VAISHNAV VIDYAPEETH VISHWAVIDYALAYA**  
**NATIONAL CYBER SAFETY AND SECURITY STANDARDS (NCSSS)**



राष्ट्रीय साइबर सुरक्षा और सुरक्षा मानक  
National Cyber Safety and  
Security Standards

**6<sup>th</sup> NATIONAL CONCLAVE ON CYBER DEFENCE**

***SAJAG 2023***

**Theme: “Cyber Era Today - Myths & Realities”**

**Certificate**

This Certificate is Presented to

**Ram krishna Singh**

**Of IMS Engineering College, Ghaziabad**

**for online participation in 6<sup>th</sup> National Conclave on Cyber Defence - SAJAG 2023 held at**

**Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore on April 27, 2023.**

Dr. Jigyasu Dubey  
Convener  
SAJAG 2022

Dr. Anand Rajavat  
Chairperson  
SAJAG 2022

Dr. Upinder Dhar  
Vice Chancellor  
SVVV, Indore



## CERTIFICATE OF PARTICIPATION

is hereby awarded to

**Mr. Awdhesh Kumar**

from the Department of **Computer Science** in **IMS Engineering College Ghaziabad** for participation in the "**One-day Online Workshop on Entrepreneurship & Intellectual Property Rights**" organized by Uttar Pradesh Institute of Design, Noida (A constituent institute of Dr. A. P.J. Abdul Kalam Technical University, Lucknow), India on 23<sup>rd</sup> July 2022.

---

**DR. KUMAR SAMBHAV**

Convener

---

**PROF. VIRENDRA PATHAK**

Chairperson

# CERTIFICATE

## OF PARTICIPATION



THIS CERTIFICATE IS AWARDED TO

**Mr. RAM KRISHNA SINGH**

for successful PARTICIPATION in the

**WEBINAR ON DESIGN AND LAYOUT OF WIND FARMS**

organized as part of the **8<sup>th</sup> EVENT** of **Azadi ka Amrit Mahotsav**  
**to commemorate the 75 years of progressive Independent India**

held on **15<sup>th</sup> February 2023**

organized by

**National Institute of Wind Energy (NIWE)**

Chennai

with the support of

**Ministry of New and Renewable Energy (MNRE)**

Government of India



सत्यमेव जयते



नीवे NIWE





# IMS Engineering College, Ghaziabad

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Under the aegis of IMS Society, Ghaziabad



## CERTIFICATE OF PARTICIPATION

*Amit Katoch*

This is to certify that \_\_\_\_\_  
from IMS Engineering College

has successfully completed Five-days online faculty development program on “**Cloud Based GIS Applications**” during **1<sup>st</sup> Aug - 5<sup>th</sup> Aug, 2022**, organized by Department of Information Technology and Department of Computer Science and Engineering at IMS Engineering College, Ghaziabad, Uttar Pradesh, India

Prof. (Dr.) Sonali Mathur  
Convener, HOD CSE

Prof. (Dr.) Sachi Gupta  
Convener, HOD-IT

Prof. (Dr.) S. N. Rajan  
Program Chair, Dean Academic

Dr. Vikram Bali  
Director



In Pursuit of Excellence

# Moradabad Institute of Technology

Ramganga Vihar Phase 2, Moradabad



## Certificate



This is to certify that **Ramander Singh** of **IMS, GZB** has attended one week Faculty Development Program on **Creativity, Innovation & Design Thinking** organized by Electronics & Communication Engineering Department of MIT Moradabad, U.P. from 29 May to 02 June 2023.

Prof. Kshitij Shinghal  
Convener, FDP

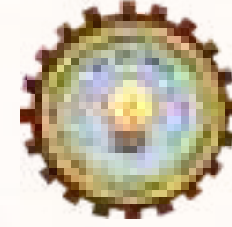
Prof. Rohit Garg  
Director

Certificate Id MITFDP2305605



# IMS Engineering College, Ghaziabad

NAAC Accredited & NBA Accredited Programme  
Approved by AICTE, New Delhi & Affiliated to AKTU, Lucknow  
Under the aegis of IMS Society, Ghaziabad



## CERTIFICATE OF PARTICIPATION

*Mr. Nizamuddin Khan*

This is to certify that \_\_\_\_\_  
from IMS Engineering College, Ghaziabad has successfully completed one-week  
online faculty development program on **“Emerging Trends in Electronics and Communication  
for IoT Applications”** during **4<sup>th</sup> July - 8<sup>th</sup> July, 2022**, organized by Department of Electronics and  
Communication Engineering at IMS Engineering College, Ghaziabad, Uttar Pradesh, India

Dr. Ajay Kumar  
Coordinator

Dr. Jyoti Guglani  
Convener, HOD-ECE

Dr. Vikram Bali  
Director



# IMS Engineering College, Ghaziabad

NAAC Accredited & NBA Accredited Programme  
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Under the aegis of IMS Society, Ghaziabad



## CERTIFICATE OF PARTICIPATION

*Mr. Ashish Kumar*

This is to certify that \_\_\_\_\_  
from IMS Engineering College, Ghaziabad has successfully completed one-week  
online faculty development program on “**Emerging Trends in Electronics and Communication  
for IoT Applications**” during **4<sup>th</sup> July - 8<sup>th</sup> July, 2022**, organized by Department of Electronics and  
Communication Engineering at IMS Engineering College, Ghaziabad, Uttar Pradesh, India

Handwritten signature of Dr. Ajay Kumar in blue ink.

Dr. Ajay Kumar  
Coordinator

Handwritten signature of Dr. Jyoti Guglani in blue ink.

Dr. Jyoti Guglani  
Convener, HOD-ECE

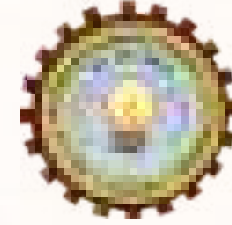
Handwritten signature of Dr. Vikram Bali in green ink.

Dr. Vikram Bali  
Director



# IMS Engineering College, Ghaziabad

NAAC Accredited & NBA Accredited Programme  
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Under the aegis of IMS Society, Ghaziabad



## CERTIFICATE OF PARTICIPATION

*Mr. Ashish Kumar*

This is to certify that \_\_\_\_\_  
from IMS Engineering College, Ghaziabad has successfully completed one-week  
online faculty development program on **“Emerging Trends in Electronics and Communication  
for IoT Applications”** during **4<sup>th</sup> July - 8<sup>th</sup> July, 2022**, organized by Department of Electronics and  
Communication Engineering at IMS Engineering College, Ghaziabad, Uttar Pradesh, India

Dr. Ajay Kumar  
Coordinator

Dr. Jyoti Guglani  
Convener, HOD-ECE

Dr. Vikram Bali  
Director



# IMS Engineering College, Ghaziabad

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## CERTIFICATE OF PARTICIPATION

*Nizam Uddin Khan*

This is to certify that \_\_\_\_\_  
from IMS Engineering College, Ghaziabad

has successfully completed Five-days online faculty development program on “**Cloud Based GIS Applications**” during **1<sup>st</sup> Aug - 5<sup>th</sup> Aug, 2022**, organized by Department of Information Technology and Department of Computer Science and Engineering at IMS Engineering College, Ghaziabad, Uttar Pradesh, India

Prof. (Dr.) Sonali Mathur  
Convener, HOD CSE

Prof. (Dr.) Sachi Gupta  
Convener, HOD-IT

Prof. (Dr.) S. N. Rajan  
Program Chair, Dean Academic

Dr. Vikram Bali  
Director



# IMS Engineering College, Ghaziabad

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Under the aegis of IMS Society, Ghaziabad



## CERTIFICATE OF PARTICIPATION

*Vivek Jain*

This is to certify that \_\_\_\_\_  
from IMS Engineering College, Ghaziabad  
has successfully completed Five-days online faculty development program on “**Cloud Based GIS Applications**” during **1<sup>st</sup> Aug - 5<sup>th</sup> Aug, 2022**, organized by Department of Information Technology and Department of Computer Science and Engineering at IMS Engineering College, Ghaziabad, Uttar Pradesh, India

Prof. (Dr.) Sonali Mathur  
Convener, HOD CSE

Prof. (Dr.) Sachi Gupta  
Convener, HOD-IT

Prof. (Dr.) S. N. Rajan  
Program Chair, Dean Academic

Dr. Vikram Bali  
Director



[www.ibsindia.org](http://www.ibsindia.org)



## Certificate of Engagement

This is to acknowledge with pride

**Mr. Amit Kumar**

Participated In Faculty Knowledge Exchange Program

**Interactive Agenda**

**“Experiential and Innovative Methods of Teaching”**

**Leader Speaker** : Dr. Shalini Khandelwal  
(IBS Gurgaon Campus)

**Host** : IBS Information Team – North  
**Date** : 27-July-2022  
**Venue**: IMS Engineering College, Ghaziabad

Prof. S.C. Sharma  
(Senior Director – IBS Gurgaon Campus)

Ahmedabad | Bangalore | Dehradun | Gurgaon | Hyderabad | Jaipur | Kolkata | Mumbai | Pune





# IMS Engineering College, Ghaziabad

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Under the aegis of IMS Society, Ghaziabad



## CERTIFICATE OF PARTICIPATION

*Mr. Amit Kumar*

This is to certify that \_\_\_\_\_  
from \_\_\_\_\_ **IMS Engineering College** \_\_\_\_\_ has successfully completed Five Days  
online faculty development program on “**Emerging Technologies with applications in Electronics  
and Communication-2022**” during **31<sup>th</sup> Oct - 4<sup>th</sup> Nov, 2022**, organized by Department of Electronics  
and Communication Engineering at IMS Engineering College, Ghaziabad, Uttar Pradesh, India

Handwritten signature of Dr. Balwant Singh in black ink.

Dr. Balwant Singh  
Coordinator

Handwritten signature of Mr. Jaya Nidhi Vashishtha in blue ink.

Mr. Jaya Nidhi Vashishtha  
Co-Coordinator

Handwritten signature of Dr. Jyoti Guglani in blue ink.

Dr. Jyoti Guglani  
Convener, HoD-ECE

Handwritten signature of Dr. Vikram Bali in green ink.

Dr. Vikram Bali  
Director



## CERTIFICATE OF PARTICIPATION

This is to certify that

**Nitin Goyal**

from **CSE , IMS Engineering College Ghaziabad AKTU** participated in **One Week Faculty Development Program on Artificial Intelligence for Sustainable Development** organized by the **Artificial Intelligence Research Centre, Department of Computer Science & Engineering, BBD University** from **September 17-22, 2022.**

FDP09035



**Dr. Praveen K. Shukla**  
Professor & Head, CSE, BBD University

**Dr. Apurva Anand**  
Dean, School of Engineering., BBD University

**Prof. A. K. Mittal**  
Vice Chancellor, BBD University



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&  
AMET UNIVERSITY**

**(Academic and Administrative Development Centre)**

*Faculty Development Programme*

**Design and Development of Industry led Curriculum in Technological Era**

**Certificate of Participation**

**NITIN GOYAL**

*This is to Certify that Dr./Mr./Ms..... from*  
IMS Engineering College Ghaziabad..... *has*  
*successfully completed the 9 days Faculty Development Programme on Design and Development of Industry led*  
*Curriculum In Technological Era during 14<sup>th</sup> -22<sup>nd</sup> December 2022 and awarded with the grade.....* **A**

**Col. Dr. G. Thiruvassagam**  
Vice-Chancellor  
AMET, Chennai

**Dr. Deepa Rajesh**  
Director-HRDC  
AADC Nodal Officer, AMET

**Dr. Amarendra Pani**  
Joint Director & Head- Research Division  
Association of Indian Universities, New Delhi

**Dr. Pankaj Mittal**  
Secretary General  
Association of Indian Universities, New Delhi



# MLR INSTITUTE OF TECHNOLOGY

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Dundigal, Hyderabad – 500 043



## CERTIFICATE OF PARTICIPATION

This is to certify that **Amit Chugh, IMS Engineering College, Ghaziabad** has participated in the One Week Faculty Development Programme on "**Machine Learning in Big Data Applications and Security Challenges**" organized by **Department of Computer Science and Engineering** from **24<sup>th</sup> - 29<sup>th</sup> April, 2023**.

He/She has successfully completed all the requirements for the completion of the Program.

**Dr. Ajmeera Kiran**

**Convener**

**Dr. A. Balaram**

**HOD-CSE**

**Dr. K. Srinivas Rao**

**Principal**



Motilal Nehru National Institute of Technology Allahabad,  
Prayagraj-211004, Uttar Pradesh, India



## **CERTIFICATE OF PARTICIPATION**

This is to certify that **AMIT CHUGH** of IMS Engineering College, Ghaziabad has successfully completed one-week online Faculty Development Program on **“Security Aspects in Computer Science and its Applications (SACSA-2022)”** sponsored by ISEA Project Phase-II and organized by Department of Computer Science & Engineering, Motilal Nehru National Institute of Technology Allahabad, Prayagraj, Uttar Pradesh, India during October 17 - 21, 2022.

Dr. Ashish Kumar Maurya  
(Coordinator)

Prof. Anil Kumar Singh  
(Convener)

Prof. Rama Shankar Yadav  
(Convener)



# MLR INSTITUTE OF TECHNOLOGY

UGC AUTONOMOUS

Dundigal, Hyderabad – 500 043



## CERTIFICATE OF PARTICIPATION

This is to certify that **AMIT KATOCH, IMS ENGINEERING COLLEGE** has participated in the One Week Faculty Development Programme on "**Machine Learning in Big Data Applications and Security Challenges** " organized by **Department of Computer Science and Engineering** from **24<sup>th</sup> - 29<sup>th</sup> April, 2023.**

He/She has successfully completed all the requirements for the completion of the Program.

**Dr. Ajmeera Kiran**

**Convener**

**Dr. A. Balaram**

**HOD-CSE**

**Dr. K. Srinivas Rao**

**Principal**



**THEIVANAI AMMAL COLLEGE FOR WOMEN**

(An Autonomous Institution Affiliated to the Annamalai University)

(Accredited by NAAC with 'A' grade in 3 cycle)

(A unit of E.S.S.K.Educational Charities) Trichy Trunk Road, Villupuram-605402

## **CERTIFICATE OF PARTICIPATION**



This is to certify that (Dr. / Mr. / Ms.) Anubhav Sharma  
has participated in Five Days Virtual Faculty Development Programme on “**Positive Aspects of Teaching Practices**” held on 20.02.2023 to 24.02.2023 organized by IQAC and PG & Research Department of Commerce, Theivanai Ammal College for Women(Autonomous), Villupuram

Resource Person  
Dr.C.Paramasivan  
Assistant Professor

Thambai Periyar Govt College of  
Arts & Science, Trichy

Resource Person  
Dr.P.V.S.Ganesh Subramani  
Associate Professor  
Mary Matha College of  
Arts & Science, Theni

Principal  
Dr.S.Akila  
TACW, Villupuram

DEAN R  
Dr.J.Kalaimathi  
TACW, Villupuram







**THEIVANAI AMMAL COLLEGE FOR WOMEN**

(An Autonomous Institution Affiliated to the Annamalai University)

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Resource Person  
Dr. C. Paramasivan  
Assistant Professor

Thanthai Periyar Govt College of  
Arts & Science, Trichy

Resource Person  
Dr. P. V. S. Ganesh Subramani  
Associate Professor  
Mary Matha College of  
Arts & Science, Theni

Principal  
Dr. S. Akila  
TACW, Villupuram

DEAN R  
Dr. J. Kalaimathi  
TACW, Villupuram





**AMET**  
UNIVERSITY



**ASSOCIATION OF INDIAN UNIVERSITIES  
&  
AMET UNIVERSITY**

**(Academic and Administrative Development Centre)**

*Faculty Development Programme*

**Collaborative Research Practices in Modern Era**

**Certificate of Participation**

*This is to certify that Dr./Mr./Ms. **BHUMICA VERMA** ..... from*  
**IMS ENGINEERING COLLEGE, GHAZIABAD** ..... *on*  
*successful completion of 9 days Faculty Development Programme on Collaborative Research Practices in Modern*  
*Era during 13<sup>th</sup> -21<sup>st</sup> February 2023 and rewarded with the grade **A** .....*

**Col. Dr. G. Thiruvasagam**  
Vice-Chancellor  
AMET, Chennai

**Dr. Deepa Rajesh**  
Director-HRDC  
AADC Nodal Officer, AMET

**Dr. Amarendra Pani**  
Joint Director & Head- Research Division  
Association of Indian Universities, New Delhi

**Dr. Pankaj Mittal**  
Secretary General  
Association of Indian Universities, New Delhi



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## CERTIFICATE OF PARTICIPATION

*Mr. Vibhor Harit*

This is to certify that \_\_\_\_\_  
from IMS Engineering College has successfully completed Five Days  
online faculty development program on “**Emerging Technologies with applications in Electronics  
and Communication-2022**” during **31<sup>st</sup> Oct - 4<sup>th</sup> Nov, 2022**, organized by Department of Electronics  
and Communication Engineering at IMS Engineering College, Ghaziabad, Uttar Pradesh, India

Dr. Balwant Singh  
Coordinator

Mr. Jaya Nidhi Vashishtha  
Co-Coordinator

Dr. Jyoti Guglani  
Convener, HoD-ECE

Dr. Vikram Bali  
Director



**Shri Vishnu Engineering College for Women : : Bhimavaram**  
**(Autonomous)**  
**Department of Computer Science & Engineering**



## Certificate of Participation

This is to certify that **Dr. Amit Chugh** has participated in One Week National Level Online Faculty Development Program on **Recent Advances in Data Science, Data Analytics and Cyber Security** from 1-5 March 2023 organized by the department of CSE at Shri Vishnu Engineering College for Women (A), Bhimavaram. He/She has cleared the end exam successfully.

A handwritten signature in blue ink, appearing to read 'P. Kiran Sree'.

**Dr. P. Kiran Sree**  
**HOD-CSE**

A handwritten signature in blue ink, appearing to read 'P. Srinivasa Raju'.

**Dr. P. Srinivasa Raju**  
**Vice-Principal**

A handwritten signature in blue ink, appearing to read 'G. Srinivasa Rao'.

**Dr. G. Srinivasa Rao**  
**Principal**



In Pursuit of Excellence

# Moradabad Institute of Technology

Ramganga Vihar Phase 2, Moradabad



## Certificate



This is to certify that **Anubhav Sharma** of **IMSEC Ghaziabad** has attended one week Faculty Development Program on **Creativity, Innovation & Design Thinking** organized by Electronics & Communication Engineering Department of MIT Moradabad, U.P. from 29 May to 02 June 2023.

Prof. Kshitij Shinghal  
Convener, FDP

Prof. Rohit Garg  
Director

Certificate Id MITFDP2305334



# IMS Engineering College, Ghaziabad

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Under the aegis of IMS Society, Ghaziabad



IMSEC/FDP/PICSA/2023/50

## Certificate of Participation

This is to certify that

*Mr. Basudeo Singh Roohani*

from

**IMS Engineering College, Ghaziabad**

has successfully completed One week online Faculty Development Program on “**Preeminent and Innovative Technologies in Computer Science and Applications 2023 (PICSA 2023)**”, organized by Department of Computer Science and Engineering from **30<sup>th</sup> Jan - 3<sup>rd</sup> Feb, 2023**, at IMS Engineering College, Ghaziabad, Uttar Pradesh, India.

Prof. (Dr.) Sonali Mathur  
HoD CSE

Dr. Vikram Bali  
Director



**Dr B R AMBEDKAR NATIONAL INSTITUTE OF TECHNOLOGY  
JALANDHAR, PUNJAB INDIA**

**(An Institution of National Importance under MHRD, New Delhi, Govt. of India)**

## ***Certificate of Participation***

**ISEA-II Sponsored Short Term Course**

**on**

**“Cyber Security: Managing Risk in the Information Age”**

**(October 12 -16, 2022)**

This is to certify that ***Dr. Amit Chugh*** from ***IMS Engineering College, Ghaziabad*** has participated in the one-week online Short Term Course on ***“Cyber Security: Managing Risk in the Information Age”*** organized by the Department of Computer Science & Engineering, Dr B R Ambedkar National Institute of Technology Jalandhar held during October 12 -16, 2022.

**Dr Geeta Sikka**

**Head CSE & Coordinator**

**Prof Harsh K Verma**

**PI ISEA-II & Convener**

**Prof A L Sangal**

**Convener**





# IMS Engineering College, Ghaziabad

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Under the aegis of IMS Society, Ghaziabad



## CERTIFICATE OF PARTICIPATION

This is to certify that Mr. Ramander Singh  
from IMSEC, GHAZIABAD has successfully completed Five Days  
online faculty development program on “**Emerging Technologies with applications in Electronics  
and Communication-2022**” during **31<sup>th</sup> Oct - 4<sup>th</sup> Nov, 2022**, organized by Department of Electronics  
and Communication Engineering at IMS Engineering College, Ghaziabad, Uttar Pradesh, India

Dr. Balwant Singh  
Coordinator

Mr. Jaya Nidhi Vashishtha  
Co-Coordinator

Dr. Jyoti Guglani  
Convener, HoD-ECE

Dr. Vikram Bali  
Director



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Under the aegis of IMS Society, Ghaziabad



IMSEC/FDP/PICSA/2023/31

## Certificate of Participation

This is to certify that

*Ms. Meenu*

from

**IMS Engineering College, Ghaziabad**

has successfully completed One week online Faculty Development Program on “**Preeminent and Innovative Technologies in Computer Science and Applications 2023 (PICSA 2023)**”, organized by Department of Computer Science and Engineering from **30<sup>th</sup> Jan - 3<sup>rd</sup> Feb, 2023**, at IMS Engineering College, Ghaziabad, Uttar Pradesh, India.

Prof. (Dr.) Sonali Mathur  
HoD CSE

Dr. Vikram Bali  
Director



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Approved by AICTE, New Delhi & Affiliated to AKTU, Lucknow  
Under the aegis of IMS Society, Ghaziabad



## CERTIFICATE OF PARTICIPATION

This is to certify that Anju Joshi  
from IMS Engineering College, Ghaziabad

has successfully completed Five-days online faculty development program on “**Cloud Based GIS Applications**” during **1<sup>st</sup> Aug - 5<sup>th</sup> Aug, 2022**, organized by Department of Information Technology and Department of Computer Science and Engineering at IMS Engineering College, Ghaziabad, Uttar Pradesh, India

Prof. (Dr.) Sonali Mathur  
Convener, HOD CSE

Prof. (Dr.) Sachi Gupta  
Convener, HOD-IT

Prof. (Dr.) S. N. Rajan  
Program Chair, Dean Academic

Dr. Vikram Bali  
Director



**Dr B R Ambedkar National Institute of Technology, Jalandhar**

# **PARTICIPATION CERTIFICATE**

Presented to

**Er BASUDEO SINGH ROOHANI**

of

**IMS Engg College Ghaziabad**

for successful completion of *One Week Online Faculty Development Programme* on “*IoT Induced Artificial Intelligence for Emerging Computing Paradigms*” organized by *Department of Information Technology* from *04-08 October, 2022*.

**Er. D K Gupta**  
**(Convener & Head-IT)**

**Dr. Samayveer Singh**  
**(Convenor)**

**Dr. Nisha Chaurasia**  
**(Coordinator)**

**Dr. Mohit Kumar**  
**(Coordinator)**



## Certificate of Achievement

**BASUDEO SINGH ROOHANI**

from

**IMS ENGG COLLEGE GHAZIABAD**

has completed:

**NATIONAL LEVEL FACULTY DEVELOPMENT PROGRAMME ON  
ONLINE TEACHING PLATFORM AND TOOLS (TECHNOLOGY MANAGEMENT IN EDUCATION)**

This online Faculty Development Programme helped to discover modern productivity strategies with hands-on practical implementation with the pace of growing trends in education with interesting facts, trends, and insights.

**FDP Duration:** 05 Days

**Date:** October 26 - 30, 2022

**Organized By**



**Government College for Women, Bhagwati Nagar, Jammu**

Affiliated to University of Jammu, (Jammu and Kashmir)

**Dr. Pavanjeet Bali**

Coordinator, Career Counseling and  
Placement Cell  
GCW Bhagwati Nagar, Jammu

**Prof. Nisha Bhagat**

Coordinator, Internal Quality  
Assurance Cell  
GCW Bhagwati Nagar, Jammu

**Roshan Kumar**

Founder and CEO  
Scrollwell

**Dr. Meeru Abrol**

Principal  
GCW Bhagwati Nagar, Jammu

**Certificate ID:** SWCERT20220731

**Date of Issue:** October 30, 2022



**AMET**  
UNIVERSITY  
Association of Indian Universities Member since 1952



**ASSOCIATION OF INDIAN UNIVERSITIES  
&  
AMET UNIVERSITY**

**(Academic and Administrative Development Centre)**

*Faculty Development Programme*

**Design and Development of Industry led Curriculum in Technological Era**

**Certificate of Participation**

**BASUDEO SINGH ROOHANI**

*This is to Certify that Dr./Mr./Ms..... from*  
IMS Engg College Ghaziabad..... *has*  
*successfully completed the 9 days Faculty Development Programme on Design and Development of Industry led*  
*Curriculum In Technological Era during 14<sup>th</sup> -22<sup>nd</sup> December 2022 and awarded with the grade* **A+**.....

**Col. Dr. G. Thiruvassagam**  
Vice-Chancellor  
AMET, Chennai

**Dr. Deepa Rajesh**  
Director-HRDC  
AADC Nodal Office, AMET

**Dr. Amarendra Pani**  
Joint Director & Head- Research Division  
Association of Indian Universities, New Delhi

**Dr. Pankaj Mittal**  
Secretary General  
Association of Indian Universities, New Delhi



# IMS Engineering College, Ghaziabad

NAAC Accredited & NBA Accredited Programme  
Approved by AICTE, New Delhi & Affiliated to AKTU, Lucknow  
Under the aegis of IMS Society, Ghaziabad



## CERTIFICATE OF PARTICIPATION

This is to certify that Mr. Nizam Uddin Khan  
from IMS Engineering College, Ghaziabad has successfully completed Five Days  
online faculty development program on **“Emerging Technologies with applications in Electronics  
and Communication-2022”** during **31<sup>st</sup> Oct - 4<sup>th</sup> Nov, 2022**, organized by Department of Electronics  
and Communication Engineering at IMS Engineering College, Ghaziabad, Uttar Pradesh, India

Dr. Bulwant Singh  
Coordinator

Mr. Jaya Nidhi Vashishtha  
Co-Coordinator

Dr. Jyoti Guglani  
Convener, HoD-ECE

Dr. Vikram Bali  
Director



# IMS Engineering College, Ghaziabad

NAAC Accredited & NBA Accredited Programme  
Approved by AICTE, New Delhi & Affiliated to AKTU, Lucknow  
Under the aegis of IMS Society, Ghaziabad



## CERTIFICATE OF PARTICIPATION

This is to certify that Mr. Nizam Uddin Khan  
from IMS Engineering College, Ghaziabad has successfully completed Five Days  
online faculty development program on **“Emerging Technologies with applications in Electronics  
and Communication-2022”** during **31<sup>st</sup> Oct - 4<sup>th</sup> Nov, 2022**, organized by Department of Electronics  
and Communication Engineering at IMS Engineering College, Ghaziabad, Uttar Pradesh, India

Dr. Bulwant Singh  
Coordinator

Mr. Jaya Nidhi Vashishtha  
Co-Coordinator

Dr. Jyoti Guglani  
Convener, HoD-ECE

Dr. Vikram Bali  
Director





# IMS Engineering College, Ghaziabad

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Approved by AICTE, New Delhi & Affiliated to AKTU, Lucknow  
Under the aegis of IMS Society, Ghaziabad



IMSEC/FDP/PICSA/2023/32

## Certificate of Participation

This is to certify that

*Ms. Gurpreet Kaur*

from

**IMS Engineering College, Ghaziabad**

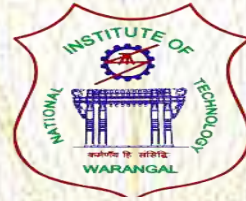
has successfully completed One week online Faculty Development Program on “**Preeminent and Innovative Technologies in Computer Science and Applications 2023 (PICSA 2023)**”, organized by Department of Computer Science and Engineering from **30<sup>th</sup> Jan - 3<sup>rd</sup> Feb, 2023**, at IMS Engineering College, Ghaziabad, Uttar Pradesh, India.

Prof. (Dr.) Sonali Mathur  
HoD CSE

Dr. Vikram Bali  
Director

# NATIONAL INSTITUTE OF TECHNOLOGY WARANGAL

## Center for Continuing Education



### Participation Certificate

This is to certify that Dr./Mr./Ms. **Anju Joshi** from **IMS Engineering College Ghaziabad** has participated in 30 hours online course on “**Machine Learning for Data Science using Python**” organized by **Department of CSE, NIT Warangal** in association with **Center for Continuing Education** during **November 14<sup>th</sup>, 2022 to November 29<sup>th</sup>, 2022**. He/She has satisfied all the requirements for completing this short-term course.

**Dr. K. Venkateswara Rao**  
Course Coordinator, NIT Warangal

**Dr. Raju Bhukya**  
CCE Incharge, NIT Warangal

**Prof. N. V. Ramana Rao**  
Director, NIT Warangal



**ICTACADEMY®**

# CERTIFICATE OF PARTICIPATION

C.No: 023-205585

Date: 13 Jan 2023

**DR. NITIN SHARMA**

**IMS Engineering College, Ghaziabad**

has participated in 5 Day Faculty Development Program on

**Microsoft Power BI Data Analyst Associate**

conducted by ICT Academy on 09 Jan 2023 to 13 Jan 2023 at

**DR. K.N. MODI INSTITUTE OF ENGINEERING AND TECHNOLOGY, GHAZIABAD**



Hari Balachandran  
Chief Executive Officer, ICT Academy



# E & ICT Academy, IIT Kanpur

(A Joint Initiative of MeitY & IIT Kanpur)

## Certificate

This is to certify that

**DR. / MR. / MS. DR. SUBHAJIT GHOSH**

of

IMS ENGINEERING COLLEGE, GHAZIABAD

has completed the **Faculty Development Program** on

**Data Analysis Using Excel**

from 11th april to 15th april 2022 (1 week)

Prof. B. V. Phani

Prof. Amey Karkare

Date of Issue: 18-04-2022

System Identification No.: 61910-4959E7-87759ed9ce84bd61

Chief investigators, E & ICT Academy, IIT Kanpur

FDP's by E&ICT Academy, IIT Kanpur are recognised as per CAS Guidelines in this regard. For more details visit [ict.iitk.ac.in/fdp](http://ict.iitk.ac.in/fdp)



# IMS Engineering College, Ghaziabad

NAAC Accredited & NBA Accredited Programme  
Approved by AICTE, New Delhi & Affiliated to AKTU, Lucknow  
Under the aegis of IMS Society, Ghaziabad



## CERTIFICATE OF PARTICIPATION

*Dr. Subhajit Ghosh*

This is to certify that \_\_\_\_\_  
from IMS Engineering College, Ghaziabad

has successfully completed Five-days online faculty development program on “**Cloud Based GIS Applications**” during **1<sup>st</sup> Aug - 5<sup>th</sup> Aug, 2022**, organized by Department of Information Technology and Department of Computer Science and Engineering at IMS Engineering College, Ghaziabad, Uttar Pradesh, India

Prof. (Dr.) Sonali Mathur  
Convener, HOD CSE

Prof. (Dr.) Sachi Gupta  
Convener, HOD-IT

Prof. (Dr.) S. N. Rajan  
Program Chair, Dean Academic

Dr. Vikram Bali  
Director



# IMS Engineering College, Ghaziabad

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Approved by AICTE, New Delhi & Affiliated to AKTU, Lucknow  
Under the aegis of IMS Society, Ghaziabad



## CERTIFICATE OF PARTICIPATION

*Dr. Subhajit Ghosh*

This is to certify that \_\_\_\_\_  
from \_\_\_\_\_ **IMSEC Ghaziabad** \_\_\_\_\_ has successfully completed Five Days  
online faculty development program on “**Emerging Technologies with applications in Electronics  
and Communication-2022**” during **31<sup>st</sup> Oct - 4<sup>th</sup> Nov, 2022**, organized by Department of Electronics  
and Communication Engineering at IMS Engineering College, Ghaziabad, Uttar Pradesh, India

Dr. Balwant Singh  
Coordinator

Mr. Jaya Nidhi Vashishtha  
Co-Coordinator

Dr. Jyoti Guglani  
Convener, HoD-ECE

Dr. Vikram Bali  
Director



IMS Engineering College, Ghaziabad

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Under the aegis of IMS Society, Ghaziabad



## CERTIFICATE OF PARTICIPATION

This is to certify that Dr. Subhajit Ghosh  
from IMS Engineering College has successfully completed one-week  
online faculty development program on **"Emerging Trends in Electronics and Communication  
for IoT Applications"** during **4<sup>th</sup> July - 8<sup>th</sup> July, 2022**, organized by Department of Electronics and  
Communication Engineering at IMS Engineering College, Ghaziabad, Uttar Pradesh, India

Dr. Ajay Kumar  
Coordinator

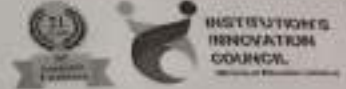
Dr. Jyoti Guglani  
Convener, HOD-ECE

Dr. Vikram Ball  
Director



## IMS Engineering College, Ghaziabad

NAAC Accredited & NBA Accredited Programme  
Approved by AICTE, New Delhi & Affiliated to AKTU, Lucknow  
Under the aegis of IMS Society, Ghaziabad



IMSEC/FDP/PICSA/2023/16

### Certificate of Participation

This is to certify that

*Dr. Subhajit Ghosh*

from

**IMS Engineering College, Ghaziabad**

has successfully completed One week online Faculty Development Program on "Preeminent and Innovative Technologies in Computer Science and Applications 2023 (PICSA 2023)", organized by Department of Computer Science and Engineering from 30<sup>th</sup> Jan - 3<sup>rd</sup> Feb, 2023, at IMS Engineering College, Ghaziabad, Uttar Pradesh, India.

Prof. (Dr.) Sonali Mathur  
HoD CSE

Dr. Vikram Bali  
Director





# MLR INSTITUTE OF TECHNOLOGY

UGC AUTONOMOUS

Dundigal, Hyderabad – 500 043



## CERTIFICATE OF PARTICIPATION

This is to certify that **Prabhat Kumar Srivastava, IMS ENGG COLLEGE GHAZIABAD** has participated in the One Week Faculty Development Programme on "**Machine Learning in Big Data Applications and Security Challenges** " organized by **Department of Computer Science and Engineering** from **24<sup>th</sup> - 29<sup>th</sup> April, 2023**.

He/She has successfully completed all the requirements for the completion of the Program.

**Dr. Ajmeera Kiran**

Convener

**Dr. A. Balaram**

HOD-CSE

**Dr. K. Srinivas Rao**

Principal

## Researcher Academy On Campus Certificate of Attendance

This certifies that

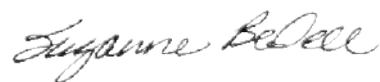
**basudeo basudeo**

has attended the following

**Write Your Thesis Using Mendeley - Tactics to manage references for Researcher (60 minutes)**

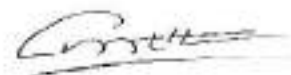
at Hybrid Mode / Seminar Hall, Block - A, AUMP,  
on Monday 06 February, 2023

Presented by Mendeley Advisor Dr. Kuldeep Singh Mendeley Advisor



Suzanne BeDell

Managing Director, Education  
Reference & Continuity Books



Laura Hassink

Managing Director, Science,  
Technology & Medical Journals





# IMS Engineering College, Ghaziabad

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Under the aegis of IMS Society, Ghaziabad

## CERTIFICATE OF PARTICIPATION

This is to certify that

*Monika*

from

**IMS Engineering College, Ghaziabad**

has successfully completed Five days online Faculty Development Program on “**Research Methodology And Publication Ethics**” during **30<sup>th</sup> Jan - 3<sup>rd</sup> Feb, 2023**, organized by The Department of Computer Science and Department of Biotechnology at IMS Engineering College, Ghaziabad, Uttar Pradesh, India.

Dr. Sonia Juneja  
HoD-CS

Dr. Avinash Singh  
HoD-BT

Dr. Vikram Bali  
Director



# IMS Engineering College, Ghaziabad

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Under the aegis of IMS Society, Ghaziabad



## CERTIFICATE OF PARTICIPATION

This is to certify that Mr. Aditya Sam Koshy  
from IMSEC, Ghaziabad has successfully completed Five Days  
online faculty development program on **“Emerging Technologies with applications in Electronics  
and Communication-2022”** during **31<sup>th</sup> Oct - 4<sup>th</sup> Nov, 2022**, organized by Department of Electronics  
and Communication Engineering at IMS Engineering College, Ghaziabad, Uttar Pradesh, India

Handwritten signature of Dr. Balwant Singh in black ink.

Dr. Balwant Singh  
Coordinator

Handwritten signature of Mr. Jaya Nidhi Vashishtha in blue ink.

Mr. Jaya Nidhi Vashishtha  
Co-Coordinator

Handwritten signature of Dr. Jyoti Guglani in blue ink.

Dr. Jyoti Guglani  
Convener, HoD-ECE

Handwritten signature of Dr. Vikram Bali in green ink.

Dr. Vikram Bali  
Director



# IMS Engineering College, Ghaziabad

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Under the aegis of IMS Society, Ghaziabad



IMSEC/FDP/PICSA/2023/01

## Certificate of Participation

This is to certify that

*Mr. Amit Katoch*

from

**IMS Engineering College, Ghaziabad**

has successfully completed One week online Faculty Development Program on “**Preeminent and Innovative Technologies in Computer Science and Applications 2023 (PICSA 2023)**”, organized by Department of Computer Science and Engineering from **30<sup>th</sup> Jan - 3<sup>rd</sup> Feb, 2023**, at IMS Engineering College, Ghaziabad, Uttar Pradesh, India.

Prof. (Dr.) Sonali Mathur  
HoD CSE

Dr. Vikram Bali  
Director



# IMS Engineering College, Ghaziabad

NAAC Accredited & NBA Accredited Programme  
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Under the aegis of IMS Society, Ghaziabad



## CERTIFICATE OF APPRECIATION

*Mr. Amit Katoch*

This is to certify that \_\_\_\_\_  
Successfully Co-ordinated and conducted a five-days online faculty development program for  
“**Cloud Based GIS Applications**” during **1<sup>st</sup> Aug – 5<sup>th</sup> Aug, 2022**, organized by Department of  
Information Technology and Department of Computer Science and Engineering at IMS Engineering  
College, Ghaziabad, Uttar Pradesh, India.

Prof. (Dr.) Sonali Mathur  
Convener, HOD CSE

Prof. (Dr.) Sachi Gupta  
Convener, HOD-IT

Prof. (Dr.) S. N. Rajan  
Program Chair, Dean Academic

Dr. Vikram Bali  
Director



# IMS Engineering College, Ghaziabad

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Under the aegis of IMS Society, Ghaziabad



IMSEC/FDP/PICSA/2023/05

## Certificate of Participation

This is to certify that

*Mr. Amit Kumar*

from

**IMS Engineering College, Ghaziabad**

has successfully completed One week online Faculty Development Program on “**Preeminent and Innovative Technologies in Computer Science and Applications 2023 (PICSA 2023)**”, organized by Department of Computer Science and Engineering from **30<sup>th</sup> Jan - 3<sup>rd</sup> Feb, 2023**, at IMS Engineering College, Ghaziabad, Uttar Pradesh, India.

Prof. (Dr.) Sonali Mathur  
HoD CSE

Dr. Vikram Bali  
Director



# IMS Engineering College, Ghaziabad

NAAC Accredited & NBA Accredited Programme  
Approved by AICTE, New Delhi & Affiliated to AKTU, Lucknow  
Under the aegis of IMS Society, Ghaziabad



## CERTIFICATE OF PARTICIPATION

*Mr. Amit Katoch*

This is to certify that \_\_\_\_\_  
from \_\_\_\_\_ **IMSEC Ghaziabad** \_\_\_\_\_ has successfully completed Five Days  
online faculty development program on “**Emerging Technologies with applications in Electronics  
and Communication-2022**” during **31<sup>th</sup> Oct - 4<sup>th</sup> Nov, 2022**, organized by Department of Electronics  
and Communication Engineering at IMS Engineering College, Ghaziabad, Uttar Pradesh, India

A handwritten signature in black ink, appearing to read 'Singh'.

Dr. Balwant Singh  
Coordinator

A handwritten signature in blue ink, appearing to read 'Jaya Nidhi Vashishtha'.

Mr. Jaya Nidhi Vashishtha  
Co-Coordinator

A handwritten signature in blue ink, appearing to read 'Jyoti'.

Dr. Jyoti Guglani  
Convener, HoD-ECE

A handwritten signature in green ink, appearing to read 'Vikram Bali'.

Dr. Vikram Bali  
Director





# IMS Engineering College, Ghaziabad

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Approved by AICTE, New Delhi & Affiliated to AKTU, Lucknow  
Under the aegis of IMS Society, Ghaziabad



IMSEC/FDP/PICSA/2023/78

## Certificate of Participation

This is to certify that

*Mr. Anubhav Sharma*

from

**IMS Engineering College, Ghaziabad**

has successfully completed One week online Faculty Development Program on “**Preeminent and Innovative Technologies in Computer Science and Applications 2023 (PICSA 2023)**”, organized by Department of Computer Science and Engineering from **30<sup>th</sup> Jan - 3<sup>rd</sup> Feb, 2023**, at IMS Engineering College, Ghaziabad, Uttar Pradesh, India.

Prof. (Dr.) Sonali Mathur  
HoD CSE

Dr. Vikram Bali  
Director



# IMS Engineering College, Ghaziabad

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Approved by AICTE, New Delhi & Affiliated to AKTU, Lucknow  
Under the aegis of IMS Society, Ghaziabad



IMSEC/FDP/PICSA/2023/13

## Certificate of Participation

This is to certify that

*Mr. Ashish Kumar*

from

**IMS Engineering College, Ghaziabad**

has successfully completed One week online Faculty Development Program on “**Preeminent and Innovative Technologies in Computer Science and Applications 2023 (PICSA 2023)**”, organized by Department of Computer Science and Engineering from **30<sup>th</sup> Jan - 3<sup>rd</sup> Feb, 2023**, at IMS Engineering College, Ghaziabad, Uttar Pradesh, India.

Prof. (Dr.) Sonali Mathur  
HoD CSE

Dr. Vikram Bali  
Director



# IMS Engineering College, Ghaziabad

NAAC Accredited & NBA Accredited Programme  
Approved by AICTE, New Delhi & Affiliated to AKTU, Lucknow  
Under the aegis of IMS Society, Ghaziabad



## CERTIFICATE OF APPRECIATION

*Mr. N. U. Khan*

This is to certify that \_\_\_\_\_  
Successfully Co-ordinated and conducted a five-days online faculty development program for  
“**Cloud Based GIS Applications**” during **1<sup>st</sup> Aug – 5<sup>th</sup> Aug, 2022**, organized by Department of  
Information Technology and Department of Computer Science and Engineering at IMS Engineering  
College, Ghaziabad, Uttar Pradesh, India.

Handwritten signature of Prof. (Dr.) Sonali Mathur in blue ink.

Prof. (Dr.) Sonali Mathur  
Convener, HOD CSE

Handwritten signature of Prof. (Dr.) Sachi Gupta in blue ink.

Prof. (Dr.) Sachi Gupta  
Convener, HOD-IT

Handwritten signature of Prof. (Dr.) S. N. Rajan in blue ink.

Prof. (Dr.) S. N. Rajan  
Program Chair, Dean Academic

Handwritten signature of Dr. Vikram Bali in green ink.

Dr. Vikram Bali  
Director



# IMS Engineering College, Ghaziabad

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Under the aegis of IMS Society, Ghaziabad



IMSEC/FDP/PICSA/2023/08

## Certificate of Participation

This is to certify that

*Mr. Nizam Uddin Khan*

from

**IMS Engineering College, Ghaziabad**

has successfully completed One week online Faculty Development Program on “**Preeminent and Innovative Technologies in Computer Science and Applications 2023 (PICSA 2023)**”, organized by Department of Computer Science and Engineering from **30<sup>th</sup> Jan - 3<sup>rd</sup> Feb, 2023**, at IMS Engineering College, Ghaziabad, Uttar Pradesh, India.

Prof. (Dr.) Sonali Mathur  
HoD CSE

Dr. Vikram Bali  
Director



# IMS Engineering College, Ghaziabad

NAAC Accredited & NBA Accredited Programme  
Approved by AICTE, New Delhi & Affiliated to AKTU, Lucknow  
Under the aegis of IMS Society, Ghaziabad



## CERTIFICATE OF PARTICIPATION

This is to certify that Mr. Pankaj Kumar  
from IMS ENGINEERING COLLEGE GHAZIABAD has successfully completed Five Days  
online faculty development program on “**Emerging Technologies with applications in Electronics  
and Communication-2022**” during **31<sup>th</sup> Oct - 4<sup>th</sup> Nov, 2022**, organized by Department of Electronics  
and Communication Engineering at IMS Engineering College, Ghaziabad, Uttar Pradesh, India

Handwritten signature of Dr. Balwant Singh in black ink.

Dr. Balwant Singh  
Coordinator

Handwritten signature of Mr. Jaya Nidhi Vashishtha in blue ink.

Mr. Jaya Nidhi Vashishtha  
Co-Coordinator

Handwritten signature of Dr. Jyoti Guglani in blue ink.

Dr. Jyoti Guglani  
Convener, HoD-ECE

Handwritten signature of Dr. Vikram Bali in green ink.

Dr. Vikram Bali  
Director



# IMS Engineering College, Ghaziabad

NAAC Accredited & NBA Accredited Programme  
Approved by AICTE, New Delhi & Affiliated to AKTU, Lucknow  
Under the aegis of IMS Society, Ghaziabad



IMSEC/FDP/PICSA/2023/79

## Certificate of Participation

This is to certify that

*Mr. Vivek Jain*

from

**IMS Engineering College, Ghaziabad**

has successfully completed One week online Faculty Development Program on “**Preeminent and Innovative Technologies in Computer Science and Applications 2023 (PICSA 2023)**”, organized by Department of Computer Science and Engineering from **30<sup>th</sup> Jan - 3<sup>rd</sup> Feb, 2023**, at IMS Engineering College, Ghaziabad, Uttar Pradesh, India.

Prof. (Dr.) Sonali Mathur  
HoD CSE

Dr. Vikram Bali  
Director



**Dr B R Ambedkar National Institute of Technology, Jalandhar**

# **PARTICIPATION CERTIFICATE**

Presented to

**Mrs BHUMICA**

of

**Imsec ghaziabad**

for successful completion of *One Week Online Faculty Development Programme* on “*IoT Induced Artificial Intelligence for Emerging Computing Paradigms*” organized by *Department of Information Technology* from *04-08 October, 2022*.

**Er. D K Gupta**  
**(Convener & Head-IT)**

**Dr. Samayveer Singh**  
**(Convenor)**

**Dr. Nisha Chaurasia**  
**(Coordinator)**

**Dr. Mohit Kumar**  
**(Coordinator)**



# IMS Engineering College, Ghaziabad

NAAC Accredited & NBA Accredited Programme  
Approved by AICTE, New Delhi & Affiliated to AKTU, Lucknow  
Under the aegis of IMS Society, Ghaziabad



IMSEC/FDP/PICSA/2023/100

## Certificate of Participation

This is to certify that

*Ms. Bhumica*

from

**IMS Engineering College, Ghaziabad**

has successfully completed One week online Faculty Development Program on “**Preeminent and Innovative Technologies in Computer Science and Applications 2023 (PICSA 2023)**”, organized by Department of Computer Science and Engineering from **30<sup>th</sup> Jan - 3<sup>rd</sup> Feb, 2023**, at IMS Engineering College, Ghaziabad, Uttar Pradesh, India.

Prof. (Dr.) Sonali Mathur  
HoD CSE

Dr. Vikram Bali  
Director





# IMS Engineering College, Ghaziabad

NAAC Accredited & NBA Accredited Programme  
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Under the aegis of IMS Society, Ghaziabad



IMSEC/FDP/PICSA/2023/27

## Certificate of Participation

This is to certify that

*Ms. Anamika Goel*

from

**IMS Engineering College, Ghaziabad**

has successfully completed One week online Faculty Development Program on “**Preeminent and Innovative Technologies in Computer Science and Applications 2023 (PICSA 2023)**”, organized by Department of Computer Science and Engineering from **30<sup>th</sup> Jan - 3<sup>rd</sup> Feb, 2023**, at IMS Engineering College, Ghaziabad, Uttar Pradesh, India.

Prof. (Dr.) Sonali Mathur  
HoD CSE

Dr. Vikram Bali  
Director



# IMS Engineering College, Ghaziabad

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Under the aegis of IMS Society, Ghaziabad



IMSEC/FDP/PICSA/2023/20

## Certificate of Participation

This is to certify that

*Ms. Anju Joshi*

from

**IMS Engineering College, Ghaziabad**

has successfully completed One week online Faculty Development Program on “**Preeminent and Innovative Technologies in Computer Science and Applications 2023 (PICSA 2023)**”, organized by Department of Computer Science and Engineering from **30<sup>th</sup> Jan - 3<sup>rd</sup> Feb, 2023**, at IMS Engineering College, Ghaziabad, Uttar Pradesh, India.

Prof. (Dr.) Sonali Mathur  
HoD CSE

Dr. Vikram Bali  
Director



# IMS Engineering College, Ghaziabad

NAAC Accredited & NBA Accredited Programme  
Approved by AICTE, New Delhi & Affiliated to AKTU, Lucknow  
Under the aegis of IMS Society, Ghaziabad



IMSEC/FDP/PICSA/2023/92

## Certificate of Participation

This is to certify that

*Ms. Monika*

from

**IMS Engineering College, Ghaziabad**

has successfully completed One week online Faculty Development Program on “**Preeminent and Innovative Technologies in Computer Science and Applications 2023 (PICSA 2023)**”, organized by Department of Computer Science and Engineering from **30<sup>th</sup> Jan - 3<sup>rd</sup> Feb, 2023**, at IMS Engineering College, Ghaziabad, Uttar Pradesh, India.

Prof. (Dr.) Sonali Mathur  
HoD CSE

Dr. Vikram Bali  
Director



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Under the aegis of IMS Society, Ghaziabad



IMSEC/FDP/PICSA/2023/23

## Certificate of Participation

This is to certify that

*Ms. Ritika Dhyani*

from

**IMS Engineering College, Ghaziabad**

has successfully completed One week online Faculty Development Program on “**Preeminent and Innovative Technologies in Computer Science and Applications 2023 (PICSA 2023)**”, organized by Department of Computer Science and Engineering from **30<sup>th</sup> Jan - 3<sup>rd</sup> Feb, 2023**, at IMS Engineering College, Ghaziabad, Uttar Pradesh, India.

Prof. (Dr.) Sonali Mathur  
HoD CSE

Dr. Vikram Bali  
Director



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IMSEC/FDP/PICSA/2023/23

## Certificate of Participation

This is to certify that

*Ms. Ritika Dhyani*

from

**IMS Engineering College, Ghaziabad**

has successfully completed One week online Faculty Development Program on “**Preeminent and Innovative Technologies in Computer Science and Applications 2023 (PICSA 2023)**”, organized by Department of Computer Science and Engineering from **30<sup>th</sup> Jan - 3<sup>rd</sup> Feb, 2023**, at IMS Engineering College, Ghaziabad, Uttar Pradesh, India.

Prof. (Dr.) Sonali Mathur  
HoD CSE

Dr. Vikram Bali  
Director



# IMS Engineering College, Ghaziabad

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Under the aegis of IMS Society, Ghaziabad



IMSEC/FDP/PICSA/2023/07

## Certificate of Participation

This is to certify that

*Ms. Sarika*

from

**IMS Engineering College, Ghaziabad**

has successfully completed One week online Faculty Development Program on “**Preeminent and Innovative Technologies in Computer Science and Applications 2023 (PICSA 2023)**”, organized by Department of Computer Science and Engineering from **30<sup>th</sup> Jan - 3<sup>rd</sup> Feb, 2023**, at IMS Engineering College, Ghaziabad, Uttar Pradesh, India.

Prof. (Dr.) Sonali Mathur  
HoD CSE

Dr. Vikram Bali  
Director



# IMS Engineering College, Ghaziabad

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Under the aegis of IMS Society, Ghaziabad



## CERTIFICATE OF APPRECIATION

*Ms. Sarika Gambhir*

This is to certify that \_\_\_\_\_  
Successfully Co-ordinated and conducted a five-days online faculty development program for  
“**Cloud Based GIS Applications**” during **1<sup>st</sup> Aug – 5<sup>th</sup> Aug, 2022**, organized by Department of  
Information Technology and Department of Computer Science and Engineering at IMS Engineering  
College, Ghaziabad, Uttar Pradesh, India.

Prof. (Dr.) Sonali Mathur  
Convener, HOD CSE

Prof. (Dr.) Sachi Gupta  
Convener, HOD-IT

Prof. (Dr.) S. N. Rajan  
Program Chair, Dean Academic

Dr. Vikram Bali  
Director



# THE NATIONAL INSTITUTE FOR ENTREPRENEURSHIP AND SMALL BUSINESS DEVELOPMENT (NIESBUD)

(Ministry of Skill Development and Entrepreneurship, Government of India)

OLN/17461/22-23/011-(2023/115046/18)

## CERTIFICATE



This is to certify that **Mr. Dr. Subhajit Ghosh** has successfully completed the online Programme on **Faculty Development Program** conducted by The National Institute for Entrepreneurship and Small Business Development from 13 March 2023 to 25 March 2023

*Poonam Sinha*  
(Dr. Poonam Sinha)  
Director

(25 March 2023)  
Issue Date



Signature Not Verified  
Signed By: POONAM  
SINHA  
Signing  
Date: 25.03.2023 06:42





**Dr B R Ambedkar National Institute of Technology Jalandhar**

# **PARTICIPATION CERTIFICATE**

Presented to

**Er VIBHOR HARIT**

of

**IMS ENGINEERING COLLEGE, GHAZIABAD**

for successful completion of *One Week Online Faculty Development Programme* on “*Big Data and Analytics*”  
organized by *Department of Information Technology* from **3-7 April 2023**.

**Dr Vijay Kumar**  
(Convenor)

**Dr Nisha Chaurasia**  
(Convenor)

**Dr Mohit Kumar**  
(Convenor)



Certificate No: 1066/23

**National Institute of  
Technical Teachers Training and Research  
Chandigarh**

MINISTRY OF EDUCATION, GOVERNMENT OF INDIA

**Certificate**



*This is to certify that*

**GURPREET**

**IMS ENGINEERING COLLEGE, GHAZIABAD  
UTTAR PRADESH**

*Participated in the AICTE Recognized Faculty Development Programme*

**on**

**Computer Programming using Python**

*Conducted by*

**Computer Science and Engineering Department**

**from**

**16/01/2023 to 20/01/2023 (One Week)**

**at**

**NITTTR, Chandigarh**



**Coordinator**

**Head of Department**

**Director**



AMET  
UNIVERSITY



## Certificate of Participation

This is to certify that ..... **MRS. BHUMICA VERMA** .....of

**IMS GHAZIABAD**

.....  
*has participated in the DST Sponsored Two Weeks Faculty Development Programme on “**Development of Entrepreneurship and Innovation**” from 29<sup>th</sup> May – 9<sup>th</sup> June 2023 in online mode Organized by Academy of Maritime Education and Training Deemed to be University, Chennai.*

**Mr. A. PONMAAKISHAN**  
Incubation Manager

**Dr. T. SASILATHA**  
Professor and Dean  
International Relations



**Dr B R Ambedkar National Institute of Technology Jalandhar**

# **PARTICIPATION CERTIFICATE**

Presented to

**Er BHUMICA**

of

**IMS, Ghaziabad**

for successful completion of *One Week Faculty Development Programme* on “*Cloud Computing and Its Applications: Opportunities and Challenges*” organized by *Computer Science & Engineering Department* from **16-20 December 2022.**

**Dr Geeta Sikka**  
(Convenor)

**Dr Lalatendu**  
(Coordinator)

**Dr Kunwar Pal**  
(Coordinator)

**Dr Avtar**  
(Coordinator)

**Dr Nisha Chaurasia**  
(Coordinator)

**Dr Mohit Kumar**  
(Coordinator)



**Dr B R Ambedkar National Institute of Technology Jalandhar**

# **PARTICIPATION CERTIFICATE**

Presented to

**Dr DR. SONALI MATHUR**

of

**IMS Engineering College, Ghaziabad**

for successful completion of *One Week Online Faculty Development Programme* on “*ML/DL for Data Science and Analytics using Python*” organized by *Department of Information Technology* from **15-19 February 2023**.

**Dr Nisha Chaurasia**  
**(Convenor)**

**Dr Mohit Kumar**  
**(Convenor)**



**Dr B R Ambedkar National Institute of Technology Jalandhar**

# **PARTICIPATION CERTIFICATE**

Presented to

**Ms BHUMICA**

of

**IMS Ghaziabad**

for successful completion of *One Week Online Faculty Development Programme* on “*Big Data and Analytics*”  
organized by *Department of Information Technology* from **3-7 April 2023**.

**Dr Vijay Kumar**  
**(Convenor)**

**Dr Nisha Chaurasia**  
**(Convenor)**

**Dr Mohit Kumar**  
**(Convenor)**



# IMS Engineering College, Ghaziabad

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Under the aegis of IMS Society, Ghaziabad



IMSEC/FDP/PICSA/2023/49

## Certificate of Participation

This is to certify that

*Dr. Prabhat Kumar Srivastava*

from

**IMS Engineering College, Ghaziabad**

has successfully completed One week online Faculty Development Program on “**Preeminent and Innovative Technologies in Computer Science and Applications 2023 (PICSA 2023)**”, organized by Department of Computer Science and Engineering from **30<sup>th</sup> Jan - 3<sup>rd</sup> Feb, 2023**, at IMS Engineering College, Ghaziabad, Uttar Pradesh, India.

Prof. (Dr.) Sonali Mathur  
HoD CSE

Dr. Vikram Bali  
Director



# IMS Engineering College, Ghaziabad

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Under the aegis of IMS Society, Ghaziabad



IMSEC/FDP/PICSA/2023/50

## Certificate of Participation

This is to certify that

*Mr. Basudeo Singh Roohani*

from

**IMS Engineering College, Ghaziabad**

has successfully completed One week online Faculty Development Program on “**Preeminent and Innovative Technologies in Computer Science and Applications 2023 (PICSA 2023)**”, organized by Department of Computer Science and Engineering from **30<sup>th</sup> Jan - 3<sup>rd</sup> Feb, 2023**, at IMS Engineering College, Ghaziabad, Uttar Pradesh, India.

Prof. (Dr.) Sonali Mathur  
HoD CSE

Dr. Vikram Bali  
Director





# IMS Engineering College, Ghaziabad

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Under the aegis of IMS Society, Ghaziabad

## CERTIFICATE OF PARTICIPATION

This is to certify that

*Ramander Singh*

from

**IMS Engineering College, Ghaziabad**

has successfully completed Five days online Faculty Development Program on “**Research Methodology And Publication Ethics**” during **30<sup>th</sup> Jan - 3<sup>rd</sup> Feb, 2023**, organized by The Department of Computer Science and Department of Biotechnology at IMS Engineering College, Ghaziabad, Uttar Pradesh, India.

Dr. Sonia Juneja  
HoD-CS

Dr. Avinash Singh  
HoD-BT

Dr. Vikram Bali  
Director



**THEIVANAI AMMAL COLLEGE FOR WOMEN**

(An Autonomous Institution Affiliated to the Annamalai University)

(Accredited by NAAC with 'A' grade in 3 cycle)

(A unit of E.S.S.K.Educational Charities) Trichy Trunk Road, Villupuram-605402

## **CERTIFICATE OF PARTICIPATION**



This is to certify that (Dr. / Mr. / Ms.) Ramander Singh  
has participated in Five Days Virtual Faculty Development Programme on “**Positive Aspects of Teaching Practices**” held on 20.02.2023 to 24.02.2023 organized by IQAC and PG & Research Department of Commerce, Theivanai Ammal College for Women(Autonomous), Villupuram

Resource Person  
Dr. C. Paramasivan  
Assistant Professor

Thanthai Periyar Govt College of  
Arts & Science, Trichy

Resource Person  
Dr. P. V. S. Ganesh Subramani  
Associate Professor  
Mary Matha College of  
Arts & Science, Theni

Principal  
Dr. S. Akila  
TACW, Villupuram

DEAN R  
Dr. J. Kalaimathi  
TACW, Villupuram





# MLR INSTITUTE OF TECHNOLOGY

UGC AUTONOMOUS

Dundigal, Hyderabad – 500 043



## CERTIFICATE OF PARTICIPATION

This is to certify that **Shomil Bansal, IMS Engineering College** has participated in the One Week Faculty Development Programme on "**Machine Learning in Big Data Applications and Security Challenges**" organized by **Department of Computer Science and Engineering** from **24<sup>th</sup> - 29<sup>th</sup> April, 2023.**

He/She has successfully completed all the requirements for the completion of the Program.

**Dr. Ajmeera Kiran**

**Convener**

**Dr. A. Balaram**

**HOD-CSE**

**Dr. K. Srinivas Rao**

**Principal**



# MLR INSTITUTE OF TECHNOLOGY

UGC AUTONOMOUS

Dundigal, Hyderabad - 500 043

## **PARTICIPATION CERTIFICATE**

This is to certify that **RAMANDER SINGH, Assistant Professor, IMSEC, GZB** has participated in a one-day National webinar on "**The Art of Writing Research Article and Publishing in High Impact SCOPUS/SCI-E Journals**" organized by **Department of Computer Science and Engineering** on **09<sup>th</sup> June, 2023**.

**Dr. Ajmeera Kiran**  
**Faculty Co-Ordinator**

**Dr. A. Balaram**  
**Convener, HOD-CSE**

**Dr. K. Srinivas Rao**  
**Principal**



## SCHOOL OF FINANCE AND COMMERCE

### *Certificate of Participation*

This is to certify that

Dr. Nitin Mohan

Assistant Professor, IMS Engg College, Ghaziabad

has participated in the one-week online Faculty Development Programme on "Advance Techniques in Research and Quality Publications" organised by the School of Finance and Commerce, Galgotias University, Greater Noida, on May 9-13, 2023

Prof (Dr) Anurag Kumar  
Dean / HOD  
School of Finance & Commerce

Dr Nitin Kumar Gaur  
Registrar  
Galgotias University

Prof (Dr) K. M. Babu  
Vice Chancellor  
Galgotias University





# IMS Engineering College, Ghaziabad

NAAC Accredited & NBA Accredited Programme  
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Under the aegis of IMS Society, Ghaziabad



## CERTIFICATE OF PARTICIPATION

This is to certify that Mr. Ashish Pandey  
from IMS Engineering College has successfully completed Five Days  
online faculty development program on **“Emerging Technologies with applications in Electronics  
and Communication-2022”** during **31<sup>th</sup> Oct - 4<sup>th</sup> Nov, 2022**, organized by Department of Electronics  
and Communication Engineering at IMS Engineering College, Ghaziabad, Uttar Pradesh, India

Handwritten signature of Dr. Balwant Singh in black ink.

Dr. Balwant Singh  
Coordinator

Handwritten signature of Mr. Jaya Nidhi Vashishtha in blue ink.

Mr. Jaya Nidhi Vashishtha  
Co-Coordinator

Handwritten signature of Dr. Jyoti Guglani in blue ink.

Dr. Jyoti Guglani  
Convener, HoD-ECE

Handwritten signature of Dr. Vikram Bali in green ink.

Dr. Vikram Bali  
Director



## Certificate of Participation

This certificate is awarded to

**VARUN CHAUDHARY**

of **IMSEC** participated in an **One Week**

**International FDP: AI Empowered Next Generation Computing Paradigm.**

The program was organized by the Department of **Computer Science and Engineering**,  
Graphic Era (Deemed to be) University Dehradun, Uttarakhand in association with  
**The Institution of Engineers (INDIA) Student Chapter.**

Handwritten signature of Prof. (Dr.) Narpinder Singh.

**Prof. (Dr.) Narpinder Singh**  
Vice Chancellor

Handwritten signature of Prof. (Dr.) D.P Singh.

**Prof. (Dr.) D.P Singh**  
Head of Department

Handwritten signature of Ms Garima Sharma.

**Ms Garima Sharma**  
GEU IEI Convenor, Asst. Professor

Handwritten signature of Prof. (Dr.) Bhaskar Pant.

**Prof. (Dr.) Bhaskar Pant**  
Director Research



**One Week Online**  
**Faculty Development Programme**  
**On**  
**Emerging Trends in Electronics and Communication for IoT**  
**Applications**  
**(ETECIA-2022)**  
**27 June -01 July 2022**

**ETECIA-2022**

The aim of the faculty development program (FDP) is to introduce the faculty with the amazing world of internet of thing (IoT) and its applications. The IoT makes the device, sensors, software that connect the other device and exchange the data and information over the internet and other networks. The IoT is widely used for front line industries, home automation, healthcare, agriculture and military applications. Some common examples of IoT devices include at-home products like Amazon Echo and security cameras, as well as wearable devices like the Apple iWatch etc. This FDP serve a platform for teaching professional, researchers, scientists and industry persons to interact the cutting-edge technologies. Current trend of research and development is the integration of 5G and cloud computing for improving the operational efficiency, reducing cost, and improve decision making capabilities.

**About the Institute:**

IMSEC is one of the top-notch engineering colleges in North India located in Delhi NCR, providing technical education and 100% employability prospects to its students. The college has been ranked 5<sup>th</sup> in North Zone by Times Engineering College Survey 2021 and 4<sup>th</sup> in Uttar Pradesh by CSR-GHRDC Engineering College Survey 2021.

IMSEC Ghaziabad is NAAC Accredited for maintaining world-class quality in Education & Infrastructure and the Department of Information Technology is NBA accredited. The college has highly experienced and dedicated faculty members, state-of-art laboratories, computer centers, learning resource centers and wholesome pedagogic skills/pedagogical techniques are being provided to students. IMSEC Ghaziabad, is a TCS Accredited college for Placements & Project Activities.

Faculty at IMS Engineering College have been recruited as per quality policy ensuring that the faculty members have educational and technical backgrounds from institutions of national/international repute and none is below a master degree. A large number of them

are being regularly deputed to undergo training programs and attending conferences and seminars to enhance their expertise. The IMSEC motto of imparting quality education is reflected by its academic results and placement. IMS Engineering College, an endeavor of IMS Society, is continuously endeavoring to make its students technically skilled, innovative, behaviorally disciplined, and morally ethical to excel in the global corporate scenario.

**Address:** NH-24, Adhyatmik Nagar, Near Dasna, Dist- Ghaziabad 201015, Uttar Pradesh, Delhi NCR, India.

**Website:** [www.imsec.ac.in](http://www.imsec.ac.in)

**Contact:** 0120-4940000

## Scope of the FDP Programme

The aim of the faculty development program (FDP) is to introduce the faculty with the amazing world of internet of thing (IoT) and its applications. The IoT makes the device, sensors, software that connect the other device and exchange the data and information over the internet and other networks. The IoT is widely used for front line industries, home automation, healthcare, agriculture, and military applications. This FDP serve a platform for teaching professional, researchers, scientists, and industry persons to interact the cutting-edge technologies. Current trend of research and development is the integration of 5G and cloud computing for improving the operational efficiency, reducing cost, and improve decision making capabilities.

## Eligibility

Faculty members/Engineering professionals of the AICTE approved institutions/Universities and Industries can apply for this program. However, research scholars with an ambition to study this exciting area are also welcome.

## Registration Link

<https://forms.gle/dX989J7LCbJ85Eg2A>

- **No Registration Fee.**
- The number of participants is limited to hundred and the selection is based on first come - first served basis.
- Online google meet/Zoom link will be provided through Whatsapp/E-mail

## Important Dates

Last date (Online Registration): **02.07.2022**

Selected Participants will be notified through email by **03.07.2022**.

## Certification

An E-Certificate will be provided to every participant upon successful completion of the FDP i.e. after at least 80% attendance and securing > 60% marks in online quiz.

## Resource Persons

- Dr. Sayeed Ahmad, Assistant Professor, National Institute of Technology, Srinagar, India
- Dr. Ankur Kumar, Indian Institute of Information Technology, Una, India
- Dr. Kundan Kumar, Sant Longowal Institute of Engineering & Technology, Punjab, India
- Dr. Yogendra Upadhyay, Assistant Professor, Chandigarh University, Punjab, India
- Dr. Prashant Upadhyay, Assistant Professor, Chandigarh University, Punjab, India
- Dr. Sudhakar Singh, Lovely Professional University, Punjab, India
- Dr. Manmohan Singh, Meerut Institute of Engineering and Technology, Uttar Pradesh, India
- Dr. Deepak Agrawal, Madanapalle Institute of Technology & Science, Andhra Pradesh, India
- Dr. Vivek Rajpoot, Aditya Engineering College, Andhra Pradesh, India



Estd. 2002

# IMS Engineering College, Ghaziabad

## About the Institute

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IMSEC Ghaziabad is NAAC Accredited for maintaining world-class quality in Education & Infrastructure and the Department of Information Technology is NBA accredited. The college has highly experienced and dedicated faculty members, state-of-art laboratories, computer centers, learning resource centers and wholesome pedagogic skills/pedagogical techniques are being provided to students. IMSEC Ghaziabad, is a TCS Accredited college for Placements & Project Activities.

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**Visionary Mentor**

Shri Naresh Agarwal,  
Hon'ble Chairman, IMS Society



**Chief Patron**

Dr. Sanjay Agarwal,  
Hon'ble Treasurer, IMS Society



**Patron**

Dr. Vikram Ball,  
Director, IMSEC Ghaziabad

## Convener:

Dr. Jyoti Guglani  
HoD  
ECE, IMSEC Ghaziabad

## Coordinator:

Dr. Ajay Kumar  
Assistant Professor,  
ECE, IMSEC Ghaziabad

Address: NH-24, Adhyatmik Nagar, Near Dasna,  
Dist- Ghaziabad 201015, Uttar Pradesh, Delhi NCR, India.

**TollFree:**  
18001028393

**Contact us:**  
0120-4940000

**Website:**  
[www.imsec.ac.in](http://www.imsec.ac.in)

## About Department of ECE

The Department of Electronics and Communications Engineering (ECE) involves researching, designing, developing and testing of electronic equipment used in various systems. Electronics and Communications engineers also conceptualize and oversee the manufacturing of communications and broadcast systems. This stream of engineering deals with analog transmission, basic electronics, microprocessors, solid state devices, digital & analog communication, analog integrated circuits, microwave engineering, satellite communication, antenna and wave propagation. It also deals with the manufacturing of electronic devices, circuits, and communications equipment. This branch of engineering also plays a vital role ensuring fastest means of communication across the world.

The Electronics and Communication department at IMSEC was established on 2002 and since then offering BTech (4 years) degree course under AKTU, Lucknow. The department has established Electronics lab, Communication Lab, PCB & Electronic workshop, Analog Integrated Circuit lab, Digital integrated Circuit lab, Power Electronics Lab, CAD Lab and Microwave and Optical Communication Lab, Microprocessor lab, DSP lab. All labs are well equipped with all modern electronics testing, measuring instruments and software as per the course requirement. Since its inception, the department has continuously grown and taken initiatives to impart quality education and inculcate research aptitude in ECE steam students. The department is actively engaged in research activities in various areas of Electronics and Communication Engineering and associated fields. Major research areas are Control and Automation, Microelectronics and VLSI, RF and Microwaves, Signal Processing, Communications & Networks.

## Vision of Department:

To produce highly competent engineers by imparting innovative and accomplished information through global education and adequately prepare them to face the challenges of outside world by fulfilling the requirements of Electronics & Communication industries.

## Mission of Department:

- To make the department a center of excellence in Electronics & Communication Engineering and to produce eminent engineers.
- To inculcate professionalism, team work, leadership qualities by imbibing high human values and professional ethics, in students.
- To enhance the employability of students by giving inter-disciplinary knowledge to meet the need of society and become globally competitive professionals.
- To become a center for research in the stream of Electronics & Communication Engineering and to provide excellent learning environment for researchers by promoting research activities in the department.

## Organising Committee:

- Dr. Praveen Chaurasia (ECE, IMSEC)
- Ms. Sulekha Saxena (ECE, IMSEC)
- Dr. Balwant Singh (ECE, IMSEC)
- Ms. Mayurika Saxena (ECE, IMSEC)
- Mr. Jaya Nidhi Vashishtha (ECE, IMSEC)
- Dr. Neeraj Jain (ECE, IMSEC)
- Dr. Chandan Choubey (ECE, IMSEC)
- Mr. V.K. Agrawal (ECE, IMSEC)



Estd. 2002

One Week Online  
Faculty Development Programme  
On

# Emerging Trends in Electronics and Communication for IoT Applications (ETECIA-2022)

04<sup>th</sup> July - 08<sup>th</sup> July 2022

organized by:

Department of  
Electronics and Communication Engineering,  
IMSEC Ghaziabad,

## Address of Correspondence:

Dr. Ajay Kumar  
Department of Electronics and  
Communication Engineering  
Coordinator (ETECIA-2022)  
+91-9193090201



# **Registration Form**

# REGISTRATION FORM FACULTY DEVELOPMENT PROGRAMME (FDP)

One Week Online Faculty Development Programme On "Emerging Trends in Electronics and Communication for IoT Applications" (ETECIA-2022) 04 July-08 July 2022

\* Indicates required question

---

1. Title \*

*Mark only one oval.*

Mr.

Ms.

Dr.

Prof.

2. Full Name \*

---

3. Designation \*

---

4. Organization Name \*

---

5. Mobile No. \*

---

6. Email Address \*

---

7. WhatsApp Mobile No. \*

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Google Forms



# **FDP Schedule**





## One Week Online Faculty Development Program on “Emerging Trends in Electronics and Communication for IoT Applications”

### DAY 1: July, 04, 2022 (MONDAY)

EVENT TIME	PERSON
12:45 PM to 1:15 PM	Inaugural Programme
01:15 PM -02:15 PM	<b>Dr. Sudhakar Singh</b> Lovely Professional University, Punjab, India Topic: "Role of AI in the startups"
02:30 PM -03:30 PM	<b>Dr. Vivek Rajpoot</b> Academy Engineering College, Andhra Pradesh, India Topic: "Cognitive Radio: The Future of Wireless Communication Technology"

### DAY 2: July, 05, 2022 (TUESDAY)

EVENT TIME	PERSON
01:15 PM -02:15 PM	<b>Dr. Prashant Upadhyay</b> Chandigarh University, Punjab, India Topic: "Hands-on Sessions-"Augmented Reality (AR)"
02:30 PM -03:30 PM	<b>Dr. Prashant Upadhyay</b> Chandigarh University, Punjab, India Topic: "Hands-on Sessions-"Augmented Reality (AR)"

### DAY 3: July, 06, 2022 (WEDNESDAY)

EVENT TIME	PERSON
01:15 PM -02:15 PM	<b>Dr. Sayeed Ahmad</b> National Institute of Technology, Srinagar, India Topic: "Low Power SRAM Design for IoT Enabled Systems"
02:30 PM -03:30 PM	<b>Dr. Ankur Kumar</b> Indian Institute of Information Technology, Una, India Topic: "Advancement in Low Power VLSI Circuits"

### DAY 4: July, 07, 2022 (THURSDAY)

EVENT TIME	PERSON
01:15 PM -02:15 PM	<b>Dr. Manmohan Singh</b> Meerut Institute of Engineering and Technology, Uttar Pradesh, India Topic: "Recent development in III-V heterostructures for high frequency applications"
02:30 PM -03:30 PM	<b>Dr. Yogendra Upadhyay</b> Assistant Professor, Chandigarh University, Punjab, India Topic: "Design of Nano Devices and Sensors Applications"

### DAY 5: July, 08, 2022 (FRIDAY)

EVENT TIME	PERSON
01:15 PM -02:15 PM	<b>Dr. Kundan Kumar</b> Sant Longowal Institute of Engineering and Technology, Longowal, Punjab, India Topic: "Substrate Integrated Waveguide Self Multiplexing Antennas for 5G and IoT Applications"
02:30 PM -03:30 PM	<b>Dr. Deepak Agrawal</b> Madanapalle Institute of Technology & Science, Andhra Pradesh, India Topic: "Design of configurable analog blocks suitable for IoT applications"

# **Speaker Profile**

**Dr. Prashant Upadhyaya** is presently working as an Associate Professor in the Department of Electronics and Communication Engineering, Chandigarh University (CU), Mohali. Prior to joining CU, Dr. Prashant have worked as an Assistant Professor in the EC Department BIT- Gorakhpur-Uttar Pradesh.

Dr. Prashant have a total experience of 14+ Years in the field of academia/research and industry and also working as a committee member of NAAC, NBA at Chandigarh University.

About his education, Dr. Prashant received a B.Tech. degree in ECE from Uttar Pradesh Technical University (UPTU), Lucknow, India in 2006, M.Tech and a Ph.D. degree in Communication and Information System, from Aligarh Muslim University, Aligarh, India, in 2012 and 2019 respectively.

He was awarded the precious Institution of Electronics and Telecommunication Engineers (IETE) Research Fellowship in April 2017. Also, the best paper award in International Conference on Multimedia, Signal Processing and Communication Technologies, IMPACT-13, AMU Aligarh.

He has given several talk in National/International webinars/FDP and also served as a session chair in the IEEE conference ICACFCT-2021 MIET, organized at Meerut, India and IEEE volunteer in IMPACT-2017 and IMPACT-2011 organized at AMU-Aligarh, 2011.

Dr. Prashant area of researches includes audiovisual speech processing, image processing, biomedical engineering, Internet of Things (IoT), and machine learning application. He has authored about 30+ research articles in reputed international/national (SCI/Scopus) journals and conferences and more are awaited.

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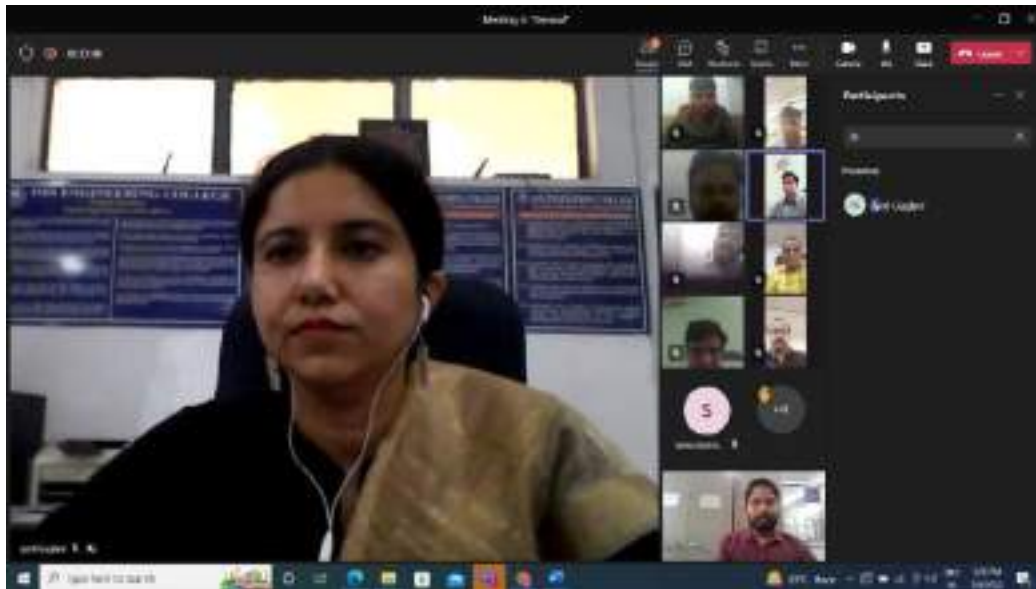
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## Faculty Development Program (FDP) Pictures



# **Participant Quiz**

# Quiz-I

Topic: "Role of AI in the startups"

\* Indicates required question

---

1. Name \* 1 point

\_\_\_\_\_

2. Identify the language preferred for IoT analytics. \* 1 point

*Mark only one oval.*

Python

HTML

PHP

C++

Other: \_\_\_\_\_

3. Identify the incorrect advantage of IoT. \* 1 point

*Mark only one oval.*

Reduce waste

Enhance data Collection

Enhance Customer Engagement

Security

Other: \_\_\_\_\_

4. IoT stands for \_\_\_\_\_ \*

1 point

*Mark only one oval.*

- Internet of Thing
- Internet of Technology
- Incorporate of Thing
- Incorporate of Technology
- Other: \_\_\_\_\_

5. For success of an entrepreneurial business, which of the following is required? \*

1 point

*Mark only one oval.*

- Vision
- Strategy
- Execution
- All of the above
- Other: \_\_\_\_\_

6. Which of the following is not an IoT device? \*

1 point

*Mark only one oval.*

- Table
- Laptop
- Arduino
- Tablet
- Other: \_\_\_\_\_

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# Quiz-IX

“Design of configurable analog blocks suitable for IoT applications”

\* Indicates required question

---

1. Name

---

2. Mobile Number

---

3. In which material will have an excess of holes? \*

*Mark only one oval.*

- P-type
- N-type
- Both a and b
- None of the above

4. What is the unit of gain? \*

*Mark only one oval.*

- Joules
- Ohms
- Unit less
- Amperes

5. A differential amplifier ..... \*

*Mark only one oval.*

- is a part of an Op-amp
- has one input and one output
- has two outputs
- answers (1) and (2)

6. For an Op-amp with negative feedback, the output is ..... \*

*Mark only one oval.*

- equal to the input
- increased
- fed back to the inverting input
- fed back to the noninverting input

7. The Op-amp can amplify \*

*Mark only one oval.*

- a.c. signals only
- d.c. signals only
- both a.c. and d.c. signals
- neither d.c. nor a.c. signals

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# **Participant Certificate**



# IMS Engineering College, Ghaziabad

NAAC Accredited & NBA Accredited Programme  
Approved by AICTE, New Delhi & Affiliated to AKTU, Lucknow  
Under the aegis of IMS Society, Ghaziabad



## CERTIFICATE OF PARTICIPATION

*Dr. Ravi Sharma*

This is to certify that \_\_\_\_\_  
from IMS Engineering College Ghaziabad has successfully completed one-week online  
faculty development program on “**Emerging Trends in Electronics and Communication for  
IoT Applications**” during **4<sup>th</sup> July - 8<sup>th</sup> July, 2022**, organized by Department of Electronics and  
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Coordinator

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Convener, HOD-ECE

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Dr. Vikram Bali  
Director



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# **Speaker Certificates**





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# CERTIFICATE

## OF APPRECIATION



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Indian Institute of Information Technology, Una, India

**Topic: “Advancement in Low Power VLSI Circuits”**

**Guest Speaker**

For imparting his valuable thoughts in the

One-week online faculty development program on

**“Emerging Trends in Electronics and Communication for IoT Applications”**

during **4<sup>th</sup> July - 8<sup>th</sup> July, 2022,**

**Organized by**

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**Topic: “Role of AI in the startups”**

**Guest Speaker**

For imparting his valuable thoughts in the

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Mr.	P Ramesh Kumar	Associate Professor	Aditya College of Engineering and Technology, Surampalem-533437, Andhra Pradesh, India	ramesh.padala@acet.ac.in
Mr.	Mukesh Pathela	Assistant Professor	Tula's Institute, Dehradun	mukeshpathela@gmail.com
Ms.	Alekhya Yalla	Assistant professor	Aditya College of Engineering and Technology, Surampalem-533437, Andhra Pradesh, India	alekhya4888@gmail.com
Ms.	Alekhya Yalla	Assistant Professor	Aditya College of Engineering and Technology, Surampalem-533437, Andhra Pradesh, India	alekhya4888@gmail.com

Mr.	K L V PRASAD	Assistant professor	Aditya College of Engineering and Technology, Surampalem-533437, Andhra Pradesh, India	vijayaprasad431@gmail.com
Ms.	Sneha M JOSEPH	Assistant professor	Aditya College of Engineering and Technology, Surampalem-533437, Andhra Pradesh, India	snehamjoseph@gmail.com





# IMS Engineering College, Ghaziabad

## Department of Electronics and Communication Engineering

Date: 05/11/2022

### Summary of Five-day FDP on Emerging Technologies with applications in Electronics and Communication-2022

The Objective of FDP is the enhancing the knowledge of participant in emerging technologies for IoT, Biomedical, 5G, Optical Communication, Generic Optoelectronic Devices, Laser System, Cognitive Radio, Health Care, Speech Recognition and Future Business Network.

Department of Electronics and Communication Engineering organize a Five-Day online FDP on “**Emerging Technologies with applications in Electronics and Communication-2022**” dated from 31/10/2022 to 04/11/2022. The FDP cover ed following topics:

1. **Design architecture of wearable antennas for Biomedical applications** delivered by **Dr. Narbada Prasad Gupta** (Principal, JNCT Bhopal)
2. **Antennas for IOT applications** delivered by **Dr. M. R. Tripathy** (Professor, ASET Noida)
3. **Free space optical communication: issues and challenges** delivered by **Dr. Abhilash Mandloi** (Associate Professor, SV NIT Surat)
4. **Data Acquisition System for Automation of Laser Systems** delivered by **Dr. Rajeev Dohare**, (DRDO, New Delhi , Additional Director and Scientist E)
5. **5 G Technology** delivered by **Dr. Neelesh Kumar Gupta** (Professor, AKGEC Ghaziabad)
6. **Spectrum Sensing for Cognitive Radio Using Energy and Entropy Detection** delivered by **Dr. Ram Sewak Singh** (Assistant Professor, School of Electrical Engineering and Computing Adama Science and Technology University, Adama Ethiopia)
7. **Security in the IoT Space** delivered by **Dr. Sandeep Kumar Singh** (Assistant Professor, NIT Hameerpur)
8. **A Peak into Future Business Networks and infrastructure trends** delivered by **Mr. Ghan Vashishtha** (Co-founder & CTO, Zeeve Inc., USA)
9. **Brain Tumor Detection, Classification from Magnetic Resonance Images using Machine Learning Approach and Implementation Through Embedded System Platform** delivered by the **Dr. Satyasis Mishra** (Associate Professor, School of Electrical Engineering and Computing Adama Science and Technology University, Adama Ethiopia.)
10. **Recent trends and challenges in Automatic speech recognition** delivered by **Dr. Astik Biswas** (Principal member of technical staff, Oracle Health & AI)
11. **Advanced Hybrid Nanomaterials for Optoelectronic and Biosensor Applications** delivered by **Dr. Sumit Kumar** (Associate Professor, LPU Punjab).

12. **Fundamentals of Cloud Computing** delivered by **Mr. Yogesh Arora** (GM, Mindtree, Gurugram).
13. **Implications of Machine Learning Strategies in Computer Vision applications for Image Analysis** delivered by **Dr. Shallu Sharma** (Scientist, NINS Lab, National Brain Research centre, Manesar).

This program is being organized for faculties of engineering and technological institutions, industry professionals, research scholars, and UG/PG students who are willing to broaden their knowledge base Antennas for Biomedical & IoT applications along with security in IoT Space, 5G Technology, Free Space Optical Communication, Fabrication of Generic Optoelectronic Devices, Data Acquisition System of Laser Systems, Spectrum Sensing for Cognitive Radio, Brain Tumor Detection by Machine Learning & Embedded System, Automatic Speech Recognition, and Future Business Networks and infrastructure trends.

This FDP have 115 participants from various engineering colleges and industries. Participation certificate is provided by the organizing committee after the successful completion of the quiz test by participant. Opening and closing ceremony is addressed by our respected director Dr. Vikram Bali. The FDP was hosted by Dr. Balwant Singh.



# IMS Engineering College, Ghaziabad

Dates:	Topic:	Time:
Oct 31, 2022	Inauguration	10AM-11AM
Oct 31, 2022	Design architecture of wearable antennas for Biomedical applications	11AM-12PM
<b>Speaker: Dr. Narbada Prasad Gupta</b>		
Oct 31, 2022	Antennas for IOT applications	2:30PM to 3:30PM
<b>Speaker: Dr. M. R. Trpathy</b>		
Nov 01, 2022	Recent trends and challenges in Automatic speech recognition	11AM-12PM
<b>Speaker: Dr. Astik Biswas</b>		
Nov 01, 2022	Data Acquisition System for Automation of Laser Systems	1:30PM to 2:30PM
<b>Speaker: Mr. Rajeerv Dohare</b>		
Nov 01, 2022	Advanced Hybrid Nanomaterials for Optoelectronic and Biosensor Applications	2:30PM to 3:30PM
<b>Speaker: Dr. Sumit Kumar</b>		
Nov 02, 2022	Security in the IoT Space	11AM-12PM
<b>Speaker: Dr. Sandeep Kumar Singh</b>		
Nov 02, 2022	Spectrum Sensing for Cognitive Radio Using Energy and Entropy Detection	1:30PM to 2:30PM
<b>Speaker: Dr. Ram Sewak Singh</b>		
Nov 02, 2022	Implications of Machine Learning Strategies in Computer Vision applications for Image Analysis	2:30PM to 3:30PM
<b>Speaker: Dr. Shailu Sharma</b>		
Nov 03, 2022	Fundamentals of Cloud Computing	11AM-12PM
<b>Speaker: Mr. Yogesh Arora</b>		
Nov 03, 2022	A Peak into Future Business Networks and infrastructure trends	1:30PM to 2:30PM
<b>Speaker: Mr. Ghan Vashishtha</b>		
Nov 03, 2022	5G Technology	2:30PM to 3:30PM
<b>Speaker: Dr. Neelesh Kumar Gupta</b>		
Nov 04, 2022	Brain Tumor Detection, Classification from Magnetic Resonance Images using Machine Learning Approach and Implementation Through Embedded System Platform	1:30PM to 2:30PM
<b>Speaker: Dr. Satyasis Mishra</b>		
Nov 04, 2022	Free space optical communication: issues and challenges	2:30PM to 3:30PM
<b>Speaker: Dr. Abhilash Mandloi</b>		
Nov 04, 2022	Conclusion/Feedback/Quiz	3:30PM to 4:30PM



**Visionary Mentor**  
Shri Naresh Agarwal,  
Hon'ble Chairman, IMS Society



**Chief Patron**  
Shri Sanjay Agarwal,  
Hon'ble Treasurer, IMS Society



**Patron**  
Dr. Vikram Bali,  
Director, IMSEC Ghaziabad



**Program Chair**  
Dr. Jyoti Guglani  
Hod, ECE, IMSEC Ghaziabad



**Coordinator**  
Dr. Balwant Singh  
Assistant Professor  
ECE, IMSEC Ghaziabad



**Co-Coordinator**  
Prof. Jaya Nidhi Vashishtha  
Assistant Professor  
ECE, IMSEC Ghaziabad

### About the Institute:

IMSEC Ghaziabad is one of the top-notch Engineering colleges in North India, providing technical education and 100% employability prospects to its students. It is ranked 5<sup>th</sup> in North zone among the top Private Engineering colleges by Times Engineering Institute Ranking Survey 2022. In top 125 Private Engineering Institute Rankings 2022, the institute stands at position 14<sup>th</sup>. On all India basis, among the Top 170 Engineering Institute Rankings 2022, IMS Engineering College ranks at 19<sup>th</sup> position. In context to best Placements, the livewire of any academic institutions, in short-listed Top 70 Private Institutions, we are distinguished at 13<sup>th</sup> position. In the domain of Research capability, IMSEC has consolidated itself at 20<sup>th</sup>, out of 30 top Engineering colleges' list.

In the survey conducted by Competition Success Review (CSR) for the session 2022-2023, IMSEC has been ranked at 4<sup>th</sup> position in the entire estate of Uttar Pradesh. Last but not least, "Institute's Innovation Council an inevitable wing of Ministry of Education Initiative", IMSEC has been given a 4 star rating.

IMSEC is NAAC Accredited for maintaining world-class quality in Education & Infrastructure and one of its courses, B.Tech. (Information Technology) is NBA accredited upto 2024. Highly experienced and dedicated faculty team, state-of-art laboratories, computer centres, learning resource centres and wholesome pedagogic skills/pedagogical techniques provide the students highly exciting and gainful opportunities to acquire knowledge and technical expertise necessary for grooming and orienting their creative young minds. IMSEC is a TCS Accredited college for Placements & Project Activities.

NH-24, Adhyatmik Nagar, Distt:Ghaziabad (UttarPradesh) 201015

**TollFree:**  
18001028393

**Contact us:**  
0120-4940000

**Website:**  
www.imsec.ac.in

Five Days Online Faculty Development Programme on

# Emerging Technologies with applications in Electronics and Communication-2022

31<sup>st</sup> Oct - 04<sup>th</sup> Nov 2022

Organized by:

Department of Electronics and Communication Engineering

Registration is free

Youtube Broadcast link: <https://youtu.be/HH6lggO1hx0>

Registration Link: <https://forms.gle/ywvrf3tvSejUg84w9>

Last Date of Registration: 27<sup>th</sup> October 2022

Contact for any Queries

9818652320 (Dr. Balwant Singh) | [balwant.singh@imsec.ac.in](mailto:balwant.singh@imsec.ac.in)

### About the Program:

The FDP seeks to develop an understanding of Antennas for Biomedical & IoT applications along with security in IoT Space, 5G Technology, Free Space Optical Communication, Fabrication of Generic Optoelectronic Devices, Data Acquisition System of Laser Systems, Spectrum Sensing for Cognitive Radio, Brain Tumor Detection by Machine Learning & Embedded System, Automatic Speech Recognition, and Future Business Networks and infrastructure trends.

### Objective of the Program:

The aim of this FDP is to introduce the participants to the amazing world of Electronics and Communication and its fascinating applications. The emerging ideas in Electronics and Communication of making devices and objects smarter by linking them to the internet will be discussed in this FDP. These technology with immense engineering applications is the need for today's industry and academia. This FDP serves as a platform to train and educate the research scholars, faculty, and people from industry to interact on cutting-edge technologies in this emerging area.

# **FDP Schedule**

**IMSEC Ghaziabad**  
**Department of Electronics and Communication Engineering**

Date: 31/10/2022 to 04/11/2022

*Five Days online FDP*

*on*

***Emerging Technologies with applications in Electronics and Communication-2022***

S.N.	Faculty Name	College/Organization	Topic	Phone	Mail Id	Date	Shift
<b>Inauguration</b>							10.00 am to 11.00 am
1	Dr. Narbada Prasad Gupta (Principal)	JNCT Bhopal	Design architecture of wearable antennas for Biomedical applications	9911313727	<a href="mailto:ernarbada@gmail.com">ernarbada@gmail.com</a>	31/10/2022 (Monday)	(11.0 am to 12.00 pm)
2	Dr. M. R. Tripathy (Professor)	ASET Noida	Antennas for IOT applications	8920090212	<a href="mailto:mrtripathy@amity.edu">mrtripathy@amity.edu</a>	31/10/2022 (Monday)	(2.30 pm to 3.30 pm)
3	Dr. Astik Biswas (Principal member of technical staff)	Oracle Health & AI	Recent trends and challenges in Automatic speech recognition	8018358059	<a href="mailto:astik.biswas@oracle.com">astik.biswas@oracle.com</a>	1/11/2022 (Tuesday)	(11.0 am to 12.00 pm)
4	Mr. Rajeev Dohare	DRDO, New Delhi (Additional Director and Scientist E)	Data Acquisition System for Automation of Laser Systems	9868672224	<a href="mailto:rajeevkumardohare@gmail.com">rajeevkumardohare@gmail.com</a>	1/11/2022 (Tuesday)	(1.30 pm to 2.30 pm)
5	Dr. Sumit Kumar (Associate Professor)	LPU Punjab	Advanced Hybrid Nanomaterials for Optoelectronic and Biosensor Applications	9466901108	<a href="mailto:sumit_24786@lpu.co.in">sumit_24786@lpu.co.in</a>	1/11/2022 (Tuesday)	(2.30 pm to 3.30 pm)
6	Dr. Sandeep Kumar Singh (Assistant Professor)	NIT Hameerpur	Security in the IoT Space	8800988592	<a href="mailto:sk Singh@nith.ac.in">sk Singh@nith.ac.in</a>	2/11/2022 (Wednesday)	(11.0 am to 12.00 pm)
7	Dr. Ram Sewak Singh (Assistant Professor)	School of Electrical Engineering and Computing Adama Science and Technology University, Adama Ethiopia	Spectrum Sensing for Cognitive Radio Using Energy and Entropy Detection.	251984248360	<a href="mailto:ram.singh@astu.edu.et">ram.singh@astu.edu.et</a>	2/11/2022 (Wednesday)	1.30 pm to 2.30 pm
8	Dr. Shally Sharma (Scientist)	NINS Lab, National Brain Research centre, Manesar	Implications of Machine Learning Strategies in Computer Vision applications for Image Analysis	9996275181	<a href="mailto:shally.hari16@gmail.com">shally.hari16@gmail.com</a>	2/11/2022 (Wednesday)	(2.30 pm to 3.30 pm)
9	Mr. Yogesh Arora (GM)	Mindtree, Gurugram	Fundamentals of Cloud Computing	9971699230	<a href="mailto:yogesharora82@gmail.com">yogesharora82@gmail.com</a>	3/11/2022 (Thursday)	(11.0 am to 12.00 pm)
10	Mr. Ghan Vashishtha (Co-founder & CTO)	Zeeve Inc., USA	A Peak into Future Business Networks and infrastructure trends	14242313582	<a href="mailto:ghan@zeeve.io">ghan@zeeve.io</a>	3/11/2022 (Thursday)	(1.30 pm to 2.30 pm)
11	Dr. Neelesh Kumar Gupta (Professor)	AKG Ghaziabad	5 G Technology	9826191439	<a href="mailto:guptaneesh@akgec.ac.in">guptaneesh@akgec.ac.in</a>	3/11/2022 (Thursday)	(2.30 pm to 3.30 pm)
12	Dr. Satyasis Mishra (Associate Prof.)	School of Electrical Engineering and Computing Adama Science and Technology University, Adama Ethiopia	Brain Tumor Detection, Classification from Magnetic Resonance Images using Machine Learning Approach and Implementation Through Embedded System Platform	251904433042	<a href="mailto:satyasis.mishra@astu.edu.et">satyasis.mishra@astu.edu.et</a>	4/11/2022 (Friday)	(1.30 pm to 2.30 pm)
13	Dr. Abhilash Mandloi (Associate Professor)	SV NIT Surat	Free space optical communication: issues and challenges	7016786449	<a href="mailto:asm@eced.svnit.ac.in">asm@eced.svnit.ac.in</a>	4/11/2022 (Friday)	(2.30 pm to 3.30 pm)
<b>Conclusion/Feedback/Quiz</b>						4/11/2022 (Friday)	(3.30 pm to 4.30 pm)

Five Days online FDP  
on  
**Emerging Technologies with applications in Electronics and Communication-2022**



Mr. Rajeev Dohare  
DRDO, New Delhi (Additional  
Director and Scientist E)



Dr. Abhilash Mandloi,  
Associate Professor, SVNIT Surat



Dr. Narbada Prasad Gupta Principal,  
JNCT Bhopal



Mr. Yogesh Arora  
GM, Mindtree, Gurugram



Mr. Ghan Vashishtha  
Co-founder & CTO, Zeeve Inc.,  
USA



Dr. Astik Biswas  
Principal member of technical staff,  
Oracle Health & AI



Dr. M. R. Trpathy,  
Professor, ASET Noida



Dr. Sandeep Kumar Singh Assistant  
Professor, NIT Hameerpur



Dr. Neelesh Kumar Gupta  
Professor, AKGEC, Ghaziabad

Five Days online FDP  
on  
**Emerging Technologies with applications in Electronics and Communication-2022**



Dr. Shallu Sharma  
Scientist, NINS Lab, National  
Brain Research Centre, Manesar



Dr. Sumit Kumar  
Associate Professor, LPU Punjab



Dr. Ajay Kumar  
Assistant Professor, IMSEC  
Ghaziabad



Dr. Ram Sewak Singh  
Assistant Professor, School of  
Electrical Engineering and  
Computing Adama Science and  
Technology University, Adama  
Ethiopia



Dr. Satyasis Mishra  
Associate Prof., School of  
Electrical Engineering and  
Computing Adama Science and  
Technology University, Adama  
Ethiopia

AMITY UNIVERSITY

## Advanced MIMO

FD-MIMO BS

Elevation Beamforming

Azimuth Beamforming

FD-MIMO simultaneously supports elevation & azimuth beamforming and > 10 MSs MU-MIMO

LTE Rel-13 Pre-Release Small Cell eNodeB

Figure 16 Example of FD-MIMO Deployment

Request control Pop-out People Chat Reactions Screen More Camera Mic Share Leave

Participants

Type a name

Share invite

In the meeting (1)

JN Vaidya Organizer

Five Days online FDP  
on  
**Emerging Technologies with applications in Electronics and Communication-2022**

### On-Body Antenna

- The On-body antenna is designed by considering the human skin effect.










Figure 1. (a) Back view (b) Side view (c) Top view [7]      Figure: Prototype [7]


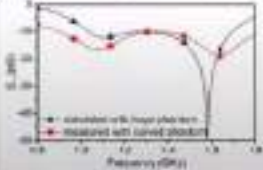




Figure 3. Antenna with curve prototype [7]      Figure: Simulated and measured S11 of the antenna [7]



AK

DG

Pooja Kumar E.C.      Dr. Santhosh E.

NG

OFF


Nimesha Sankar E.

JV

Print
ESC
to exit full screen

### History and modernization of ASR

- ▶ Hidden Markov model (HMM) was back-end of the ASR < 2010
- ▶ With the evolution of GPU computational power neural network (with HMM or without HMM) is now at the back-end of the state of the art ASR technologies > 2010.



Amazon  
Alexa



Cortana



Siri






Google Assistant

1 word	16 words	1000 words	10K+ words
Freq. detector	Isolated word recognition	Connected speech	LVCSR systems









RJ

BS

Prashant Kumar E.C.      Nimesha Sankar E.

VT

OFF

Nimesha Sankar E.



Five Days online FDP  
on  
Emerging Technologies with applications in Electronics and Communication-2022



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on  
Emerging Technologies with applications in Electronics and Communication-2022


### Why Cloud – Ever-growing Tech. Needs



- IT Infrastructure - Servers, Storage, NW, Security
- Connectivity
- Hosting Infrastructure – Datacenters, Server Rooms, Global and Regional locations
- Peripherals - Electricity, Air Conditioning, Generators, Fuel, UPS, Fire Safety etc.
- Maintenance and Management
- Ageing and continuous replacements
- Idle times and Investment Costs

Exit full screen (f)

### Top 10 Networking Technology Trends



- AI & ML
- 5G and Wi-Fi 6
- AR/VR
- Internet of Things (IIOT)
- Hybrid Based Network (HBN)
- Digital Transformation
- SD-WAN
- Cloud Computing
- Data Security
- DevOps

Press [Esc] to exit full screen

Five Days online FDP  
on  
Emerging Technologies with applications in Electronics and Communication-2022

### Mobile Generations

The diagram illustrates the evolution of mobile communication technologies over time. It features a horizontal timeline with arrows pointing from left to right, representing the progression of generations. The timeline is divided into several color-coded sections: 1990-1995 (GSM, GPRS, EDGE), 2000-2005 (EDGE+, Evolution), 2010-2015 (3G, UMTS, HSPA+, UMTS-A), 2015-2020 (4G, LTE, LTE-A, LTE-B, LTE-C), and 2020 (5G NR, New Air Interface). Above the timeline, the underlying technologies are listed: GSM+GPRS+TDMA, GPRS+TDMA+GPRS, QAM+OFDM+MIMO, and New Air Interface. A small yellow box with the number '3' is located in the top right corner of the slide.

5G NR: The New Radio interface for 5G.  
The 5G air interface that scales from cellular to the mm-wave bands.

Timeline: 1990, 1995, 2000, 2005, 2010, 2015, 2020

Technologies: GSM, GPRS, EDGE, EDGE+, Evolution, 3G, UMTS, HSPA+, UMTS-A, 4G, LTE, LTE-A, LTE-B, LTE-C, 5G, New Air Interface

### Brain Tumor Detection, Classification from Magnetic Resonance Images Using Machine Learning Approach and Implementation Through Embedded System Platform

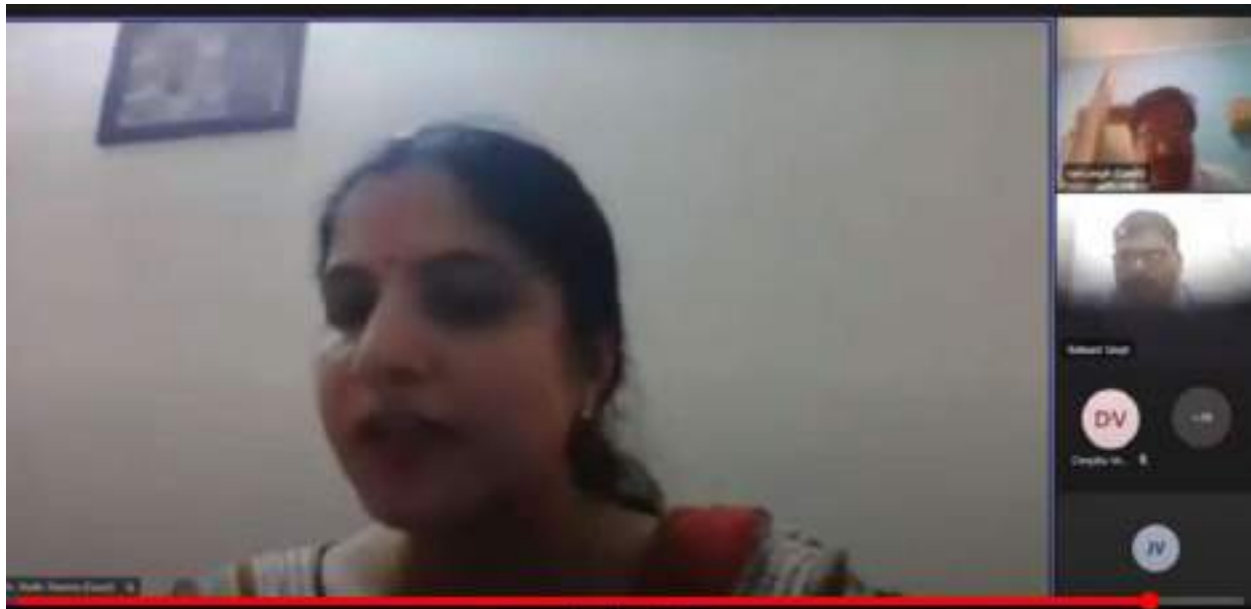
Presented by  
**DR. Satyash Mishra**  
Associate Professor

The slide features four medical images of brain tumors: a 3D reconstruction of a brain with a tumor, a cross-sectional MRI scan, a 3D reconstruction of a brain with a tumor, and a cross-sectional MRI scan. The Adama Science and Technology University logo is also present.

Adama Science and Technology University  
School of Electrical Engineering and Computing  
Department Of Electronics and Communication Engineering  
Image and Signal Processing SIG



Five Days online FDP  
on  
Emerging Technologies with applications in Electronics and Communication-2022



Five Days online FDP  
on  
**Emerging Technologies with applications in Electronics and Communication-2022**

FDP Emerging Technologies with Applications in Electronics and Communication-2022, Day 2 sessio...

Press **Esc** to exit full screen

DAAS Structures

1. Complete Wired Structure  
Sensor Nodes etc. → Physical Connection → Controller → Physical Connection → PC
2. Complete Wireless Structure  
Sensor Nodes etc. → Wireless → Controller → Wireless → PC
3. Hybrid Structure 1  
Sensor Nodes etc. → Wireless → Controller → Physical Connection → PC
4. Hybrid Structure 2  
Sensor Nodes etc. → Physical Connection → Controller → Wireless → PC

# **Speaker Certificates**



# IMS Engineering College, Ghaziabad

NAAC Accredited & NBA Accredited Programme  
Approved by AICTE, New Delhi & Affiliated to AKTU, Lucknow  
Under the aegis of IMS Society, Ghaziabad



## CERTIFICATE OF PARTICIPATION

This is to certify that Dr. Ajay Kumar  
from IMS Engineering college, Ghaziabad has successfully completed Five Days  
online faculty development program on **“Emerging Technologies with applications in Electronics  
and Communication-2022”** during **31<sup>th</sup> Oct - 4<sup>th</sup> Nov, 2022**, organized by Department of Electronics  
and Communication Engineering at IMS Engineering College, Ghaziabad, Uttar Pradesh, India

Handwritten signature of Dr. Balwant Singh in black ink.

Dr. Balwant Singh  
Coordinator

Handwritten signature of Mr. Jaya Nidhi Vashishtha in blue ink.

Mr. Jaya Nidhi Vashishtha  
Co-Coordinator

Handwritten signature of Dr. Jyoti Guglani in blue ink.

Dr. Jyoti Guglani  
Convener, HoD-ECE

Handwritten signature of Dr. Vikram Bali in green ink.

Dr. Vikram Bali  
Director



# **Participant Certificate**



# IMS Engineering College, Ghaziabad

NAAC Accredited & NBA Accredited Programme  
Approved by AICTE, New Delhi & Affiliated to AKTU, Lucknow  
Under the aegis of IMS Society, Ghaziabad



## CERTIFICATE OF PARTICIPATION

This is to certify that Atul Kumar Kushwaha  
from IMS ENGINEERING COLLEGE, GHAZIABAD has successfully completed Five Days  
online faculty development program on “**Emerging Technologies with applications in Electronics  
and Communication-2022**” during **31<sup>th</sup> Oct - 4<sup>th</sup> Nov, 2022**, organized by Department of Electronics  
and Communication Engineering at IMS Engineering College, Ghaziabad, Uttar Pradesh, India

A handwritten signature in black ink, appearing to read 'Singh', written over a horizontal line.

Dr. Balwant Singh  
Coordinator

A handwritten signature in blue ink, appearing to read 'Jaya Nidhi Vashishtha', written over a horizontal line.

Mr. Jaya Nidhi Vashishtha  
Co-Coordinator

A handwritten signature in blue ink, appearing to read 'Jyoti', written over a horizontal line.

Dr. Jyoti Guglani  
Convener, HoD-ECE

A handwritten signature in green ink, appearing to read 'Vikram Bali', written over a horizontal line.

Dr. Vikram Bali  
Director

# IMS Engineering College, Ghaziabad

## Inter Office Note

From : Director	To: All HoDs, Section Heads & Staff Members
-----------------	---

Ref. No.: DIR/DEC/2022/879

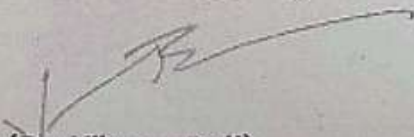
Date: 2<sup>nd</sup> December, 2022

### Skill Upgradation of Staff Members

All the non-teaching staff members are informed that **training programs** have been designed under aegis of IQAC of the institute to upgrade their technical and soft skills. The detail of the training programs is mentioned below:

S.No.	Title of the Training Program	Resource Persons	Date	Venue of the Program
1.	Network & Troubleshooting	Mr. Amit Tyagi	03.12.2022 (Saturday)	Computer Centre, Academic Block - A
2.	Microsoft Excel & Power Point	Mr. Manoj Kumar Chaudhary & Mr. Shankar Gaur	10.12.2022 (Saturday)	
3.	Corel Draw	Mr. Manish Arora	17.12.2022 (Saturday)	
4.	Soft Skills	Dr. Milan Chakraborty	24.12.2022 (Saturday)	

All the Section Heads/Incharges are requested to depute their staff member for above training programs.

  
(Dr. Vikram Bali)

Director

#### Copy to:

Hon'ble Treasurer for kind information please.

IQAC Coordinator.

The Resource Persons of the programs.

System Admin for necessary arrangement in the Computer Centre.

Group Head - HR to provide list of participants.

## **Staff Development Program on “Technical Session on IT Troubleshooting” for IMSEC Staff Members”**

IMSEC-Ghaziabad believes in the strategy that from time to time, staff members are required to be trained to enhance better results from all diversified angles. This will escalate efficiency, productivity and brand image in the future of the organization. Thus, staff training is must which will lead to staff development on one side and organization's growth on other. Thus, a Technical Session on "IT Trouble Shooting" had been scheduled on 03<sup>rd</sup> of December 2022 to groom the valuable staff members of the institution.

The diversification was the key to success of this training session. An individual who uses a computer system and internet are prone to multiple day-to-day obstacles. The ways and means to resolve these issues have been taught in depth. The topics covered were Internet related issues, Handling Desktop, Wi-Fi, Printing, Peripheral devices like keyboard, Mouse, Web camera, Scanner, display issues related to screen and much more.

The in-house Head of System Administrator named Mr. Amit Tyagi was the key speaker and presided over the workshop. He is an IT professional and domain expert in this field.

The staff members had undergone through the rigor of this technical skills which was a complete professional package comprised of solutions to technical problems occurring at the most preliminary stage. The participants had raised their queries and solutions were told with live demonstration that made the interaction very effective. The members cherished and praised the workshop as they found the same fruitful and beneficial for their professional development and career growth. The objectives planned had been successful as the learning outcomes were appreciated by all members present there.

*Regards.*

Amit Tyagi

IMS ENGINEERING COLLEGE, GHAZIABAD

Training Program (Network & Troubleshooting) for Non - Teaching Staff Members on  
03 December 2022

S.No.	Name	Designation	Department	Signature
1	Larita Mishra	Warden	Hostel	L. Mishra
2	Sania Dwivedi	Warden	Hostel	Sania
3	Deepak Singh Bhatt	Warden	Hostel	Deepak
4	Ravindrap Kumar	L.A	ME	Ravi
5	SHIVGAMBIER	PCO JG	Reception Office	Shiv
6	Deepak Kumar			Deepak
7	Uday Shankar Singh	Office ASST.	IT	Uday
8	Anil Kumar	T.A	BT	Anil
9	Krishan Kumar	L.A	ME	Krishan
10	SANSAY KUMAR	O.A.	M.E	Sansay
11	K.P. Singh	L.A	EN	K.P.
12	Bhincee	Admin	Admin	Bhincee
13	Pankaj Tiwari	L.A EC	EC	Pankaj
14	ANUJ SHARMA	L.A	AS & H	Anuj
15	Rupendra Kumar	L.A	ECE	Rupendra
16	Sunil Kumar	Registrar	RO	Sunil
17	Sandeep Bhardwaj	L.A	CSE	Sandeep
18	Pranav Kumar	L.A	AS & H	Pranav
19	Dheeraj Kumar	L.A-I.T	IT	Dheeraj
20	Vinod Kumar	L.A	ME	Vinod
21	Digvijay Singh	L.A	EM	Digvijay
22	M.S. Gargan	O.A	CSE	M.S.
23	Shantanu Gaur	Sr. Executive	Admin	Shantanu
24	Rajeev Naithani	AR	RO	Rajeev
25	Manish Arora	Designer	RO	Manish

## IMS ENGINEERING COLLEGE, GHAZIABAD

Training Program (Network & Troubleshooting) for Non - Teaching Staff Members on  
05 December 2022

S.No.	Name	Designation	Department	Signature
1	Neeraj Kumar	Library Incharge	Library	Neeraj
2	Rinku	Asst. Librarian	Library	Rinku
3	Jitendra Mittal	Librarian	Library	JM
4	Nitin Jain	Head & C.A.	CDC	Nitin
5	Chandul Chaudhary	Asst. Manager	CDC	Chandul
6	Bhaskar Varma	A.D.E	Admin	Bhaskar
7	ASHISH TRIPATHI	Warden	Admission Hostel	ASHISH
8	Malharan Khan	Lib. Asstt	Library	Malharan
9	Balkam Kataria	Lib. Ass'	Library	Balkam
10	Anur Tyagi	System Analyst	Computer Cent	Anur
11	Anur Tyagi	T.A.	Computer Centre	Anur
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# IMS Engineering College, Ghaziabad

## Inter Office Note

From : Director	To: All HoDs, Section Heads & Staff Members
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Ref. No.: DIR/DEC/2022/879

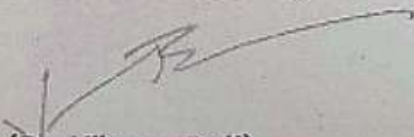
Date: 2<sup>nd</sup> December, 2022

### Skill Upgradation of Staff Members

All the non-teaching staff members are informed that **training programs** have been designed under aegis of IQAC of the institute to upgrade their technical and soft skills. The detail of the training programs is mentioned below:

S.No.	Title of the Training Program	Resource Persons	Date	Venue of the Program
1.	Network & Troubleshooting	Mr. Amit Tyagi	03.12.2022 (Saturday)	Computer Centre, Academic Block - A
2.	Microsoft Excel & Power Point	Mr. Manoj Kumar Chaudhary & Mr. Shankar Gaur	10.12.2022 (Saturday)	
3.	Corel Draw	Mr. Manish Arora	17.12.2022 (Saturday)	
4.	Soft Skills	Dr. Milan Chakraborty	24.12.2022 (Saturday)	

All the Section Heads/Incharges are requested to depute their staff member for above training programs.

  
(Dr. Vikram Bali)

Director

#### Copy to:

Hon'ble Treasurer for kind information please.

IQAC Coordinator.

The Resource Persons of the programs.

System Admin for necessary arrangement in the Computer Centre.

Group Head - HR to provide list of participants.

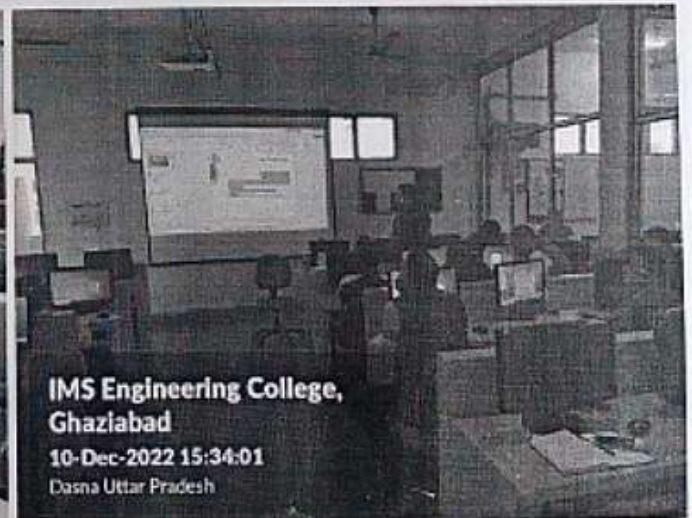
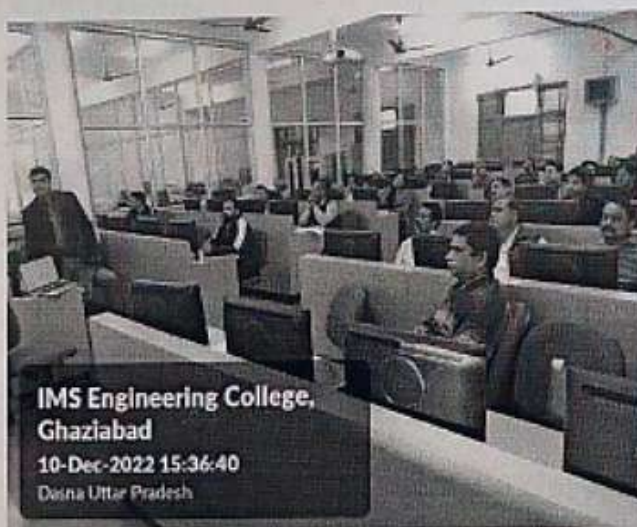
# REPORT

## **Staff Skill Training Development Program** (Under the aegis of IQAC, IMS Engineering College, Ghaziabad)

### **Session: 2 (10.12.2022)** **Microsoft Excel and Microsoft PowerPoint**

**Objective:** IMS Engineering College, Ghaziabad is continuously working on the skill enhancement of staff members. To enhance the technical and soft skills, a series of training programs were designed under the aegis of IQAC of the institute. In this series of training on 10/12/2022 a training session on **Microsoft Excel and Microsoft PowerPoint** was organized. The resource persons for this session were **Mr. Manoj Kumar Chaudhary**, Assistant Professor, Department of MBA and **Mr. Shankar Gaur**, Senior Executive, IMS Engineering College, Ghaziabad. The training session was meant for all the non-teaching staffs of the college.

The session started with the introduction of the resource persons. Initial part of training on the topic **“MAKING AN IMPRESSIVE POWERPOINT PRESENTATION”** was taken by Mr. Manoj Kumar Chaudhary. Mr. Chaudhary started the session with the fundamental knowledge like how to create a presentation, how new slide can be added, how text can be added and formatted, etc. In later part of the session he explained how the maker of presentation can add pictures and shapes and also how a video can be added in the presentation. He also explained and demonstrated about adding hyperlink in the presentation. Lastly he explained everyone about creating a master slide. How they can save their time and energy with the help of master slide where all the similar changes and be done with change on only one slide.





Next part of the session was taken by **Mr. Shankar Gaur**. He started his training by giving clear insights on the usage of **Mail Merge in Microsoft Word**. He explained three main components of the merging process i.e. the main document, the data source, and the merged document. He demonstrated how to insert one or more merge fields that pull the information from your Excel Spreadsheet into your document. He also explained how to convert text to column and column to text in Microsoft Word. Further, he explained about some useful functions in Excel with examples. He practically described following excel functions with live examples:

1. **CONCATENATE**, to join two or more text strings into one string.
2. **UPPERCASE, LOWERCASE & PROPER**, which are used to convert the text to upper, lower & sentence case.
3. **TRIM**, which removes all spaces from text except for single spaces between words.
4. **MACROS**, which is an action or a set of actions that can be recorded, named, saved and executed as many times as required and whenever desired.



**Conclusion:** - 31 Staff members attended the session. The session was very informative. The discussed areas were of great benefits for the participants. Participants were enlightened and benefitted with the wisdom of the trainer Mr. Manoj Kumar Chauhdary and Mr. Shankar Gaur.

The session ended with **vote of thanks** and **group photo** of the participants and



experts. Special thanks to **Mr. Mukul Goswami**, Asst. Manager, HR for coordinating the event.


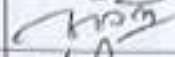

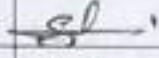
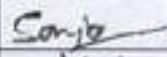
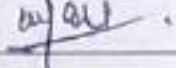
**IMS ENGINEERING COLLEGE, GHAZIABAD**

Training Program (Microsoft Excel & Power Point) for Non - Teaching Staff Members on  
10 December 2022

S.No.	Name	Designation	Department	Signature
1	PRAMOD KUMAR	Lab Assistant	AS&H (PHYSICS)	
2	KRISHANKUMAR	Lab Assistant	ME	
3	SANJAY KUMAR	OFFICE ASST	ME	
4	Sandeep Bhardwaj	Lab Assistant	CSE	
5	Uday Kumar Singh	Office ASST	IT	
6	Mangy Kukreja	Registrar	Registrar office	
7	Prince Shukla	Admin	Admin	
8	Mitini Jain	CDC-HEAD	CDC	
9	M.S. Gantam	Office Asst.	CSE	
10	Rishi	F.D.E Admin	Admin	
11	Rajeev Nathaw	AK	Admin	
12	Jitendra Mittal	Librarian	Library	
13	Malakat Khan	Lib. ASST	Library	
14	SHIV GALEEM	Receptionist	Admin	
15	Rinika	Asst. Librarian	Library	
16	Chand Chaudhary	Asst. Manager.	CDC	
17	K.P. Singh	Lab. Assistant	EN	
18	Pankaj Tiwari	LA	EC	
19	Vikas Sharma (B)	T.A	CC	
20	Sandeep Sharma	T.A	C.E.	
21	VIRAS SHARMA (C)	T.A	C.C.	
22	Parvendra Kumar	T.A	CC	
23	ANUJ TYAGI	T.A	C.E.	
24	Vinod Kumar	L.A	M.E	
25	Sajeev Kumar	L.A	ME	

## IMS ENGINEERING COLLEGE, GHAZIABAD

Training Program (Microsoft Excel & Power Point) for Non - Teaching Staff Members on  
10 December 2022

S.No.	Name	Designation	Department	Signature
1	Digvijay Tyagi	Lab Asst	EM	
2	Anil Kumar	T. A	BT	
3	RAVINDRA KUMAR	L.A	ME	
4	Sonika Mishra	warden	Hostel	
5	Sonika Dwivedi	warden	Hostel	
6	Naykal Grewani	Asst. Mgr. HK	HK	
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# IMS Engineering College, Ghaziabad

## Inter Office Note

From : Director	To: All HoDs, Section Heads & Staff Members
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Ref. No.: DIR/DEC/2022/879

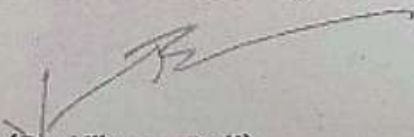
Date: 2<sup>nd</sup> December, 2022

### Skill Upgradation of Staff Members

All the non-teaching staff members are informed that **training programs** have been designed under aegis of IQAC of the institute to upgrade their technical and soft skills. The detail of the training programs is mentioned below:

S.No.	Title of the Training Program	Resource Persons	Date	Venue of the Program
1.	Network & Troubleshooting	Mr. Amit Tyagi	03.12.2022 (Saturday)	Computer Centre, Academic Block - A
2.	Microsoft Excel & Power Point	Mr. Manoj Kumar Chaudhary & Mr. Shankar Gaur	10.12.2022 (Saturday)	
3.	Corel Draw	Mr. Manish Arora	17.12.2022 (Saturday)	
4.	Soft Skills	Dr. Milan Chakraborty	24.12.2022 (Saturday)	

All the Section Heads/Incharges are requested to depute their staff member for above training programs.

  
(Dr. Vikram Bali)

Director

#### Copy to:

Hon'ble Treasurer for kind information please.

IQAC Coordinator.

The Resource Persons of the programs.

System Admin for necessary arrangement in the Computer Centre.

Group Head - HR to provide list of participants.

# Introduction to Corel DRAW Tools

Corel DRAW is a graphics and drawing program that is vector-based and developed by a software company based in Ottawa called Corel. When you sketch an object on the Corel DRAW drawing page using the available tools, a mathematical formula determines the structure of the object displayed on the screen.

You will be able to create any graphic image file that you need with the help of Corel DRAW. There are many tools available in Corel DRAW, with the help of which you can create logos, motifs, signs, etc. some important tool in CorelDraw, which are as follows:

## 1. Pick Tool

This tool allows you to pick or select the object and transform it. You can position the object too.

## 2. Shape Tool

If you want to edit the shape of objects chosen by the pick tool, then you can use this tool.

## 3. Free Transform Tools

This tool allows you to alter the image objects with the help of rotation angle, rotation free, and resize. It also lets you bend the image structure.

- **Smudge Brush:** This tool will help you change and distort the picture in general with engaging shorelines.
- **Roughen Brush:** This tool will let you change as well as distort the outline shape of the sketch in general with engaging shorelines.

## 4. Crop Tool

This tool can be used in clipping the region of an image that is not needed.

- **Virtual Segment Delete:** If you want to remove an object which is a part of an intersection, then you can use this tool.
- **Erase:** It helps to get rid of some areas of the image.

## 5. Zoom Tool

It helps you change the level of magnification in the illustration window to look at the object more intently. In simple words, it is used as a magnifying glass.

- **Hand:** It helps in balancing the images that materialize in the image window.

## 6. Curve Tools

- **Freehand Tool:** This tool lets you sketch curves and lines with the help of a mouse. Essentially it is used for sketching.
- **Bezier:** It helps to draw curves in the shape of a solitary line per point.

- **Pen:** It helps in sketching curves in the form of a node.
- **Three-Point Curve:** It helps you in drawing a curve first by identifying the start and the endpoint, then it's center.
- **Poly-line:** It lets you sketch curves and lines in preview mode.
- **Dimension:** It helps you sketch a horizontal, vertical, oblique and angular line.
- **Interactive Connector:** It lets you combine the two objects accompanied by a line.

## 7. Artistic Media Tool

It helps in accessing the sprayer, brush, calligraphic, preset and pressure tools.

## 8. Rectangle Tool

This tool helps you in drawing squares and rectangles to initiate boxes and terms.

- **Three-Point Rectangle:** If you want to arrange boxes and create terms from one point to another, this is the tool.

## 9. Ellipse Tool

This tool helps you sketch circles and ellipses.

## 10. Polygon Tool

If you want to sketch stars and polygons in a symmetric manner, then you can use the polygon tool.

- **Star:** This tool can be used to draw stars.
- **Complex Star:** This tool allows you to create stars that have intersection angles and complex shapes.

## 11. Basic Shapes Tool

This tool helps you to select from a complete set of forms such as a right-angle triangle, smiley face, and hexagram. You can draw arrows and slanted rectangles.

- **Arrow Shapes:** You can draw arrows ranging from diverse shapes such as arrowheads, direction, etc.
- **Flowchart Shapes:** You can create a flowchart with this tool.

## 12. Text And Table Tool

This tool helps you in typing words straight on the screen as paragraph text or creative text. The table tool helps you in creating and editing tables.

## 13. Dimension Tools

This tool allows you to draw numerous lines like segment, slanted, horizontal, vertical, and three-point dimensions.

## 14. Connector Tools

This tool helps you in drawing a straight line, right-angle, edit anchor connector line and rounded right-angle connector lines.

## 15. Interactive Tools

- **Interactive Blend:** Boxes and terms can be created using this tool.
- **Interactive Distortion** helps you apply a pull or push distortion and a zipper distortion to an object.
- **Interactive Drop Shadow:** It helps you to put an object into the shadow.
- **Interactive Fill:** It helps you to apply numerous amount of fills to an object.
- **Interactive Mesh:** If you want to apply network lines to an object, then you can use this tool.

## 16. Eyedropper Tool

Object properties like size, line thickness and effects can be selected and copied using the eyedropper tool.

## 17. Outline Tool

This tool lets you open a fly-out that helps you in setting the outline properties.

## 18. Fill Tool

This tool lets you open a fly-out that helps you in setting the fill properties.

Here, we have discussed the tools available in CorelDRAW with the help of which you can create logos, motifs, signs, etc.

## Conclusion

As a design program, CorelDraw bestows the users with various tools to produce original images or acutely edit them. Users who can do some of the things with this program include generating page layout, QR code and adding different exceptional effects. In addition to this, CorelDraw has the capability of working with other programs in the CorelDraw graphics suite, like Corel photo-paint, which helps users to produce furthermore composite images.

IMS ENGINEERING COLLEGE, GHAZIABAD

Training Program (Corel Draw) for Non - Teaching Staff Members on 17 December 2022



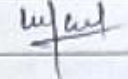
S.No.	Name	Designation	Department	Signature
1	KRISHANKUMAR	LAB ASSISTANT	ME	
2	Vinod Kumar	L.A	ME	
3	RAVINDRAKUMAR	L.A	ME	
4	Deepak Kumar	L.A	C.E	
5	Kumar Pal Singh	L.A	EN	
6	Udaykumar Singh	O.A	IT	
7	Poojnee Shukla	Admin	Admin	
8	Manoj Kulkarni	Registrar	Reg. office	
9	Digvijay Tyagi	Lab Asst.	EM	
10	Nitin Jain	HEAD	CDC	
11	Malahat Khan	Lib. AssH.	Library	
12	Sanjeev Kumar	L.A	ME	
13	Neeraj Kumar	Asstt Librarian	Library	
14	Jitendra Mittal	Librarian	Library	
15	M.S. Gantam	O.A.	CSE	
16	Rinku	Asst Librarian	Library	
17	Sarita Mishra	Warden	Hostel	
18	CHANCHAL CHAUDHARY	Asst. Manager	CDC	
19	PRAVENDRA KUMAR	T.A.	Computer center	
20	PRAMOD KUMAR	Lab Assistant	Physics	
21	ANUS KUMAR SHARMA	Lab. AssH	Chemistry	
22	Bharti Verma	Admin	Admin	
23	Rupendra Kr.	Asstt Librarian ECE	ECE	
24	Pankaj Tiwari	LA EE	ECE	
25	Anil Kumar	T.A	BT	

17/12/2022



## IMS ENGINEERING COLLEGE, GHAZIABAD

Training Program (Corel Draw) for Non - Teaching Staff Members on 17 December 2022

S.No.	Name	Designation	Department	Signature
1	Prashant Kataria	PS to Dir	Admin	
2	Amit Singh	System Admin	I.T (CC)	
3	Mukul Goswami	Ant. Manager	HRD	
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## Events Pictures:





**IMS Engineering College, Ghaziabad**  
**Inter Office Note**

<b>From : Director</b>	<b>To: All HoDs, Section Heads &amp; Staff Members</b>
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Ref. No.: DIR/JAN/2023/935


Date: 20<sup>th</sup> January, 2023

**Skill Upgradation of Staff Members**

All the non-teaching staff members are informed that **training programs** have been designed for them under aegis of IQAC of the institute. The detail of the training programs is mentioned below:

S.No.	Title of the Training Program	Resource Persons	Date	Time	Venue of the Program
1.	Basic Human Aspirations and Their Fulfillment	Dr. Navin Kumar, Asstt. Prof. – AS&H Deptt.	21.01.2023 (Saturday)	10:00 – 12:00 AM	Computer Center, Academic Block - A
2.	Resolution of Concerns	Dr. Navin Kumar, Asstt. Prof. – AS&H Deptt.	21.01.2023 (Saturday)	2:00 – 4:00 PM	

All the HoDs/Section Heads/Incharges are requested to depute their staff members for above training programs.

  
**Prof. (Dr.) Vikram Bali**  
Director

**Copy to:**

Hon'ble Treasurer for kind information.

Dr. Amit Sharma, IQAC Coordinator.

Dr. Navin Kumar, Asstt. Prof. – AS&H Department.

System Admin for necessary arrangement in the Computer Centre.

Group Head – HR to provide list of participants.

## IMS ENGINEERING COLLEGE, GHAZIABAD

Skill Upgradation Program for Non - Teaching Staff Members on 21 January 2022

S.No.	Name	Designation	Department	Signature
1	M.S. Gauram	O.A	CSE	
2	Anil Kumar	T.A	BIT	
3	Vinod Kumar	T.A	ME	vinodh
4	Sandeep Bhargava	<del>CSE</del> T.A	CSE	
5	Samir Kumar	T.A	ME	
6	KRISHANKUMAR	L.A	ME	
7	Digvijay Tiwari	L.A	ENI	
8	Manish Khera	GrD	Admission	
9	Sandeep Sharma	T.A	C.C.	
10	Rupendra Kumar	T.A	ECE	
11	Rupender	T.A.	C.C.	
12	Vijay Sharma (A)	T.A.	C.C.	
13	VIKAS SHARMA (B)	T.A.	C.C.	
14	RAVINDRAKI	L.A	ME	
15	ANUJ SHARMA	L.A	AS & M	
16	Pankaj Tiwari	L.A	EC	
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## IMS ENGINEERING COLLEGE, GHAZIABAD

Skill Upgradation Program for Non - Teaching Staff Members on 21 January 2022

S.No.	Name	Designation	Department	Signature
1	Anil Kumar	T.A	BT	
2	Kuwar Lal Singh	T.A	EN	
3	Rupendra Kumar	T.A	ECE	
4	Sandeep Bhardwaj	T.A	CSE	
5	Rupak Kumar	T.A	ASEH	
6	M.S. Gautam	O.A	CSE	
7	Digvijay Tyagi	T.A	EN	
8	Vinod Kumar	T.A	ME	
9	Sanjeev Kumar	T.A	ME	
10	Sandeep Sharma	T.A.	C.C.	
11	Vikas Sharma (B)	T.A.	C.C.	
12	M.P. Kaushik	Elect.	electrical Mat.	
13	RAVINDRA K.	Asst L.A	ME	
14	PRAMOD KUMAR	L.A	ASEH (PHYSICS)	
15	KRISHAN KUMAR	L.A	ME	
16	Ehasti	Admin	Admin	
17	Prashant K. Jaank	PS to Director	-Do-	
18	VIKAS Sharma (A)	T.A.	C.C.	
19	Pravendra Kumar	T.A	CC	
20	Pankaj Tiwari	L.A	EC	
21	ANUJ SHARMA	L.A	ASEH	
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## Event Pictures





**IMSEC GHAZIABAD**

**Jan 21, 2023 11:24:49 AM**

Ghaziabad, Meerut Division 201015

India

28°68'N 77°51'E



**IMSEC GHAZIABAD**

**Jan 21, 2023 11:25:34 AM**

Dasna, Meerut Division 201009 India

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# IMS Engineering College, Ghaziabad

## Inter Office Note

From : Director	To: All HoDs, Section Heads & Staff Members
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Ref. No.: DIR/DEC/2022/879

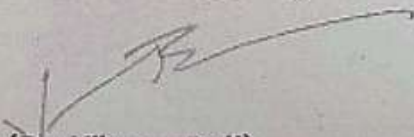
Date: 2<sup>nd</sup> December, 2022

### Skill Upgradation of Staff Members

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S.No.	Title of the Training Program	Resource Persons	Date	Venue of the Program
1.	Network & Troubleshooting	Mr. Amit Tyagi	03.12.2022 (Saturday)	Computer Centre, Academic Block - A
2.	Microsoft Excel & Power Point	Mr. Manoj Kumar Chaudhary & Mr. Shankar Gaur	10.12.2022 (Saturday)	
3.	Corel Draw	Mr. Manish Arora	17.12.2022 (Saturday)	
4.	Soft Skills	Dr. Milan Chakraborty	24.12.2022 (Saturday)	

All the Section Heads/Incharges are requested to depute their staff member for above training programs.

  
(Dr. Vikram Bali)

Director

#### Copy to:

Hon'ble Treasurer for kind information please.

IQAC Coordinator.

The Resource Persons of the programs.

System Admin for necessary arrangement in the Computer Centre.

Group Head - HR to provide list of participants.

## Workshop on “Soft Skills for IMSEC Staff Members”

The institute named “IMS Engineering College” located in the heart of Ghaziabad leaves no stone unturned to impart quality training in the form of workshops periodically for their staff members. The management believes that staff growth and development is the real key to success if we decode the same on a holistic spectrum. Individual behavioural refinement and continuous seasoning is the ultimate destination to conquer all real life problems. Thus, a session on Soft Skills had been scheduled on 24<sup>th</sup> of December 2022 to groom the valuable staff members of the institution. The metamorphosis through redefining the theme of life and transformation through physical, emotional and psychological attributes were the integral ingredients on which the entire emphasis were laid upon.

The in-house faculty named Dr. Milan Chakraborty was the key speaker and presided over the workshop. He is an economist and a corporate trainer by profession.

The motto was to enhance the communication skills immensely, so that the staff members can show their dynamism at the time of conversation with others. They can present themselves in a polished manner to upgrade and sharpen their interpersonal skills. Moreover, the impetus was to strengthen the content and affective speech delivery. It is being said that if the various components of soft skills are being merged in a perfect blend with utmost dedication, determination and devotion then miracles are bound to get happen at all walks of life.

The staff members had undergone through the rigor of this soft skills which was a complete professional package comprised of Practicing spoken English ,Vocabulary building and its application, Positive body language, Para linguistic features, Habits, Positive attitude, Presentation skills, Effective writing skills, Expectation management, Corporate etiquettes, Mechanism to win over frustration through the amalgamation of mind, body and soul and last but not least the dynamism to remain satisfied and happy to led a stress free life. Infusing professionalism was the ultimate selling preposition and the livewire of this workshop.

The program was extremely informational, entertaining and enlightening. The staff members had raised their queries and solutions were bestowed to them instantly. The members cherished and praised the workshop as they found the same fruitful and beneficial for their professional development and career growth. At the end of the day, we can easily arrive at a conclusion that any organization can be considered an epitome of success, if the above said features are found in all staff members who contribute in escalating the branding and profit maximization through ethics for their company’s or institution’s growth. The objectives envisioned by the top management have been culminated with the desired outcomes. In fact the approach of soft skills is the only panacea to add laurels on its ongoing legacy.

IMS ENGINEERING COLLEGE, GHAZIABAD

Training Program (Soft Skills) for Non - Teaching Staff Members on 24 December 2022

S.No.	Name	Designation	Department	Signature
1	Udaykumar Singh	Office Asstt	IT	
2	Sandeep Kumar	MLTA	ME	
3	Sanjiv Kumar	L.A	ME	
4	Rupendra Kr.	Lab Asstt	ECE	
5	Krishan Kumar	Lab Assistant	ME	
6	Digvijay Tyagi	Lab Asstt	EMI	
7	Vinod Kumar	L.A	ME	
8	PRAMOD KUMAR	Lab Assistant	AS&H	
9	ANUS KR. SHARMA	Lab Asstt	AS&H	
10	RAVINDRA K.	Lab Asstt	ME	
11	Chand Cloudary	Asstt. Manager Placement	CIC	
12	Rinoo	Asstt Librarian	Library	
13	Pankaj Tripathi	LA	EC	
14	Malahal Khan	Lib. Asstt	Library	
15	Amil Kumar	T.A	BT	
16	M.S. Gargam	O.A	CSE	
17	VIRAS SHARMA	T.A.	C.C.	
18	Sandeep	T.A.	C.C.	
19	Bhanti	F.I.D.E.	Admin	
20	Mr K. P. Singh	EA&L.A	E.O.V	
21	Deepak Kumar	L.A	AS&H	
22	Manoj Kulkarni	Registrar	R.O.	
23	Sanjay Kumar	Registrar (C)	R.O	
24	Rajeev Nairhen	AR	RO	
25	Manish Kataria	Designer	Admission	
26.	Prashant Kr. Taank	PS to Dir	Admin	

## Events Pictures:







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## Training Calendar for 10th Oct to 12th Oct at IMSEC- Ghaziabad

2 messages

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Training and Internship Division IMSEC <tid@imsec.ac.in>

Fri, Oct 7, 2022 at 10:26 AM

To: HOD Computer Science & Engineering <hodcse@imsec.ac.in>, HOD Computer Science <hodcs@imsec.ac.in>, HOD Computer Science & Design <hodcsd@imsec.ac.in>, HOD Information Technology <hodit@imsec.ac.in>, HOD Electronics & Communication <hodec@imsec.ac.in>, "HOD Bio-Tech." <hodbt@imsec.ac.in>, HOD Mechanical Engineering <hodme@imsec.ac.in>, HOD MBA <hodmba@imsec.ac.in>, System Admin-IMSEC Amit Tyagi <sysadmin@imsec.ac.in>

Cc: Ajay Sharma <ajaysharmatpc@gmail.com>, Swati Pal <swatipal481@gmail.com>, Nitin Jain <nitin.jain@imsec.ac.in>, Dean Academics <deanacademic@imsec.ac.in>, Director IMS Engineering College <director@imsec.ac.in>, "ruchi.goyal@imgzb.ac.in" <ruchi.goyal@imgzb.ac.in>

Dear Sir/Mam,

Greetings for the day!

As per discussion with you all kindly find herewith **attachment of Training Calendar for 10th Oct 2022 to 12th Oct 2022** at IMSEC- Ghaziabad. Requesting to all Respective Hod for smooth conduction of **online Assessment in Lab**, kindly **share the details of 2nd Year students of your respective department** (i.e, Name, Roll No, Branch, E Mail Id) so that we can **create the complete plan regarding online assessment** and share the same with you all.

Thank you for your kind support.

With Regards

--

**Prof. (Dr.) Prabhat Kumar Srivastava**

Head (TID)

Training and Internship Division

Ph: 9871771996



**TPC Roadmap Scheduled Plan for 10th Oct to 12th Oct.pdf**

502K

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Jaya Nidhi Vashishtha <jaya.vashishtha@imsec.ac.in>

Fri, Oct 7, 2022 at 3:03 PM

To: HOD Electronics & Communication <hodec@imsec.ac.in>

Cc: Training and Internship Division IMSEC <tid@imsec.ac.in>

Respected Maam,

PFA the details of 2nd year students.

On Fri, Oct 7, 2022 at 2:17 PM HOD Electronics & Communication <hodec@imsec.ac.in> wrote:

Sir,

Kindly do the needful.

Regards,

[Quoted text hidden]

[IMS Engineering College](https://www.imsec.ac.in)

NH-09, Adhyatmik Nagar, Ghaziabad-201015

Landline:- +91-1204940000

Admission Enquiry:- +91-9821396581, 82, 83

Web:- [www.imsec.ac.in](https://www.imsec.ac.in)



**IMS Engineering College, Ghaziabad**

NAAC Accredited & NBA Accredited Programme

Approved by AICTE New Delhi & Affiliated to AKTU, Lucknow

Under the aegis of IMS Society, Ghaziabad



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--  
HoD (Electronics & Communication Engg. Dept.)  
[IMS Engineering College](#)  
NH-09, Adhyatmik Nagar, Ghaziabad-201015  
Landline:- +91-1204940000  
Admission Enquiry:- +91-9821396581, 82, 83  
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## 2 attachments



**2nd Year ECE Student Details.pdf**

22K



**2nd Year Student Details.xlsx**

14K



# IMS ENGINEERING COLLEGE, GHAZIABAD

## NOTICE

**From: TID DEPTT**

**To: ALL CONCERN**

**Ref No: TID/April-2023/1**

**Date: - 06/04/2023**

It is bring to your kind notice that PDP Training & Technical Training Program (from Out Source Agency) will start from 10 April & 11 April 2023 respectively. Due to University & Sessional Examination Training program was stopped in 2<sup>nd</sup>/3<sup>rd</sup> Year and it will be resumed as per following schedule:-

S.No	Training Program	Date of Commencement
1	PDP Training	10/04/2023
2	Technical Training	11/04/2023

Remarks:-

- (1) In 3<sup>rd</sup> Year there are no changes in day & time of Training Schedule.
- (2) In 2<sup>nd</sup> Year PDP training session has been reshuffled [i.e.; CS/IT Batch in Pre Lunch & CSE & COMBINED batch after lunch session]
- (3) Details Time Table of PDP Classes will be shared by TPC Team side.

With Regards,

**Prof. (Dr.) Prabhat Kumar Srivastava**  
**Prof. In Charge TID**  
**IMS Engineering College, Ghaziabad, U.P.**





## Fwd: Training Planner :10th Oct till 12th Oct 22.

1 message

**Nitin Jain** <nitin.jain@imsec.ac.in>

Thu, Oct 6, 2022 at 10:07 AM

To: gauravgosain@ymail.com, Ajay Sharma <ajaysharmatpc@gmail.com>, Swati Pal <swatipal481@gmail.com>

Cc: "Dr. Prabhat Kumar Srivastava" <prabhat.srivastava@imsec.ac.in>, Training and Internship Division IMSEC <tid@imsec.ac.in>

Dear Gaurav,  
Greetings!

Thanks a lot for sharing the Training Calendar.

+++Connecting Dr. Prabhat Kr. Srivastava for further planning and coordination.

Sincere Regards,

**Nitin Jain**

GM & Head - Career Development Center

Mobile: +91 9891804757

----- Forwarded message -----

From: **Gaurav Gosain** <gauravgosain@ymail.com>

Date: Tue, Oct 4, 2022 at 12:13 AM

Subject: Re: Training Planner :10th Oct till 12th Oct 22

To: nitin.jain@imsec.ac.in <nitin.jain@imsec.ac.in>

Cc: Ajay Sharma <ajaysharmatpc@gmail.com>, Swati Pal <swatipal481@gmail.com>

Dear Nitin Sir,

Please ignore the previous mail and PFB the new and updated Training calendar for IMS- Ghaziabad.

We may require the Training Room numbers and venue for orientation . Also,

Please share the details of all the students so that we can create the complete planner and share the same with you.

TRAINING CALENDAR @ IMSEC GHAZIABAD				
Day	Dates	Time	Agenda	Batch
Monday	10th Oct' 2022	10:00 AM-10:45 AM	Orientation	Batch 1
Monday	10th Oct' 2022	11:00 AM-1:00 PM	Soft Skills Assessment	Batch 1
Monday	10th Oct' 2022	1:30 -2:30 PM	Orientation	Batch 2
Monday	10th Oct' 2022	2:45- 4:45 PM	Soft Skills Assessment	Batch 2
Tuesday	11th Oct' 2022	11:00 AM-1.00 PM	Soft Skills Assessment	Batch 1
Tuesday	11th Oct' 2022	1:30-2:30 pm	Apptitude Assessment (Online)	Batch 1
Tuesday	11th Oct' 2022	2:45- 4:45 Pm	Soft Skills Assessment	Batch 2
Wednesday	12th Oct' 2022	1:30-2:30 pm	Apptitude Assessment (Online)	Batch 2

Please let us know in case any changes are required.

Regards  
Gaurav Gosain

Manager - Project and Alliances  
9716717966  
7982481383

On Monday, 3 October, 2022 at 09:41:44 pm IST, Gaurav Gosain <[gauravgosain@gmail.com](mailto:gauravgosain@gmail.com)> wrote:

Dear Nitin Sir,

Greetings for the day!

As per our last discussion, PFB the Training Calendar for IMS- Ghaziabad from 10th Oct till 12th Oct 22

We may require the Room numbers, venue for orientation and for training. Also,

Please share the details of all the students so that we can create the complete planner and share the same with you.

Dates	Schedule	Time	Batch
10th oct 2022	Orientation	10.00-10:45 Pm	Batch 1
10th oct 2022	Assessment Training	11:00-1 Pm	Batch 1
10th oct 2022	Orientation	1:30-2:30 pm	Batch 2
10th oct 2022	Assessment Training	2:45- 4:45 Pm	Batch 2
11th Oct 2022	Pre assessment	11:00-1 Pm	Batch 1
11th Oct 2022	Pre assessment	2:45- 4:45 Pm	Batch 1
12th Oct 2022	Pre assessment	11:00-1 Pm	Batch 2
12th Oct 2022	Pre assessment	2:45- 4:45 Pm	Batch 2

Please let us know in case any changes are required.

Regards  
Gaurav Gosain  
Manager - Project and Alliances  
9716717966

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**IMS Engineering College**  
**NH-09, Adhyatmik Nagar, Near Dasna, Distt. Ghaziabad, U.P.**  
**Tel: (0120) 4940000**  
**Training & Internship Division**  
**NOTICE**

<b>From: TID DEPTT</b>	<b>To: ALL CONCERN</b>
------------------------	------------------------

**Ref No: TID/Oct-2022/4**

**Date: - 30/10/2022**

**Greetings from TID!!!**

We are pleased to inform you that **Training & Internship Division** of **IMS Engineering College Ghaziabad** is going to start **60 Hours and 80 Hours Job Employability Training Program** about Soft skills, Quantitative aptitude, Logical Reasoning & Mock Interview for **all the 2<sup>nd</sup> & 3<sup>rd</sup> Year** Students of all branches respectively. The Program will be commencing from **2<sup>nd</sup> Nov 2022**. This Training program will be beneficial for upcoming placement drive. Keeping this in mind to attend all the training classes which will be taken by Out Source Agencies. Attendance is mandatory.

Thanking You.

Training & Internship Department

IMS Engineering College, Ghaziabad

If any Doubt regarding above clarification kindly let me confirm.

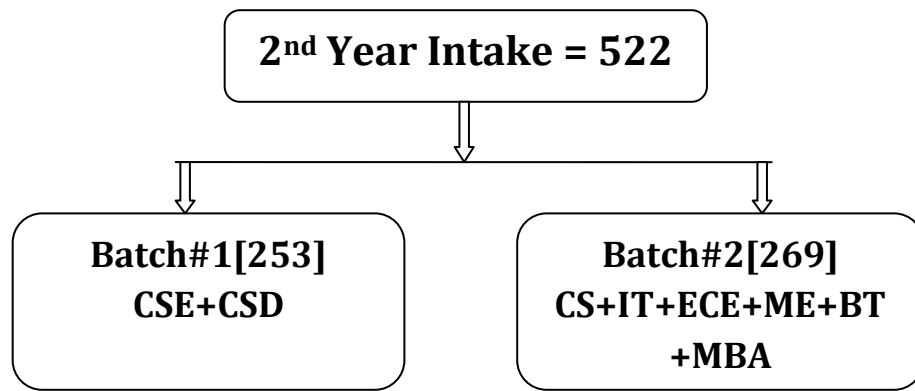
With Regards,

**Prof. (Dr.) Prabhat Kumar Srivastava**  
**Head TID**  
**IMS Engineering College, Ghaziabad, U.P.**

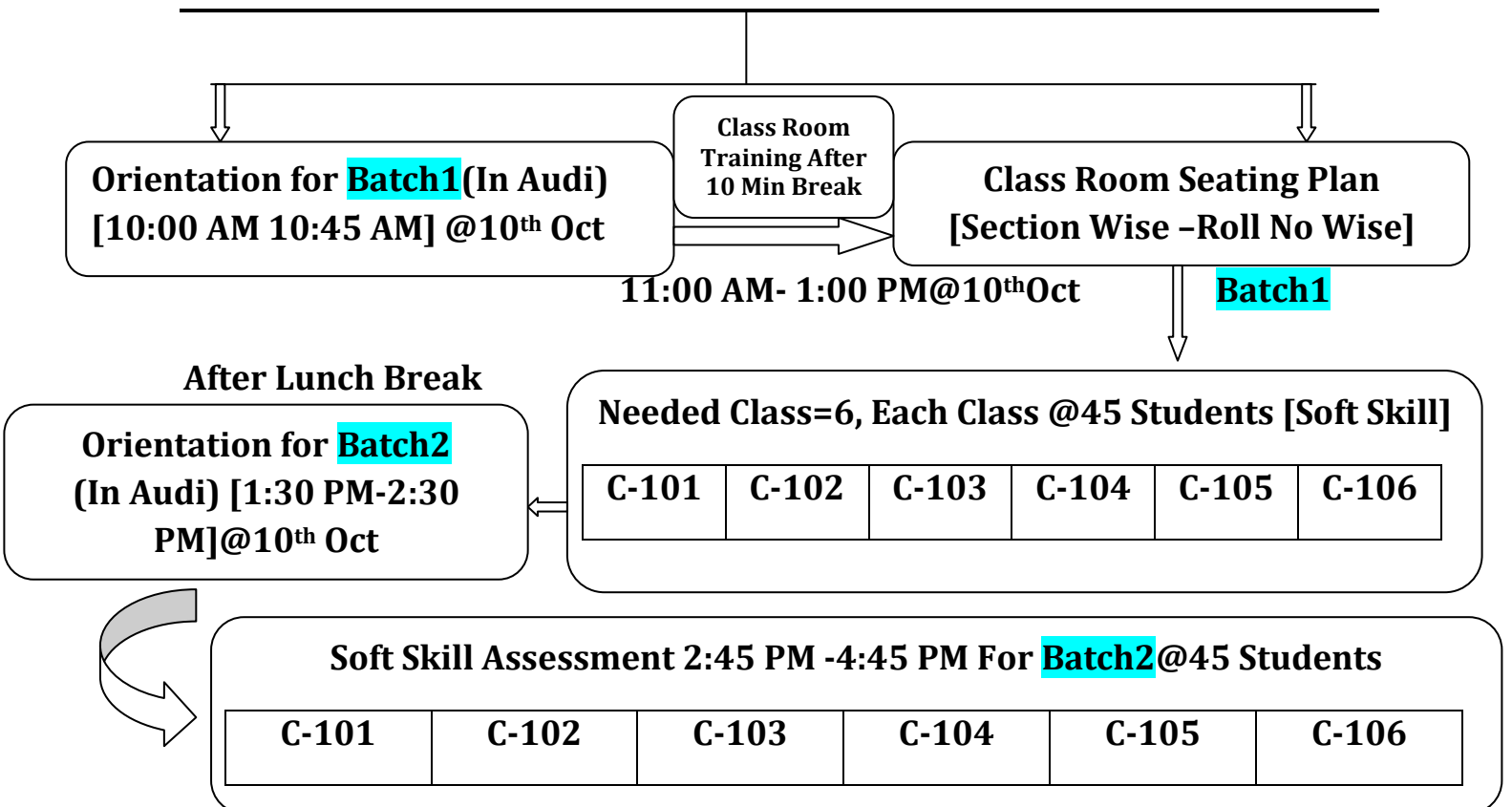


## IMS ENGINEERING COLLEGE, GHAZIABAD

IMSEC Branch	8	CSE	CS	IT	ECE	ME	BT	CSD	MBA
2 <sup>nd</sup> Year Intake	522	207	69	78	19	9	40	46	54



### Roadmap of Workshop [For Day-1 10<sup>th</sup> Oct]



## Roadmap of Workshop [For Day-2 11<sup>th</sup> Oct]

Soft Skill Assessment 11:00 AM-1:00 PM For **Batch1**@45 Students

C-101	C-102	C-103	C-104	C-105	C-106
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LUNCH BREAK [1:00 PM- 2:00 PM]

Aptitude Assessment (Online) for **Batch1** [1:30 PM-2:30 PM]

Soft Skill Assessment 02:45 PM-4:45 PM For **Batch2**@45 Students

C-101	C-102	C-103	C-104	C-105	C-106
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## Roadmap of Workshop [For Day-3 12<sup>th</sup> Oct]

Aptitude Assessment(OnLine) for **Batch#2** [1:30 PM- 2:30 PM]

TRAINING CALENDAR @ IMSEC GHAZIABAD					
Day	Dates	Time	Agenda	Batch	Room Number
Monday	10th Oct' 2022	10:00 AM-10:45 AM	Orientation	Batch 1	Seminar Hall
Monday	10th Oct' 2022	11:00 AM-1:00 PM	Soft Skills Assessment	Batch 1	C101-C106
Monday	10th Oct' 2022	1:30 -2:30 PM	Orientation	Batch 2	Seminar Hall
Monday	10th Oct' 2022	2:45- 4:45 PM	Soft Skills Assessment	Batch 2	C101-C106
Tuesday	11th Oct' 2022	11:00 AM-1.00 PM	Soft Skills Assessment	Batch 1	C101-C106
Tuesday	11th Oct' 2022	1:30-2:30 pm	Apptitude Assessment (Online)	Batch 1	Lab
Tuesday	11th Oct' 2022	2:45- 4:45 Pm	Soft Skills Assessment	Batch 2	C101-C106
Wednesday	12th Oct' 2022	1:30-2:30 pm	Apptitude Assessment (Online)	Batch 2	Lab

# *Endeavor- Progressive*

*“Program structure for B. Tech @ IMSEC”*

**TPC<sup>TM</sup> Global**  
*Training for Professional Competence*



*“Improving employability and growth of our partner institutions and universities with precision and diligence”*

# Endeavor- Progressive

Soft skill & Aptitude Training has become an inseparable and closely integrated component for the success of an individual. In an Endeavour to do so, personality development, aptitude building programs and assessment models have created their niche in the curriculum of each professional course. The project intervention would cater to students pursuing professional courses, helping them glean out their latent abilities essential for entering the corporate world.

## Program Overview

Life Skills	20 Hours
Personality Skills Enhancement (PSE)	50 Hours
Quantitative Aptitude	20 Hours
Logical Reasoning, DI & DS	10 Hours
Verbal Ability	10 Hours
Career Skills (CV & Email writing, Interview Skills)	10 hours
<b>Sub-Total</b>	<b>120 Hours</b>
<b>Complimentary Services</b>	
1. Guest Lecture from an Industry Expert	02 Hours
2. 10 Company based online assessments (4 tests / Phase)	08 Hours
<b>Total</b>	<b>130 Hours</b>
<b>Special Add Ons:</b>	
1. Unlimited access to training and practice material online	
2. Unlimited access to training videos	
3. Access to a social blog on website to share feedback and queries	
4. Regular testing on fortnight basis	
5. Mapping to the online and in class tests taken by students	

## After attending the workshop the participants would:

- ✦ See a remarkable change in the overall personality
- ✦ Improve aptitude/ DI/ DS skills
- ✦ Understand decision making and problem solving mechanism
- ✦ Improve with their group discussion and personal interview skills
- ✦ Improve personal grooming habits
- ✦ Become an effective team player
- ✦ Enhance reasoning skills.

**Campus Recruitment Training**

**Psychometric Assessments**

**Career Counseling**

**Management Development Program**

**Corporate Training**

**Aptitude Assessments**

**Sales Training**

**Train The Trainers**

**Talent Acquisition Testing**

**Company based Training**

**Faculty Development Program**

**Pre-placement Training**

## *After attending the workshop the participants would:*

- ✦ See a remarkable change in the overall personality
- ✦ Improve aptitude/ DI/ DS skills
- ✦ Understand decision making and problem solving mechanism
- ✦ Improve with their group discussion and personal interview skills
- ✦ Improve personal grooming habits
- ✦ Become an effective team player
- ✦ Enhance reasoning skills.

## *Importance of Training & Development*

- ✦ Productivity – T&D helps in increasing the productivity of a student who thereon performs at different companies to achieve their long-term goal.
- ✦ Team spirit – T&D helps in inculcating the sense of team work, team spirit, and inter-team collaborations. It helps in inculcating the zeal to learn within the student.
- ✦ Quality – T&D in improving upon the quality of work and work-life.
- ✦ Healthy work environment –T&D helps in creating the healthy working environment.
- ✦ It helps to build good employees so that individual goals align with organizational goal.
- ✦ Morale – Training and Development helps in improving the morale of the work force and in daily life.
- ✦ Training and Development helps in developing leadership skills, motivation, loyalty, better attitudes.

## *Benefits of the Students*

- ✦ Our time tested workbooks comprising Logical Reasoning, Quantitative aptitude, Verbal Ability, Data Interpretation, Data sufficiency made by Industry HR Experts.
- ✦ Our Unique Audio Video Learning solutions not only help students in developing a realistic approach towards profession and industry requirements but also help them to think out of box and explore their strengths , realize their potential.
- ✦ Trainers with rich corporate training experience from IIMs, IITs, FMS, IMT and top notch companies like Dell, HCL, TCS, Bharti Group etc.

## *Highlights of our Training Program*

- ✦ Pre Training Assessment and Post Training Assessment Report
- ✦ Online Resources
- ✦ Industry Interface
- ✦ Psychometric Assessments
- ✦ Tailor Made Modules
- ✦ Career Counseling
- ✦ Heterogeneous Grouping, Psychological Counseling and Morale Boost

*Campus Recruitment Training*  
*Psychometric Assessments*  
*Career Counseling*  
*Management Development Program*

*Corporate Training*  
*Aptitude Assessments*  
*Sales Training*  
*Train The Trainers*

*Talent Acquisition Testing*  
*Company based Training*  
*Faculty Development Program*  
*Pre-placement Training*



# Pedagogy

The sessions are conducted in the following pattern:

- ✦ ILD – Instructor Led Delivery
- ✦ Concept Building
- ✦ Short cut Techniques
- ✦ Doubt Solving
- ✦ Evaluation & Feedback

*All the sessions involve Motivational / behavioral / positive attitudinal inputs and examples which are customized as per the group / individual so that major positive change is evident in the candidates.*

## Course Duration

*120 Hours / student in academic year 2022-23 & 24, spread across 3 semesters*

## Material to the students:

*Set of books comprising of verbal ability, quantitative ability & GD/PI.*

## Modus Operandi

*To be decided with mutual convenience.*



**Campus Recruitment Training**  
**Psychometric Assessments**  
**Career Counseling**  
**Management Development Program**

**Corporate Training**  
**Aptitude Assessments**  
**Sales Training**  
**Train The Trainers**

**Talent Acquisition Testing**  
**Company based Training**  
**Faculty Development Program**  
**Pre-placement Training**

## PERSONALITY & CAREER SKILLS (60 HOURS)

Hours	Module	Content	Methodology	Objective
4 hrs	<ul style="list-style-type: none"> <li>✚ Icebreaker</li> <li>✚ TNIA (Training Need identification &amp; assessment)</li> <li>✚ Introduction, Team formation &amp; Presentation</li> <li>✚ Pre &amp; Post Assessment</li> </ul>	<ul style="list-style-type: none"> <li>✓ Introduction &amp; Welcome to the workshop.</li> <li>✓ Fetching participants to the comfort ZONE.</li> <li>✓ Creating an Environment of receptivity.</li> <li>✓ Understanding importance of team</li> <li>✓ How to form and work in teams</li> </ul>	<ul style="list-style-type: none"> <li>• ILD</li> <li>• Group activity</li> <li>• Question based discussion</li> </ul>	<ul style="list-style-type: none"> <li>• Workshop Introduction</li> <li>• Putting participants on learning mode.</li> </ul>
4 Hrs	<ul style="list-style-type: none"> <li>✚ Individual Presentation</li> <li>✚ Analysis and feedback</li> </ul>	<ul style="list-style-type: none"> <li>✓ 3 minutes Individual Presentation on given topic.</li> <li>✓ Feedback sharing with participants</li> </ul>	<ul style="list-style-type: none"> <li>• Overhead Projectors</li> <li>• White board Assessment sheets</li> </ul>	<ul style="list-style-type: none"> <li>• Implementation of the presentation skills developed in last few sessions</li> <li>• Self-assessment</li> <li>• Understanding strengths and Limitations</li> </ul>
4 Hrs	<ul style="list-style-type: none"> <li>✚ Personal Grooming</li> <li>✚ Body Language</li> </ul>	<ul style="list-style-type: none"> <li>✓ Personal grooming &amp; its importance</li> <li>✓ Personal appearance and image projection</li> <li>✓ Basic principles of dressing</li> <li>✓ Dressing Do's and Don'ts</li> <li>✓ General do's &amp; don'ts in body language for social &amp; professions worlds</li> </ul>	<ul style="list-style-type: none"> <li>• ILD</li> <li>• Videos</li> <li>• Role-plays</li> </ul>	<ul style="list-style-type: none"> <li>• Knowing the importance of grooming in the corporate world.</li> <li>• Know the correct body language for social &amp; professional life</li> </ul>
4 Hrs	<ul style="list-style-type: none"> <li>✚ Effective Communication &amp; Presentation Skills</li> </ul>	<ul style="list-style-type: none"> <li>✓ Communication – A two way process.</li> <li>✓ Elements in communication</li> <li>✓ Verbal communication</li> <li>✓ Barriers to effective communication</li> <li>✓ Overcoming Communication barriers.</li> </ul>	<ul style="list-style-type: none"> <li>• ILD</li> <li>• Group activity</li> <li>• Audio Visuals</li> </ul>	<ul style="list-style-type: none"> <li>• Understanding basics of Communication</li> <li>• Knowing non-verbal aspects of communication</li> </ul>

**Campus Recruitment Training**  
**Psychometric Assessments**  
**Career Counseling**  
**Management Development Program**

**Corporate Training**  
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**Talent Acquisition Testing**  
**Company based Training**  
**Faculty Development Program**  
**Pre-placement Training**

4 Hrs	 <b>Group Discussion I</b>	<ul style="list-style-type: none"> <li>✓ Understanding the Group discussions dynamics</li> <li>✓ Personality manifestation</li> <li>✓ Tone &amp; Voice</li> <li>✓ Countenance manners</li> <li>✓ Communication</li> <li>✓ Knowledge</li> <li>✓ Leadership</li> <li>✓ The Role Player</li> <li>✓ Positive &amp; negative traits</li> <li>✓ Accepting criticism and effective response to it</li> </ul>	<ul style="list-style-type: none"> <li>• ILD</li> <li>• Group Activity</li> <li>• Role plays</li> <li>• Question based discussion</li> </ul>	<ul style="list-style-type: none"> <li>• Understanding the factors related with being an effective participant in group discussion</li> </ul>
4 Hrs	 <b>Mock GD</b>	<ul style="list-style-type: none"> <li>✓ Analysis &amp; Feedback</li> </ul>	<ul style="list-style-type: none"> <li>• GD in the group of 8 students</li> </ul>	<ul style="list-style-type: none"> <li>• Mapping the learning of student</li> </ul>
4 Hrs	 <b>Interpersonal Skills</b>	<ul style="list-style-type: none"> <li>✓ Listening skills</li> <li>✓ Problem solving skills</li> <li>✓ Decision making</li> <li>✓ Importance of assertiveness</li> </ul>	<ul style="list-style-type: none"> <li>✓ ILD</li> <li>✓ Group Activity</li> <li>✓ Role plays</li> <li>✓ Question based discussion</li> </ul>	<ul style="list-style-type: none"> <li>• Understand the importance of interpersonal skills in personal &amp; professional life.</li> </ul>
10 Hrs	 <b>English ability</b>	<ul style="list-style-type: none"> <li>✓ Reading</li> <li>✓ Writing</li> <li>✓ Speaking</li> <li>✓ Listening</li> </ul>	<ul style="list-style-type: none"> <li>✓ ILD</li> <li>✓ Group Activity</li> <li>✓ Role plays</li> <li>✓ Exercise</li> </ul>	<ul style="list-style-type: none"> <li>• Learn English through simulations, practice, activities</li> </ul>
4 Hrs	 <b>Debates &amp; Cross-debates</b>	<ul style="list-style-type: none"> <li>✓ Dos &amp; Don'ts of debates</li> <li>✓ Importance</li> <li>✓ Convincing ability</li> <li>✓ Listening skills</li> <li>✓ Power of speaking</li> </ul>	<ul style="list-style-type: none"> <li>✓ ILD</li> <li>✓ Competition</li> <li>✓ Q &amp; A</li> </ul>	<ul style="list-style-type: none"> <li>• Learn the art of debating &amp; empathizing with others through x-debates</li> </ul>
2 Hrs	 <b>JAM (Just a minute)</b>	<ul style="list-style-type: none"> <li>✓ Spontaneous speaking ability</li> <li>✓ Presentation ability</li> <li>✓ Removing on nervousness</li> </ul>	<ul style="list-style-type: none"> <li>✓ ILD</li> <li>✓ Competition</li> <li>✓ Q &amp; A</li> </ul>	<ul style="list-style-type: none"> <li>• Build the confidence to speak spontaneously on different issues</li> </ul>
4 Hrs	 <b>Role Plays</b>	<ul style="list-style-type: none"> <li>✓ Society issues &amp; suggested sol.</li> <li>✓ Campus issues &amp; suggested sol.</li> <li>✓ Corporate issues &amp; suggested sol.</li> </ul>	<ul style="list-style-type: none"> <li>✓ ILD</li> <li>✓ Activities</li> <li>✓ Solution approach</li> <li>✓ Empathizing</li> </ul>	<ul style="list-style-type: none"> <li>• Learn to be solution centric with empathizing approach.</li> </ul>
2 Hrs	 <b>Etiquette &amp; Manners</b>	<ul style="list-style-type: none"> <li>✓ Social, campus &amp; corporate etiquette &amp; manners</li> </ul>	<ul style="list-style-type: none"> <li>✓ Activities</li> <li>✓ Fun games</li> <li>✓ Stories</li> <li>✓ Simulations</li> </ul>	<ul style="list-style-type: none"> <li>• Learn the importance &amp; after effects of being good at etiquette &amp; manners</li> </ul>
		✓	✓	•

**Campus Recruitment Training**  
**Psychometric Assessments**  
**Career Counseling**  
**Management Development Program**

**Corporate Training**  
**Aptitude Assessments**  
**Sales Training**  
**Train The Trainers**

**Talent Acquisition Testing**  
**Company based Training**  
**Faculty Development Program**  
**Pre-placement Training**

10 Hrs	<ul style="list-style-type: none"> <li>✚ Interviewing Skill</li> <li>✚ Resume Building</li> <li>✚ (workshop mode)</li> <li>✚ Mock Interviews</li> </ul>	<ul style="list-style-type: none"> <li>✓ Understanding Interview Dynamics</li> <li>✓ Preparation for the Interview</li> <li>✓ First Impression is the last impression</li> <li>✓ Learning how to tackle interview nerves</li> <li>✓ Corporate etiquette</li> <li>✓ Understanding the dynamics around the table</li> <li>✓ Dressing for Interview Success</li> <li>✓ Handling difficult Interview questions</li> <li>✓ What is Resume?</li> <li>✓ Importance of Resume</li> <li>✓ Essence of good Resume writing.</li> <li>✓ Do's and Don'ts.</li> <li>✓ Interview FAQs</li> </ul>	<ul style="list-style-type: none"> <li>• ILD</li> <li>• Group Activity</li> <li>• Question based discussion</li> <li>• Activity on resume building..</li> </ul>	<ul style="list-style-type: none"> <li>• Understanding the overall mechanism of interviewing</li> <li>• Understanding resume building .</li> </ul>
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## QUANTITATIVE APTITUDE (20 HOURS)

4 Hrs	✚ Number System - 1	✓ Discussion (Theory) Testing & Feedback.	<ul style="list-style-type: none"> <li>• ILD</li> <li>• Short cut methods</li> <li>• Class room Exercise</li> <li>• Assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Proficiency in solving Questions based on the topic while appearing Aptitude screening assessment in campus recruitment drives</li> </ul>
6 Hrs	<ul style="list-style-type: none"> <li>✚ Ratio &amp; Proportion</li> <li>✚ Percentage, profit &amp; Loss</li> </ul>	✓ Discussion (Theory) Testing & Feedback.	<ul style="list-style-type: none"> <li>• ILD</li> <li>• Short cut methods</li> <li>• Class room Exercise</li> <li>• Assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Proficiency in solving Questions based on the topic while appearing Aptitude screening assessment in campus recruitment drives</li> </ul>
2 Hrs	✚ Average, Mixture & Allegation.	✓ Discussion (Theory) Testing & Feedback.	<ul style="list-style-type: none"> <li>• ILD</li> <li>• Short cut methods</li> <li>• Class room Exercise</li> <li>• Assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Proficiency in solving Questions based on the topic while appearing Aptitude screening assessment in campus recruitment drives</li> </ul>
4 Hrs	<ul style="list-style-type: none"> <li>✚ Time &amp; Work</li> <li>✚ Pipes &amp; Cisterns</li> </ul>	✓ Discussion (Theory) Testing & Feedback.	<ul style="list-style-type: none"> <li>• ILD</li> <li>• Short cut methods</li> <li>• Class room Exercise</li> <li>• Assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Proficiency in solving Questions based on the topic while appearing Aptitude screening assessment in campus recruitment drives</li> </ul>

4 Hrs	<ul style="list-style-type: none"> <li>✚ Time Speed &amp; Distance</li> <li>✚ Linear Equations</li> </ul>	✓ Discussion (Theory) Testing & Feedback.	<ul style="list-style-type: none"> <li>• ILD</li> <li>• Short cut methods</li> <li>• Class room Exercise Assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Proficiency in solving Questions based on the topic while appearing Aptitude screening assessment in campus recruitment drives</li> </ul>
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## LOGICAL REASONING (10 Hours)

4 Hrs	<ul style="list-style-type: none"> <li>✚ Clocks &amp; Calendars</li> <li>✚ Blood Relations</li> </ul>	✓ Discussion, Testing & Feedback	<ul style="list-style-type: none"> <li>• ILD</li> <li>• Short cut methods</li> <li>• Class room Exercise Assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Proficiency in solving Questions based on the topic while appearing Aptitude screening assessment in campus recruitment drives</li> </ul>
2 Hrs	✚ Analytical Reasoning	✓ Discussion, Testing & Feedback	<ul style="list-style-type: none"> <li>• ILD</li> <li>• Short cut methods</li> <li>• Class room Exercise Assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Proficiency in solving Questions based on the topic while appearing Aptitude screening assessment in campus recruitment drives</li> </ul>
2 Hrs	✚ Picture Reasoning	✓ Discussion, Testing & Feedback	<ul style="list-style-type: none"> <li>• ILD</li> <li>• Short cut methods</li> <li>• Class room Exercise Assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Proficiency in solving Questions based on the topic while appearing Aptitude screening assessment in campus recruitment drives</li> </ul>
2 Hrs	✚ Series	✓ Discussion, Testing & Feedback	<ul style="list-style-type: none"> <li>• ILD</li> <li>• Short cut methods</li> <li>• Class room Exercise Assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Proficiency in solving Questions based on the topic while appearing Aptitude screening assessment in campus recruitment drives</li> </ul>

## VERBAL ABILITY (10 Hours)

4 Hrs	<ul style="list-style-type: none"> <li>✚ Critical Reasoning</li> <li>✚ Reading Comprehension &amp; short passages.</li> </ul>	✓ Discussion (Theory) Testing & Feedback.	<ul style="list-style-type: none"> <li>• ILD</li> <li>• Short cut methods</li> <li>• Class room Exercise Assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Proficiency in solving Questions based on the topic while appearing Aptitude screening assessment in campus recruitment drives</li> </ul>
4 Hrs	✚ Grammatical Errors Elimination.	✓ Discussion (Theory) Testing & Feedback.	<ul style="list-style-type: none"> <li>• ILD</li> <li>• Short cut methods</li> <li>• Class room Exercise Assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Proficiency in solving Questions based on the topic while appearing Aptitude screening assessment in campus recruitment drives</li> </ul>

2 Hrs	✚ Para-Jumbles	✓ Discussion (Theory) Testing & Feedback.	<ul style="list-style-type: none"> <li>• ILD</li> <li>• Short cut methods</li> <li>• Class room Exercise</li> <li>• Assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Proficiency in solving Questions based on the topic while appearing Aptitude screening assessment in campus recruitment drives</li> </ul>
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## *Complimentary Services*

- ✚ Unlimited access to practice material online
- ✚ Unlimited access to training material and modules
- ✚ Unlimited access to company mock paper online
- ✚ Access to social blog
- ✚ Guest Lecture from an Industry expert on latest software and technological trends

Kindly feel comfortable to contact us if you need further information/clarifications. We will be delighted to take care of any requirement/clarification that you may have.

Assuring you our best services

*Thanking You*

*Regards*

### Ajay Sharma

Contact No: +91-(0)-999-99-80-120

E - Mail: [info@tpcglobal.in](mailto:info@tpcglobal.in)  
[ajaysharmatpc@gmail.com](mailto:ajaysharmatpc@gmail.com)

Executive Director



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### Corporate office:

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 Vaishali  
 Ghaziabad -201010  
 UP, INDIA

*Campus Recruitment Training*  
*Psychometric Assessments*  
*Career Counseling*  
*Management Development Program*

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*Pre-placement Training*



# IMS ENGINEERING COLLEGE, GHAZIABAD

## NOTICE

**From: TID DEPTT**

**To: ALL CONCERN**

**Ref No: TID/Dec-2022/07/12/2022/2**

It is bring to your kind notice that a Soft Skill & Quantitative Aptitude Training Program has been started from 02 Nov 2022 at IMS Engineering College, Ghaziabad. The Quality based Training Program will be delivered by TPC Global as per work order . As per information either of TPC Training modules shared Dash Board or Department's Head, the following time hours has been completed and which is mentioned below:-

S. No.	Year/Semester	Delivered (In Hours)	Soft Skill ( In Hours)	Quantitative Aptitude (In Hours)
1	3 <sup>rd</sup> /5 <sup>th</sup>	26	22	04
2	2 <sup>nd</sup> /3 <sup>rd</sup>	16	12	04

### 3<sup>rd</sup> Year Dash Board Screen Shot:-

Course	Number of Session	Number of hours	Present	Absent	% Present	%Absent	Room Numbers	Session
BT	13	26	417	116	78.24%	21.76%	C305	Morning
CS-A	12	24	365	175	67.59%	32.41%	C408	Evening
CS-B	12	24	349	167	67.64%	32.36%	C405	Evening
CSE - A	13	26	643	189	77.28%	22.72%	C105	Morning
CSE- B	13	26	750	82	90.14%	9.86%	C106	Morning
CSE - C	13	26	708	98	87.84%	12.16%	C107	Morning
CSE - D	12	24	671	109	86.03%	13.97%	C108	Morning
ECE	13	26	63	15	80.77%	19.23%	C304	Morning
IT	12	24	353	115	75.43%	24.57%	C204	Evening
IT 2	12	24	465	51	90.12%	9.88%	C203	Evening
ME	13	26	95	22	81.20%	18.80%	C304	Morning
EN	13	26	39	13	75.00%	25.00%	C304	Morning

**2<sup>nd</sup> Year Dash Board Screen Shot:-**

Course	Number of Session	Number of hours	Present	Absent	% Present	%Absent	Room Numbers	Session
BT	8	16	233	55	80.90%	19.10%	C305	Morning
CS-A	7	14	180	100	64.29%	35.71%	C409	Evening
CS-B	7	14	140	70	66.67%	33.33%	C409	Evening
CSD	7	14	230	64	78.23%	21.77%	C410	Evening
CSE - A	7	14	344	41	89.35%	10.65%	C101	Morning
CSE- B	7	14	312	38	89.14%	10.86%	C102	Morning
CSE - C	7	14	306	51	85.71%	14.29%	C103	Morning
CSE - D	6	12	285	27	91.35%	8.65%	C104	Morning
ECE	8	16	73	47	60.83%	39.17%	C-305	Morning
IT	7	14	203	49	80.56%	19.44%	C207	Evening
IT 2	7	14	205	26	88.74%	11.26%	C205	Evening
MBA	6	12	0	0	#DIV/0!	#DIV/0!	A201	NA
ME	8	16	43	5	89.58%	10.42%	C-305	Morning

Keeping in mind Odd Semester University Examination 2022, Academic Council Members has decided that 3<sup>rd</sup> Year Soft Skill Training program will not run w.e.f. 07/12/2022 and it will be resumed after Examination, date will be shared later on. 2<sup>nd</sup> Year TPC Soft Skill Training will further run by 20<sup>th</sup> Dec 2022 and it will be stopped from 09/12/2022. So requested to all of you kindly connect with Year wise Department Students during this period.

With Regards,



**Prof. (Dr.) Prabhat Kumar Srivastava**  
**Head TID**  
**IMS Engineering College, Ghaziabad, U.P.**

**Copy to:**

1. Director, IMSEC (For information please)
2. Dean (A), IMSEC (For information please)
3. All Department HOD
4. All Notice Boards





Training and Internship Division IMSEC &lt;tid@imsec.ac.in&gt;

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**2nd & 3rd Year Training module time table of Odd Sem 2022**

4 messages

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**Training and Internship Division IMSEC** <tid@imsec.ac.in>

Wed, Aug 24, 2022 at 11:28 AM

To: HOD Computer Science & Engineering <hodcse@imsec.ac.in>, HOD Computer Science <hodcs@imsec.ac.in>, HOD Information Technology <hodit@imsec.ac.in>, HOD Electronics & Communication <hodec@imsec.ac.in>, HOD Mechanical Engineering <hodme@imsec.ac.in>, "HOD Bio-Tech." <hodbt@imsec.ac.in>, HOD Electrical Engineering <hoden@imsec.ac.in>, HOD Civil Engineering <hodce@imsec.ac.in>, HOD Applied Science <hodas@imsec.ac.in>, "Dr.Renuka" <renuka.singh@imsec.ac.in>, Amit Maan <amit.maan@imsec.ac.in>, Monika Singh <monika.singh@imsec.ac.in>  
Cc: Dean Academics <deanacademic@imsec.ac.in>

Dear Mam/Sir

Kindly find herewith attachment of 2nd & 3rd Year Training module time table of Odd Sem 2022. If you find any errors then kindly let me know.

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**Prof. (Dr.) Prabhat Kumar Srivastava**

Head (TID)

Training and Internship Division

Ph: 9871771996

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**4 attachments** **Time Table TID 3rd year IT+BT+ECE+ME.xls**  
83K **Time Table TID 3rd year CSE+CS.xls**  
83K **Time Table TID 2nd year IT+BT+ECE+ME.xls**  
83K **Time Table TID 2nd year CSE+CS.xls**  
82K

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**Training and Internship Division IMSEC** <tid@imsec.ac.in>




Wed, Aug 24, 2022 at 11:30 AM

To: Nitin Goyal &lt;nitin.goyal@imsec.ac.in&gt;

Cc: HOD Computer Science &amp; Engineering &lt;hodcse@imsec.ac.in&gt;

[Quoted text hidden]

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**4 attachments** **Time Table TID 3rd year IT+BT+ECE+ME.xls**  
83K **Time Table TID 3rd year CSE+CS.xls**  
83K **Time Table TID 2nd year IT+BT+ECE+ME.xls**  
83K **Time Table TID 2nd year CSE+CS.xls**  
82K

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**Training and Internship Division IMSEC** <tid@imsec.ac.in>


Wed, Aug 24, 2022 at 2:32 PM

To: Anjali Patel <anjali.patel@imsec.ac.in>, Anju Joshi <anju.joshi@imsec.ac.in>, "Dr.Renuka" <renuka.singh@imsec.ac.in>


[Quoted text hidden]


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**4 attachments**

 **Time Table TID 3rd year IT+BT+ECE+ME.xls**  
83K

 **Time Table TID 3rd year CSE+CS.xls**  
83K

 **Time Table TID 2nd year IT+BT+ECE+ME.xls**  
83K

 **Time Table TID 2nd year CSE+CS.xls**  
82K

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**Training and Internship Division IMSEC** <tid@imsec.ac.in>  
To: Neha Chaudhary <neha.chaudhary@imsec.ac.in>


Mon, Aug 29, 2022 at 10:03 AM


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**4 attachments**

 **Time Table TID 3rd year IT+BT+ECE+ME.xls**  
83K

 **Time Table TID 3rd year CSE+CS.xls**  
83K

 **Time Table TID 2nd year IT+BT+ECE+ME.xls**  
83K

 **Time Table TID 2nd year CSE+CS.xls**  
82K