ELECTRONICS AND COMMUNICATION ENGINEERING

FACULTY ACHIEVEMENTS

Faculty as Participants in Faculty Development / Training activities/ STTPs

CAY (2024-25)

S. No.	Name & Designation	Name of FDP	Period	
			From	**To**
1	Neha Sharma	2 days FDP on "Evidence Based Pedagogical Practices and Educational Technology"	02.08.24	03.08.24
2	Dr. Ankit Soni	2 days FDP on "Evidence Based Pedagogical Practices and Educational Technology"	02.08.24	03.08.24
3	Prof. Mahendra Jadhav	2 days FDP on "Evidence Based Pedagogical Practices and Educational Technology"	02.08.24	03.08.24
4	Neha Sharma	AI and Cloud based Tools for Research	24.03.25	28.03.25
5	Dr. Reena Disawal	2 days FDP on "Evidence Based Pedagogical Practices and Educational Technology"	02.08.24	03.08.24
6	Prof. Naveen Mukati	5 days FDP on "Innovation and Entrepreneurship"	24.03.25	28.03.25

CAYm1 (2023-24)

S. No.	Name & Designation	Name of FDP	Period	
			From	**To**
1	Prof. Neha Sharma	5 days FDP on Artificial Embedded Systems	24.07.23	28.07.23
2	Prof. Neha Sharma	5 days FDP on "VLSI to System Design: Silicon to End Application Approach"	31.07.23	04.08.23

3	Prof. Neha Sharma	5 days FDP on "Design and Simulation of next.generation Semiconductor Devices and its Application for Bio.Sensing	01.01.24	06.01.24
4	Dr. Reena Disawal	5 days FDP on "Design and Simulation of next.generation Semiconductor Devices and its Application for Bio.Sensing	01.01.24	06.01.24
5	Prof. Sadhana Tiwari	5 days FDP on "Design and Simulation of next.generation Semiconductor Devices and its Application for Bio.Sensing	01.01.24	06.01.24
6	Dr. Mahendra Singh Thakur	5 days FDP on "Design and Simulation of next.generation Semiconductor Devices and its Application for Bio.Sensing	01.01.24	06.01.24
7	Dr. Ankit Soni	2 Week FDP on Data Science & Scientific Computing	03.01.24	16.01.24
8	Prof. Sadhana Tiwari	VLSI to System Design: Silicon to End Application Approach"	31.07.23	04.08.23
9	Prof. Sadhana Tiwari	Image analysis using Python	14.12.23	20.12.23

CAYm2 (2022-23)

S. No.	Name & Designation	Name of FDP	Period	
			From	To
1	Ms. Sadhana Tiwari	Machine Learning to Deep Learning: A Journey for Remote Sensing Data Classification ,ISRO	04.07.2022	08.07.2022
2	Ms. Sadhana Tiwari	Designing & modeling of IoT ,AI ML based system , AICTE, ARM education & ST microelectronics	01.08.2022	05.08.2022
3	Ms. Neha Sharma	5 days FDP on " Applications of Deep Learning in the real world", Arya College of Engineering & IT Jaipur	22.05.2023	26.05.2023
4	Ms. Neha Sharma	One Week FDP on "Introduction to Data Science", NITTTR Kolkata	12.06.2023	16.06.2023

S. No.	Name & Designation	Name of FDP. workshop.Seminar. Conference and Venue	From	To
5	Ms. Neha Sharma	Two week FDP on "Advanced Pedagogy" , NITTTR Kolkata	19.06.2023	30.06.2023
6	Ms. Sadhana Tiwari	Two week FDP on "Advanced Pedagogy" , NITTTR Kolkata	19.06.2023	30.06.2023
7	Dr. Reena Disawal	Two week FDP on "Advanced Pedagogy" , NITTTR Kolkata	19.06.2023	30.06.2023
8	Dr. Mahendra Singh Thakur	Two week FDP on "Advanced Pedagogy" , NITTTR Kolkata	19.6.2023	30.6.2023
9	Mr. Pankaj Raghuwanshi	Remote Sensing & GIS Applications in Agriculture, IIRS Dehradun, ISRO.	25.07.2022	29.07.2022
10	Mr. Pankaj Raghuwanshi	"Role of smart Electronics and renewable energy systems for sustainable development"	14.03.2023	18.03.2023
11	Mr. Pankaj Raghuwanshi	5 days FDP on " Applications of Deep Learning in the real world", Arya College of Engineering & IT Jaipur	22.05.2023	26.05.2023

CAYm3 (2021-22)

S. No.	Name & Designation	Name of FDP. workshop.Seminar. Conference and Venue	Period	
			From	To
1	Dr. Aabha Jain	Pedagogy FDP for PIEMR: "New Age Pedagogy and Tools for Effective Teaching Learning"	27.01.2022	31.01.2022
2	Dr. Aabha Jain	AICTE-ISTE Refresher Program on "Intelligence based physiology signals and their Learning And analysis"	12.01.2022	27.01.2022
3	Dr. Aabha Jain	FDP on Architecture and Technologies for 5G and Beyond Wireless Networks	16.08.2021	20.08.2021
4	Dr. Reena Disawal	Pedagogy FDP for PIEMR: "New Age Pedagogy and Tools for Effective Teaching Learning"	27.01.2022	31.01.2022

5	Dr. Reena Disawal	AICTE-ISTE Refresher Program on "Artificial Intelligence based physiology signals and their Learning And analysis"	12.01.2022	18.01.2022
6	Dr. Mahendra Singh Thakur	Pedagogy FDP for PIEMR: "New Age Pedagogy and Tools for Effective Teaching Learning"	27.01.2022	31.01.2022
7	Dr. Mahendra Singh Thakur	AICTE-ISTE Refresher Program on "Artificial Intelligence based physiology signals and their Learning And analysis"	12.01.2022	18.01.2022
8	Dr. Mahendra Singh Thakur	Fabless and Fab Semiconductor Ecosystem under Madhya Pradesh Vigyan Sammelan & Expo (MPVS-2021)	22.12.2021	25.12.2021
9	Dr. Mahendra Singh Thakur	36th Indian Engineering Congrss	15.12.2021	16.12.2021
10	Dr. Mahendra Singh Thakur	STTP on Electromagnetics: Recent Trends and Future Applications	28.02.2022	05.03.2022
11	Ms. Sadhana Tiwari	Pedagogy FDP for PIEMR: "New Age Pedagogy and Tools for Effective Teaching Learning"	27.01.2022	31.01.2022
12	Ms. Sadhana Tiwari	AICTE-ISTE Refresher Program on "Artificial Intelligence based physiology signals and their Learning And analysis"	12.01.2022	18.01.2022
13	Ms. Sadhana Tiwari	Inculcating Universal Human Values in Technical Education"	18.10.2021	22.10.2021
14	Mr. Pankaj Raghuwanshi	Hyper spectral and Microwave Remote Sensing Techniques for Geological Studies	07.03.2022	17.03.2022
15	Mr. Pankaj Raghuwanshi	Online Course on Global Navigation Satellite System	21.02.2022	04.03.2022
16	Mr. Pankaj Raghuwanshi	Pedagogy FDP for PIEMR: "New Age Pedagogy and Tools for Effective Teaching Learning"	27.01.2022	31.01.2022
17	Mr. Pankaj Raghuwanshi	Online Course Short Term Course on Sampling Theory and Its Applications:	24.01.2022	29.01.2022

		Signal Image Processing and Data Science		
18	Mr. Pankaj Raghuwanshi	AICTE-ISTE Refresher Program on"Artificial Intelligence based physiology signals and their Learning And analysis"	12.01.2022	18.01.2022
19	Mr. Pankaj Raghuwanshi	87-IIRS ISRO Outreach Programme on Global Navigation Satellite System	13.09.2021	24.09.2021
20	Mr. Pankaj Raghuwanshi	ATAL FDP on Panacea of Success: 'Leadership Excellence'	24.08.2021	28.08.2021
21	Mr. Pankaj Raghuwanshi	ATAL FDP on Robotics	02.09.2021	06.08.2021
22	Ms. Neha Sharma	Pedagogy FDP for PIEMR: "New Age Pedagogy and Tools for Effective Teaching Learning"	27.01.2022	31.01.2022
23	Ms. Neha Sharma	AICTE-ISTE Refresher Program on" Artificial Intelligence based physiology signals and their Learning And analysis"	12.01.2022	18.01.2022
25	Ms. Neha Sharma	Artificial intelligence in Electronic Design Automation	09.08.2021	13.08.2021
26	Ms. Neha Sharma	Pedagogy for Effective use of 5G Communication Network for Cloud Applications.	13.07.2022	17.07.2022
27	Mr. Rishabh Badjatiya	Pedagogy FDP for PIEMR: "New Age Pedagogy and Tools for Effective Teaching Learning"	27.01.2022	31.01.2022
28	Mr. Rishabh Badjatiya	AICTE-ISTE Refresher Program on" Artificial Intelligence based physiology signals and their Learning And analysis"	12.01.2022	18.01.2022
29	Mr. Rishabh Badjatiya	AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Custom IC Design in the Advanced CMOS Technology"	21.11.2021	25.11.2021
30	Mr. Rishabh Badjatiya	AICTE Training And Learning (ATAL) Academy Online FDP on " Internet of Things (IoT)"	02.11.2021	06.11.2021

31	Mr. Rishabh Badjatiya	AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "FDP on Molecular Modelling and In-silico Drug Designing."	23.08.2021	27.08.2021

Following faculty members have given the exam and successfully cleared NPTEL Course. AICTE defines the course as equivalent to FDP.

List of Faculty members who successfully completed NPTEL Courses in 2024-25

S.NO.	Name	Course Name
1.	Prof. Neha Sharma	Microprocessor and Microcontroller

List of Faculty members who successfully completed NPTEL Courses in 2023-24

S.No.	Name	Course Name
1.	Dr. Reena Disawal	Digital Electronic Circuits
2.	Dr. Reena Disawal	Principles of Signals and Systems
3.	Ms. Neha Sharma	Research Methodology
4.	Ms. Sadhana Tiwari	Research Methodology

List of faculty members who successfully completed NPTEL Courses in 2021-22

S.NO.	Name	Course Name
1.	Dr. Reena Disawal	Discrete Time Signal Processing

List of Publication by the Faculty of the Department

CAY (2024-25)

S. No.	Name of the faculty	Title of paper	Name of the Journal	Year of Publication	International/National Journal
1	Dr. Mahendra Singh Thakur	Smart Hybrid Drone with a 5G Base for Land Survey and Surveillance	IJARCCE	2025	International
2	Dr. Mahendra Singh Thakur	Smart Anti-Sleep Eyewear for student	IJARCCE	2025	International
3	Ms. Sadhana Tiwari	Smart Anti-Sleep Eyewear for student	IJARCCE	2025	International
4	Ms. Neha Sharma	ONU Placement Optimization in FiWi Networks Using Mountain Gazelle Algorithm with Hyperbolic, Archimedes and Logarithmic Spirals	Journal of Information systems Engineering and Management (JISEM)	2025	Scopus International Journal
5	Ms. Neha Sharma	Smart Anti-Sleep Eyewear for student	IJARCCE	2025	International
6	Mr. Naveen Mukati	Smart Hybrid Drone with a 5G Base for Land Survey and Surveillance	IJARCCE	2025	International

| 7 | Mr. Naveen Mukati | Smart Anti-Sleep Eyewear for student | IJARCCE | 2025 | International |
| 8 | Mr. Mahendra R. Jadhav | Towards Intelligent Food Safety: Machine Learning Approaches for Aflatoxin Detection and Risk Prediction | Trends in Food Science & Technology | 2025 | International |

CAY m1(2023-24)

S. No.	Name of the faculty	Title of paper	Name of the Journal	Year of Publication	International/ National Journal
1	Dr. Mahendra Singh Thakur	Leveraging 5G Drone Technology for Enhanced Agricultural Automation	International Journal of Trendin Scientific Research and Development (IJTSRD)	2024	International
2	Dr. Mahendra Singh Thakur	Role of Drone Technology for Smart City Application using 5g Technology	International Journal for Research Trends and Innovation (IJRTI)	2023	International
3	Mr. Naveen Mukati	Leveraging 5G Drone Technology for Enhanced Agricultural Automation	International Journal of Trendin Scientific Research and Development (IJTSRD)	2024	International
4	Mr. Naveen Mukati	Role of Drone Technology for Smart City Application	International Journal for Research Trends	2023	International

		using 5g Technology	and Innovation (IJRTI)		
5	Mr. Naveen Mukati	Smart Automated People Counting Device with Light Control Powered by IoT City Application	International Journal of Trends in Scientific Research and Development (IJTSRD)	2024	International

CAYm3 (2021-22)

S. No.	Name of the faculty	Title of paper	Name of the Journal	Year of Publication	International/ National Journal
1.	Dr. Rajkamal	A Design Approach for Identifying, Diagnosing and Controlling Soybean Diseases using CNN Based Computer-Vision (CV) of the Leaves for optimizing the production	IOP Series: Materials and Engineering	2021	International
2.	Dr. Rajkamal	Comparative study of orchestrated, centralised and decentralised approaches for orchestrator-based task allocation and collision avoidance using network-controlled robots	*Journal of King Saud University - Computer and Information Sciences*	2021	International
3.	Dr. Rajkamal	An Architectural Design for Inspection of Machine Objects using Small DNNs as TinyML for Machine-Vision	Innovations in Computing	2022	International

		of defects and faults in the Manufacturing Processes			
4	Dr. Rajkamal	New Palladium (II) complexes of 2-arylidene-1-(4-methyl-6- phenyl-pyrimidin-2-yl) hydrazines: synthesis, spectroscopic characterization, biological evaluation and protein binding	Journal of the Iranian Chemical Society	2021	International

Research Conferences attended by Faculty

CAY (2024-25)

Sr. No.	Name of the faculty	Title of paper	Title of Conference/Seminar	Organized by	National/ International
1.	Neha Sharma	Design and Development of A 6-Dof Robotic Arm for Pick and Place Application **(ACCEPTED)**	International Conference on AI and Robotics (AIR 2025)	Nazarbayev University Kazakhstan in association with Soft Computing Research Society in Hybrid Mode	International SCOPUS Indexed Springer Book Series
2.	Neha Sharma	Performance Measurement and Analysis of Soil Quality Using IoT	2024 8th International Conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud) (I-SMAC)	Purwanchal Campus, Institute of Engineering, Tirubhuvan university , Nepal	International , IEEE Explore

3.	Neha Sharma	Review of Survivability Techniques in Fiber-Wireless Networks to Achieve Uninterrupted Connectivity	3rd International Conference on Applied Data Science and Smart Systems(ADSSS-2024)	Chitkara University	International, AIP Conference Proceeding
4.	Mahendra R. Jadhav	Design and Development of A 6-Dof Robotic Arm for Pick and Place Application **(ACCEPTED)**	International Conference on AI and Robotics (AIR 2025)	Nazarbayev University Kazakhstan in association with Soft Computing Research Society in Hybrid Mode	International SCOPUS Indexed Springer Book Series

CAY m1 (2023-24)

Sr. No.	Name of the faculty	Title of paper	Title of Conference/ Seminar	Organized by	National/ International
1.	Reena Disawal	Study of Exascale Computing: Advancements, Challenges, and Future Directions	2nd International conference on Applied Data Science and Smart Systems (ADSSS 2023)	Chitkara University	International
2.	Reena Disawal	Viability Detection of Soybean Seeds using α-variogram based Statistical Analysis	4th International Conference on Condensed Matter & Applied Physics (ICC-2023), Bikaner	Department of Physics, Engineering College, Bikaner and Condensed Matter Research	International

				Society	
3	Reena Disawal	Intelligent Spraying Application of UAV for Continuous Evenly Distributed Crop in Horticulture	Innovative Research in Agriculture, Engineering, Technology, Applied Sciences, Humanities and Business Management for Sustainable Development" (ETAHBS-2023)	Krishi Sanskriti, PIT, New Delhi	International
4.	Mahendra Singh Thakur	Study of Exascale Computing: Advancements, Challenges, and Future Directions	2nd International conference on Applied Data Science and Smart Systems (ADSSS 2023)	Chitkara University	International
5.	Mahendra Singh Thakur,	Viability Detection of Soybean Seeds using α-variogram based Statistical Analysis	4th International Conference on Condensed Matter & Applied Physics (ICC-2023), Bikaner	Department of Physics, Engineering College, Bikaner and Condensed Matter Research Society	International
6.	Sadhana Tiwari	Study of Exascale Computing: Advancements, Challenges, and Future Directions	2nd International conference on Applied Data Science and Smart Systems (ADSSS 2023)	Chitkara University	International
7.	Sadhana	Viability Detection of	4th International	Department of Physics,	International

	Tiwari,	Soybean Seeds using α-variogram based Statistical Analysis	Conference on Condensed Matter & Applied Physics (ICC-2023), Bikaner	Engineering College, Bikaner and Condensed Matter Research Society	
8.	Neha Sharma	Study of Exascale Computing: Advancements, Challenges, and Future Directions	2nd International conference on Applied Data Science and Smart Systems (ADSSS 2023)	Chitkara University	International
9.	Ms. Neha Sharma	Examining Approaches To Image Segmentation in Medical Image Analysis	4th International Conference on Condensed Matter & Applied Physics (ICC-2023), Bikaner	Department of Physics, Engineering College, Bikaner and Condensed Matter Research Society	International
10.	Ms. Neha Sharma	Exploring Image Segmentation Approaches for Medical Image Analysis	2nd International conference on Applied Data Science and Smart Systems (ADSSS 2023)	Chitkara University	International
11.	Amit Chatterjee	Viability Detection of Soybean Seeds using α-variogram based Statistical Analysis	4th International Conference on Condensed Matter & Applied Physics (ICC-2023), Bikaner	Department of Physics, Engineering College, Bikaner and Condensed Matter Research Society	International

CAYm2 (2022-23)

Sr. No.	Name of the faculty	Title of paper	Title of Conference /Seminar	Organized by	National/ International
1.	Dr. Reena Disawal	5G to 6G Evolution or Revolution	ICICES 17-18 March 2023	IET DAVV	International
2.	Dr. Reena Disawal	Landslide Monitoring and Alarming System using IoT	ICICES 17-18 March 2023	IET DAVV	International
3.	Dr. Reena Disawal	Advanced IOT Based Smart Car Parking System	ICICES 17-18 March 2023	IET DAVV	International
4.	Dr. Mahendra Singh Thakur	5G to 6G Evolution or Revolution	ICICES 17-18 March 2023	IET DAVV	International
5.	Mahendra Singh Thakur	Landslide Monitoring and Alarming System using IoT	ICICES 17-18 March 2023	IET DAVV	International
6.	Dr. Mahendra Singh Thakur	Advanced IOT Based Smart Car Parking System	ICICES 17-18 March 2023	IET DAVV	International
7.	Ms. Sadhana Tiwari	5G to 6G Evolution or Revolution	ICICES 17-18 March 2023	IET DAVV	International
8.	Neha Sharma	5G to 6G Evolution or Revolution	ICICES 17-18 March 2023	IET DAVV	International

9.	Mr. Suyog Munshi	Landslide Monitoring and Alarming System using IoT	ICICES 17-18 March 2023	IET DAVV	International
10.	Mr. Panakaj kumar Raghuwanshi	Landslide Monitoring and Alarming System using IoT	ICICES 17-18 March 2023	IET DAVV	International

CAYm3 (2021-22)

Sr. No.	Name of the faculty	Title of paper	Title of Conference/Seminar	Organized by	National/International
1.	Dr. Aabha Jain	Investigations Towards the Measurement of Displacement using Lateral Shearing Interferometry and Fourier Fringe Analysis Technique	ICCTPP-2022	MIT WPU, Pune 8-11 Jun 2022	International
2.	Dr. Aabha Jain	Accelerated AI Inference at CNN Based Machine Vision in ASICs: A Design Approach	Doctoral Consortium (CUDC-2021)	Chitkara University 12-13 November 2021	International
3.	Dr. Aabha Jain	A Survey of Internet of Things: Smart System for Future	Convergence of Smart Technologies (ICCST-2021)	PIEMR, Indore 03-04 Sep 2021.	International
4.	Ms. Sadhana Tiwari	Idea, Architecture and Applications of 5G enabled IoMT Systems for	Doctoral Consortium (CUDC-2021),	Chitkara University	International

		Smart Health Care System		12-13 November 2021	
5.	Ms. Sadhana Tiwari	Case study on Artificial Intelligence based Neuralink	Convergence of Smart Technologies(ICCST-2021)	PIEMR, Indore 03-04 Sep 2021.	International
6.	Ms. Neha Sharma	Idea, Architecture and Applications of 5G enabled IoMT Systems for Smart Health Care System	Doctoral Consortium (CUDC-2021),	Chitkara University 12-13 November 2021	International
7.	Ms. Neha Sharma	Accelerated AI Inference at CNN Based Machine Vision in ASICs: A Design Approach	Doctoral Consortium (CUDC-2021),	Chitkara University 12-13 November 2021	International
8.	Ms. Neha Sharma	Case study on Artificial Intelligence based Neuralink	Convergence of Smart Technologies (ICCST-2021)	PIEMR, Indore 03-04 Sep 2021.	International
9.	Mrs. Neha Sharma	A Survey of Internet of Things: Smart System for Future	Convergence of Smart Technologies (ICCST-2021)	PIEMR, Indore 03-04 Sep 2021.	International
10.	Mr. Suyog Munshi	Optical Fibre Link Power Analysis Under Rain & Wind Pressure Effect and Various Modulation Schemes	Convergence of Smart Technologies (ICCST-2021)	PIEMR Indore 03-04 Sep 2021.	International
11.	Mr. Pankaj Raghuvanshi	Role of Mathematics in Research	ICCST-2021	PIEMR Indore	International

				03-04 Sep 2021.	
12.	Dr. Reena Disawal	Investigations Towards the Measurement of Displacement using Lateral Shearing Interferometry and Fourier Fringe Analysis Technique	ICCTPP-2022	MIT WPU, Pune, 9-11 Jun 2022	International
13.	Mahendra Singh Thakur	Investigations Towards the Measurement of Displacement using Lateral Shearing Interferometry and Fourier Fringe Analysis Technique	ICCTPP-2022	MIT WPU, Pune, 9-11 Jun 2022	International

Patents

CAY (2024-25)

S. N	Patent Application No.	Status of Patent (Published / Granted)	Inventor/s Name	Title of the Patent	Patent Filed Date (DD/MM/YYYY)	Patent Published Date / Granted Date (DD/MM/YYYY)
1	445645-001	Design Granted	Dr. Mahendra Singh Thakur	Anti sleep eyewear	26/01/2025	Application under Process (wating for Technical)
2	443146-001	Desing Granted	Dr. Mahendra Singh	5g Based Smart Hybrid Drones	05/01/2025	Application under Process (wating for Technical)

			Thakur			
3	445645-001	Design Granted	Er. Sadhana Tiwari	Anti sleep eyewear	26/01/2025	Application under Process (wating for Technical)
4	426376-001	Published	Ms. Neha Sharma	Smart Wireless Charging Equipment for Electric Vehicles		9/8/2024
5	445645-001	Design Granted	Er. Pankaj Kumar Raghuwanshi	Anti sleep eyewear	26/01/2025	Application under Process (wating for Technical)
6	445645-001	Design Granted	Er. Naveen Mukati	Anti sleep eyewear	26/01/2025	Application under Process (wating for Technical)
7	443146-001	Desing Granted	Er. Naveen Mukati	5g Based Smart Hybrid Drones	05/01/2025	Application under Process (wating for Technical)

CAYm1(2023-24)

S.N	Patent Application No.	Status of Patent (Published / Granted)	Inventor/s Name	Title of the Patent	Patent Filed Date (DD/MM/YYYY)	Patent Published Date / Granted Date (DD/MM/YYYY)

1	386585-001	Published	Dr. Reena Desawal	Solar Powered Laptop and Mobile Charging Station	18/05/2023	28/07/2023
2	388724-001	Published	Dr. Reena Disawal	Wireless Messenger	21/06/2023	01/09/23
3	202321041369	Published	Dr. Reena Disawal	System and Method for Monitoring and Alerting Landslide Movements using IoT Sensors	17/06/2023	22/09/2023
4	388725-001	Published	Dr. Reena Disawal	Automatic Guided vehicles	21/06/2023	23/02/2024
5	388724-001	Published	Dr. Mahendra Singh Thakur	Wireless Messenger	21/06/2023	01/09/23
6	202321041369	Published	Dr. Mahendra Singh Thakur	System and Method for Monitoring and Alerting Landslide Movements using IoT Sensors	17/06/2023	22/09/2023

7	388725-001	Published	Dr. Mahendra Singh Thakur	Automatic Guided vehicles	21/06/2023	23/02/2024
8	410828-001	Desing Granted	Dr. Mahendra Singh Thakur	Agriculture Drones with 5G Capabilities	18/03/2024	16/05/2024
9	6303957	Desing Granted	Dr. Mahendra Singh Thakur	Smart Drones based on 5G Technology	16/08/2023	29/08/2023
10	410828-001	Desing Granted	Er. Rishabh Badjatya	Agriculture Drones with 5G Capabilities	18/03/2024	16/05/2024
11	6303957	Desing Granted	Er. Rishabh Badjatya	Smart Drones based on 5G Technology	16/08/2023	29/08/2023
12	410828-001	Desing Granted	Er. Pankaj Kumar Raghuwanshi	Agriculture Drones with 5G Capabilities	18/03/2024	16/05/2024
13	410586-001	Published	Dr. Ankit Soni	Smart Brain Monitoring Headset	15/03/2024	02/05/2024
14	410828-001	Desing Granted	Er. Naveen Mukati	Agriculture Drones with 5G Capabilities	18/03/2024	16/05/2024
15	6303957	Desing Granted	Er. Naveen Mukati	Smart Drones based on 5G Technology	16/08/2023	29/08/2023

16	6303957	Desing Granted	Er. Deepak Goud	Smart Drones based on 5G Technology	16/08/2023	29/08/2023

CAYm2(2022-2023)

S. N	Patent Application No.	Status of Patent (Published / Granted)	Inventor/s Name	Title of the Patent	Patent Filed Date (DD/MM/YYYY)	Patent Published Date / Granted Date (DD/MM/YYYY)
1	202321024464	Published	Dr. Reena Disawal	Smart City Applications using 5g Drone Technology	31/03/2023	05/05/2023
2	20224170445	Published	Dr. Reena Disawal	Analysis of Potential Health and Environmental Risks Associated with 6g Wireless Communication Networks	6/12/22	9/12/22
3	202321024464	Published	Dr. Mahendra	Smart City Applications	31/03/2023	05/05/2023

			Singh Thakur	using 5g Drone Technology		
4	202221054106	Published	Er. Mahendra Singh Thakur	IoT and RFID Based Library Management Systems	21/09/2022	11/11/2022
5	20224170445	Published	Mahendra Singh Thakur	Analysis of Potential Health and Environmental Risks Associated with 6g Wireless Communication Networks	6/12/22	9/12/22
6	202321024464	Published	Er. Sadhana Tiwari	Smart City Applications using 5g Drone Technology	31/03/2023	05/05/2023
7	202221026116	Published	Er. Sadhana Tiwari	The Smart Device and Process for Objects Counting and Controlling	05/05/2022	14/04/2023
8	202321024464	Published	Er. Neha Sharma	Smart City Applications using 5g Drone Technology	31/03/2023	05/05/2023
9	202321024464	Published	Er. Naveen Mukati	Smart City Applications using 5g Drone Technology	31/03/2023	05/05/2023

10	202221026116	Published	Er. Naveen Mukati	The Smart Device and Process for Objects Counting and Controlling	05/05/2022	14/04/2023
11	202221054106	Published	Er. Naveen Mukati	IoT and RFID Based Library Management Systems	21/09/2022	11/11/2022
12	202241056743	Published	Er. Naveen Mukati	IoT and Machine Learning Based Smart Solar Grid Management System	03/10/2022	14/10/2022
13	202241007444	Published	Er. Naveen Mukati	A New Control Strategy for Fast Regenerative Braking Of Electrical Vehicles	11/02/2022	14/10/2022
14	202321024464	Published	Er. Deepak Goud	Smart City Applications using 5g Drone Technology	31/03/2023	05/05/2023

Patents:

CAYm3(2021-2022)

S. N	Patent Application No.	Status of Patent (Published / Granted)	Inventor/s Name	Title of the Patent	Patent Filed Date (DD/MM/YYYY)	Patent Published Date / Granted Date (DD/MM/YYYY)
1.	202121025 112	Published	Sadhana Tiwari	Distributing Deep Learning System for optimization over the Cloud and Smart Phone Device.		
2.	20212102 5112	Published	Neha Sharma	Distributing Deep Learning System for optimization over the Cloud and Smart Phone Device.		
3.	2022/0158 9	Published	Aabha Jain	IoT Based Precision Soil Fertility Measurement System for Organic Farm		

Book Chapter Details:

CAYm1(2023-24)

Sr. No.	Name of the faculty	Book Chapter Title	Book Title	Publisher	ISBN No.
1.	Reena Disawal	Study of exascale computing: Advancements,	Applied Data Science and Smart Systems 2025	CRC Press, 1st Edition, eBook	ISBN 97810034710 59

Sr. No.	Name of the faculty	Book Chapter Title	Book Title	Publisher	ISBN No.
		challenges, and future directions			
2.	Mahendra Singh Thakur	Study of exascale computing: Advancements, challenges, and future directions	Applied Data Science and Smart Systems 2025	CRC Press, 1st Edition, eBook	ISBN 9781003471059
3.	Sadhana Tiwari	Study of exascale computing: Advancements, challenges, and future directions	Applied Data Science and Smart Systems 2025	CRC Press, 1st Edition, eBook	ISBN 9781003471059
4.	Neha Sharma	Study of exascale computing: Advancements, challenges, and future directions	Applied Data Science and Smart Systems 2025	CRC Press, 1st Edition, eBook	ISBN 9781003471059
5.	Neha sharma	Exploring Image Segmentation Approaches for Medical Image Analysis	Applied Data Science and Smart Systems 2025,	CRC Press, 1st Edition, eBook	ISBN 9781003471059
6.	Neha Sharma	Smart Greenhouse Management System Using AIoT for Sustainable Agriculture	Explainable AI (EXAI) for Sustainable Development: Trends and Applications, 2024	CRC Press (Taylor and Francis Group), 1st edition, eBook	ISBN 9781003457176

CAYm2 (2022-23)

Sr. No.	Name of the faculty	Book Chapter Title	Book Title	Publisher	ISBN No.

1.	Ms. Sadhana Tiwari	IoT Implementation: Technological Overview for Healthcare Systems	Federated Learning for Internet of Medical Things: Concepts, Paradigms, and Solutions,	CRC Press, Taylor & Francis Group	ISBN 9781032300788
2.	Ms. Neha Sharma	IoT Implementation: Technological Overview for Healthcare Systems	Federated Learning for Internet of Medical Things: Concepts, Paradigms, and Solutions,	CRC Press, Taylor & Francis Group	ISBN 9781032300788

Thesis Guided/Awarded

Electronics and Communication Engineering

Research Guide	Name of Scholar	Topic of the Research	University and Year of Registration	Status
Dr. Reena Disawal (Co-Guide)	Mr. Vikas Bhujade	Low Power VLSI System Design for IoT Applications	RGPV Bhopal, 2024-25	Registered

List of Faculty Guiding the Ph.D. students

S. No.	Ph. D. Student Name	Faculty Name	Research Area	University and Year of Registration

1.	Mr. Vikas Bhujade	Prof. R. S Mansoore (Supervisor) Prof. Reena Disawal (Co-Supervisor)	Low Power VLSI System Design for IoT Applications	RGPV Bhopal, 2024-25

Sponsored Research (5)   3

S. No.	Project Title	Funding Agency	Amount	Duration
1	UAV based Smart Spraying system for Agriculture	IITI DRISHTI CPS FOUNDATION	12.45 Lakhs	2 Years

Development activities

Product Development

S. No	Project Title	Funding Agency	Amount	Duration
1.	8 International Software Projects	Dr. Ivan Salazar, NG School	1,00,000/-	6 months

List of Projects:

Sr. No.	Project Title	Faculty Coordinator	Student Coordinators
1	Optimize a platform built on WordPress for sports service reservations, similar to Booking.com.	Dr. Aradhana Negi	Kshitij Rohilla

2	Develop a football exercise selection platform (based on videos), where filtering is done based on specific criteria.	Dr. Yakuta Tayeibi	Kunal Dutta, Anshita Balodiya, Gourav Choudhary, Anuj Bankey
3	Develop an AI application for entity scraping to find emails and contact information, and generate personalized letters.	Dr. Dipti Chauhan	Shruti Tiwari, Yash Kute, Mani Chourasiya, Dwarkesh Saxsena, Saloni Shinde
4	Convert text to video (MP4 format) as an explanation of actions in a sports context.	Dr. Amita Jain	Dhakad Anjali, Deepak sahu
5	Scrape blogs, media outlets, and social networks on a specific topic, and create a personalized article for potential publication.	Dr. Pritika Bahad	Shruti Tiwari, Sakshi mourya, Anmol Singh Bhatia, Khyati Verma, Palak Gupta
6	Generate reports based on content and format them in a specific design.	Dr. Charu Verma	Tanmay Patil, Sahil Khan Mansoori, Ujjaval Patel, Yash Kute, Shweta Meena
7	Develop a learning platform using gamified quizzes, initially built on a no-code platform (bubble.io), later migrated to another programming language for consistency and security.	Dr. Piyush Choudhary	Adarsh Nashine, Abhishek Shrivastava, Harsh Khandelwal, Lucky Parihar, Ankush Kumayu, Ashish Parmar, Aaditya Yadav, Kuldeep Rajput, Bhushan Shinde
8	Create a repository of student academic information and generate reports based on this repository (TPT).	Dr. Naveen Shahi	Himanshu Singh Bhadoriya, Vivek Gautam, Mariya Bohra, Anvesh Sharma, Apoorv Jain,

			Sunidhi Sharma, Pukhraj Garasiya