

IQAC



**ANNUAL REPORT
2022-23**



S J M INSTITUTE OF TECHNOLOGY

INTERNAL QUALITY ASSURANCE CELL (IQAC)

Accredited by NAAC with B⁺⁺

(Recognized by AICTE, New Delhi and Affiliated to Visvesvaraya Technological University, Belagavi)
NH-4 Bypass, P.B.No:73, CHITRADURGA -577502, Karnataka State



CONTENTS

SL. No	Particulars
01	Plan of Action
02	Result Analysis (UG & PG)
03	Journal Publications
04	Books/Chapter/Conferences
05	FDP/Workshop/ Training Programme etc., (Organized/Attended)
06	MOU's

Plan of action chalked out by the IQAC in the beginning of the Academic year towards Quality Enhancement and the outcome achieved

Plan of Action	Achievements / Outcomes
Co Curricular activities and teaching learning process	<ul style="list-style-type: none"> • Webinars and quiz have been organized by various departments. • Workshops have been organized by various departments through online and offline to improve the knowledge of teaching/non-teaching faculty and students. • 115 students have undergone Certification Program.
Industry Interaction	<ul style="list-style-type: none"> • Internships and Industrial Trainings: More than 1000 students have undergone Internship/Project work in various organizations. • MOUs: 18 MOUs have been signed with industries during the year 2022-23.
Capability enhancement and development schemes	<p>Career Counselling:</p> <ul style="list-style-type: none"> • Online personal Counselling sessions have been conducted regularly. • More than 80% of the eligible students were placed at various companies during the year 2022-23. <p>Remedial Classes for slow learners:</p> <ul style="list-style-type: none"> • Remedial classes have been conducted regularly for Students with less than 50% of IA marks in Online mode. • More than 80% of faculty members are using ICT facilities. • Faculty development Program has been organized by Mechanical Engineering Department.
Research Activities and Publications	<ul style="list-style-type: none"> • Civil, EEE and MECH departments are recognized as Research Centers by VTU Belagavi, Karnataka. • 39 Research papers have been published. • 08 Faculty Members are recognised as Research Guides.
Financial assistance to the faculty members	<ul style="list-style-type: none"> • 50 percent Concession is provided towards the medical treatment expenses for the employees of the Institute. • 30 Faculty members were provided with financial assistance to attend International conferences/Workshops. • Personal loans, Vehicle loans and Home loans are provided to the employees of the Institution.

Extra-Curricular and Cultural activities	<p>Extension Activities:</p> <ul style="list-style-type: none"> • More than 700 students have participated in various extension activities. • NSS unit and Youth Red cross actively involving the students in activities like Blood donation camps, Tree plantations, Pulse polio camps to local children etc., continuously.
Human and Ethical values	Seminars / workshops are conducted for promotion of Universal Values and Ethics.


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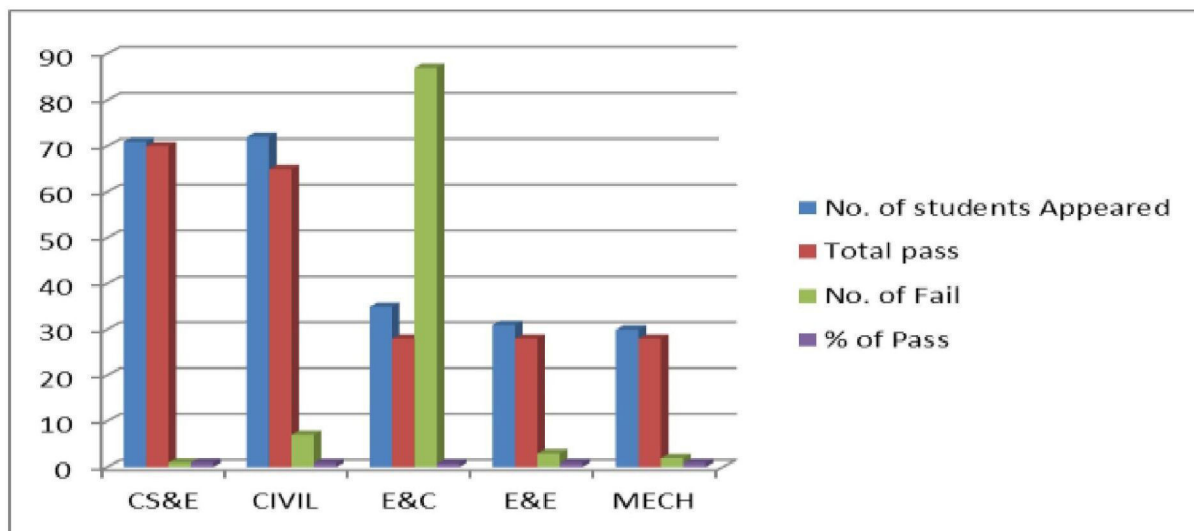
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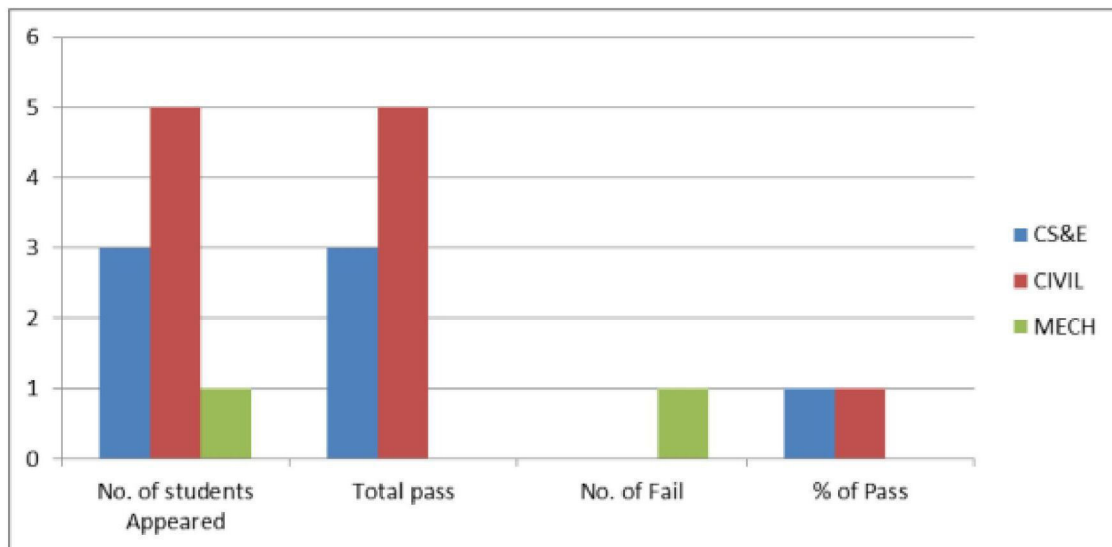
Percentage of Result for the examination held in the month of MAY/JULY - 2023 Undergraduate Programme (B.E)

Semester	Branch	No. of students Appeared	Total pass	No. of Fail	% of Pass
VIII 18 Scheme	CS&E	71	70	01	98.59%
	CIVIL	72	65	07	90.27%
	E&C	35	28	07	77.14%
	E&E	31	28	03	90.32%
	MECH	30	28	02	93.33%
Total		239	219	21	91.21%



Percentage of Result for the examination held in the month of SEP/OCT- 2023
Post Graduate Programme (M.Tech)

Semester	Branch	No. of students Appeared	Total pass	No. of Fail	% of Pass
IV M-Tech	CS&E	3	3	0	100.00%
	CIVIL	5	5	0	100.00%
	MECH	1	0	1	0.00%
Total		9	8	1	88.88%




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Research Papers published in the Journals notified on UGC website during the year 2022 -23

SL. No	Title of paper	Name of the author/s	Department of the teacher	Name of journal	Year of publication
1	Tribological Study on Effects of chill casting on Aluminium A356 Reinforced with Hematite articulated composites	Dr. Jagannatha N	Mechanical	Journal of Bio and Tribo Corrosion , Volume 8 , article 52, 7th March 2022	2022
2	Experimental Investigation and Processing of Aluminium with Silicon Carbide and Graphite Particulates	Dr.Bharath P B	Mechanical	International Journal of Engineering & Technology (IJERT)	2022
		Dr.Shivakumar S P	Mechanical		
		Dr.Rajesh A M	Mechanical		
		Prof. Prabhuswamy G S	Mechanical		
3	A Review on types of Real time image processing methods	Dr. Siddesh K B	Electronics and Communication Engineering	IJARIE	2023
		Prof. Nandini G R	Electronics and Communication Engineering		

4	Sliding mode controlled step down converter using reaching law technique	Dr. Siddesh K B	Electronics and Communication Engineering	IJARIE	2023
		Prof. Farzana Parveen B A	Electronics and Communication Engineering		
		Prof. Tanuja T	Electronics and Communication Engineering		
5	Sliding mode controlled step down converter using reaching law technique	Dr. Siddesh K B	Electronics and Communication Engineering	IJAPE	44986
		Prof. Sridhar S N	Electronics and Communication Engineering		
		Prof. Lavakumar T B	Electronics and Communication Engineering		
		Prof. Sudarshan M K	Electronics and Communication Engineering		
		Prof. Sandeep V R	Electronics and Communication Engineering		

6	Design and analysis of topologically compressed flip flop with maximum power saving	Dr. Siddesh K B	Electronics and Communication Engineering	ICEI-2023	2nd June 2023
		Prof. Roopa S	Electronics and Communication Engineering		
7	Design of duty cycle correction circuit using ASIC implementation for high speed communication	Dr. Siddesh K B	Electronics and Communication Engineering	I-managers journal on Electronics Engineering	2023
		Prof. Roopa S	Electronics and Communication Engineering		
		Prof. Farzana Parveen B A	Electronics and Communication Engineering		
		Prof. Tanuja T	Electronics and Communication Engineering		
8	Implementation of rover with field protection and crop health monitoring system and floor sweeping system	Prof. Roopa S	Electronics and Communication Engineering	IJARCCE	Vol.11,issue 10 October 2022
		Prof. Pradeep Kumar V H	Electronics and Communication Engineering		

9	Autonomous Wheelchair under a predefined environment using STM32F429ZIT6	Prof. Farzana Parveen B A	Electronics and Communication Engineering	IJARIE	Volume 9 Issue 2,2023
		Prof. Jayadevappa R S	Electronics and Communication Engineering		
10	Analysis of value stream mapping frame work with machine learning technique	Prof. Farzana Parveen B A	Electronics and Communication Engineering	GRENZE	2023
		Prof. Tanuja T	Electronics and Communication Engineering		
11	Stair climbing robot using Arduino	Prof. Jayadevappa R S	Electronics and Communication Engineering	IJARIE	2023
12	Analysis of Topologically Compressed Flip Flop design with low Power consumption	Prof. Chetan S	Electronics and Communication Engineering	ICEI-2023, Jain Institute of Technology, Davanagere, karnataka	2nd June 2023
13	A Performance Assessment of a Slotted Reconfigured Microstrip Patch Antenna for MultiWireless Applications	Prof. Chetan S	Electronics and Communication Engineering	Advances in Intelligent Systems and Technologies	2023
14	Design of Frequency Reconfigurable Patch Antenna with Metamaterial for Wireless Applications	Prof. Chetan S	Electronics and Communication Engineering	1st International conference on Smart Technologies, Communication And Robotics[ICSCR- 2023]	20 th and 21 st July 2023

15	Mobile Wireless Communication - The expansion to the 5G Revolution	Prof. Chetan S	Electronics and Communication Engineering	2nd International Conference on Engineering Innovation (ICEI-2023), organized by the Jain Institute of Technology,	2nd June 2023
16	Comparative Analysis of RCC Structure on Sloping Ground Against Seismic loading by using FVD Vs Shear Wall Vs Bracings	Hussain Imran K M	Civil Engineering	Journal: IRJET	Aug-22
17	Structural Analysis of Asymmetrical Multi storey Building with water tank as a fluid viscous Damper	Shankar G S	Civil Engineering	Journal: IJIRSET	Aug-22
18	Structural Design & Analysis RCC, L shape, C Shape, Using Response Spectrum Analysis	Pramod P S	Civil Engineering	Journal: IJIRSET	Nov-22
19	Low Cost, Eco-friendly Treatment of Dairy Wastewater using Jack Fruit Seed Powder	Anusha V	Civil Engineering	Journal:IJNRD	Oct-22
20	Comparative study on Collision Effect Using Response Spectrum Analysis	Pramod P S	Civil Engineering	Journal: IJIRSET	Aug-22
21	Comparative Analysis of RCC Structure on Sloping Ground Against Seismic loading by using FVD Vs Shear Wall Vs Bracings	Hussain Imran K M	Civil Engineering	Journal: IJIRSET	Nov-22

22	Seismic Performance Evaluation of Industrial Junction Tower	Subramanya P G	Civil Engineering	IJRSET	Nov-22
23	Experimental study on strength behavior of concrete reinforced with natural fibers	Dr. Srishaila J M	Civil Engineering	Elsevier Materials Proceedings	2022
24	Potential Utilization of industrial effluents in ternary blended geopolymer concrete for future sustainable environment	Dr. Srishaila J M	Civil Engineering	Innovative Infrastructure Solutions (Spinger)	18-Feb-23
25	Smart forming AI powered Crop selection for optional field and sustainability	Prof B E Ramesh	CS&E	IJERT	Apr-23
26	A review on types of real time image processing methods	Prof Basantha Kumari	CS&E	IJARITE	Mar-23
		Prof Shruthi M K			
		Prof Beena Sheril			
27	Strngthing forest conservation with an IOT based anti poaching alarn system for trees	Prof.Ramesh B E	CS&E	Journal of Green Chemistry	2023
28	Sensor based soil nutrient monitoring in agriculture	Prof Avinash G M	CS&E	Journal of JILIN University, China	10/05/2023
29	Smart Ambulance tracing system using IOT	Prof Apoorva G O	CS&E	IJIRCCE	May-23
30	Machine Learning Based Heart Disease Prediction System	Prof Apoorva G O	CS&E	IJIRCCE	Feb-23

31	Raita mitra for crop and Pesticide recommendation along with disease prediction using ML	Prof Apoorva G O	CS&E	IJRASET	Feb-23
32	Measuring quality of water in real time environment by using sensors	Prof Mukta R Desai	CS&E	IEEE	2022
33	Credit card Fraud Detection System	Prof Monisha R	CS&E	IJIRCCE	May-23
34	Unsteady absorption flow and dissipation heat transfer over a non-Newtonian fluid	Dr. Ganesh Kumar K	Mathematics	Waves in Random and Complex Media	2022
35	Perspective of multiple slips on 3D flow of Al ₂ O ₃ -TiO ₂ -CuO/H ₂ O ternary nanofluid past an extending surface due to non-linear thermal radiation	Dr. Ganesh Kumar K	Mathematics	Waves in Random and Complex Media	2022
36	Impact of magnetic dipole on flow and heat transfer of AA7072-AA7075/water based nanofluid over a stretching sheet using Koo and Kleinstreuer model	Dr. Ganesh Kumar K	Mathematics	Springer Berlin Heidelberg	2022

37	Mixed convection flow over a vertical cone saturated porous medium with double dispersion effect	Dr. Ganesh Kumar K	Mathematics	Elsevier	2022
38	Comparative study of hybrid (graphene/magnesium oxide) and ternary hybrid (graphene/zirconium oxide/magnesium oxide) nanomaterials over a moving plate	Dr. Ganesh Kumar K	Mathematics	Elsevier	2023
39	A Combined Experimental and CS of Flexible Polyvinyl alcohol nano composites films for superior UV shielding with improved mechanical properties	Prof. Shashidhar A P	Physics	Journal of materials Today communications, Elsevier	2022


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Books and Chapters in edited volumes published and Papers published in National/ International conference proceedings per teacher during year 2022-23

Sl. No.	Name of the teacher	Title of the paper	Title of the proceedings of the conference	Name of the conference	National / International
1	Dr. Bharath P B	Thermal conductivity and resistivity of 3-D printed carbon fiber reinforced polyamide composites	Conference	2nd International Conference on Advanced Trends in Mechanical & Automation Science	International
2	Dr. Jagannatha N	Investigation of laser abrasive jet machining of soda lime glass	Conference	(ATMA-2023)	International
3	Dr. Jagannatha N	Tribological Study on Effect of Chill Casting on Aluminium A356 Reinforced with Hematite Particulated Composites	Conference	ICRDME – 2022 Conference Proceedings	International
4	Dr. Siddesh K B	Design and analysis of topologically compressed flip flop with maximum power saving	Conference	ICEI-2023	International
5	Prof. Farzana Parveen B A	Analysis of value stream mapping frame work with machine learning technique	Conference	ACT 2023	International

6	Prof. Chetan S	A Performance Assessment of a Slotted Reconfigured Microstrip Patch Antenna for MultiWireless Applications	Conference	International Conference on VLSI, Communications and Computer Communication	International
7	Dr.Manjunatha S C	GA based POD and GADC based voltage regulator for IPFC to dampen low frequency oscillation	Conference	ICEI-22	International
8	Dr.Manjunatha S C	Detection of skin cancer using artificial intelligence and Machine learning concepts	Conference	IEEE	International
9	Dr. Srishaila J M	An Experimental Investigation on Lego Blocks Using Industrial and Agricultural Waste	Conference	Sustainable Infrastructure : Innovations, Opportunities and Challenges (SIIOC 2023)	National
10	Prof Basantha Kumari	Strengthening Forest Conservation with an IoT- Based Anti-Poaching Alarm System for Treess	Conference	IC-ICIC	International
11	Prof Avinash G M	Sensor based soil nutrient monitoring in agriculture	Conference	Journal of JILIN University, China	International


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FDP /Workshops / Seminars /Training Programs Organized During the year 2022-23

Sl. No	Name of the activity	Organizing unit/ agency/ collaborating agency	Name of the scheme	Year of the activity	Number of students participated in such activities	Number of teachers participated in such activities
01	Workshop on Biofuel production	Biofuel Research Information and Demonstration Centre (BRIDC)	Biofuel Research	2023	80	10
02	World Environment Plantation Program	Biofuel Research Information and Demonstration Centre (BRIDC)	Biofuel Research	2023	90	14
03	International biofuel day organized at SJMIT	Biofuel Research Information and Demonstration Centre (BRIDC)	Biofuel Research	2023	70	12
04	District selected SHG women's	Biofuel Research Information and Demonstration Centre (BRIDC)	Biofuel Research	2022	31	3
05	District selected SHG women's	Biofuel Research Information and Demonstration Centre (BRIDC)	Biofuel Research	2022	30	3
06	Awareness Programme for SJM Polytechnic students	Biofuel Research Information and Demonstration Centre (BRIDC)	Biofuel Research	2023	20	2
07	Tree Plantation Drive	National Service Scheme	NSS Scheme	2023	120	10
08	Awareness Program About First Aid, Gas Leakage Protection, Snake Bite And Social Services.	National Service Scheme	NSS Scheme	2023	200	8
09	Anemia Screening Program-NAARI	Youth Red Cross	YRC Scheme	2023	50	10
10	Blood Donation Camp	Youth Red Cross	YRC Scheme	2022	45	8
11	Health Check Up Program For Staff	Youth Red Cross	YRC Scheme	2023	50	18
12	Swacha Bharath abhiyan	S.J.M Institute of Technology	AICTE Activity	2022	60	4

13	Swacha Bharath abhiyan	S.J.M Institute of Technology	AICTE Activity	2022	50	6
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14	Awareness Program on Education & Social Media to students	S.J.M Institute of Technology	AICTE Activity	2023	65	4
15	Career guidance & Computer guidance to school students	S.J.M Institute of Technology	AICT Activity	2023	50	4
16	Awareness program on digital india	S.J.M Institute of Technology	AICTE Activity	2023	60	4
17	Awareness program on Rain Harvestig	S.J.M Institute of Technology	AICTE Activity	2023	55	4
18	Swacha Bharath abhiyan	S.J.M Institute of Technology	AICTE Activity	2023	50	4
19	District selected SHG women's	Biofuel Research Information and Demonstration Centre (BRIDC)	Biofuel Research	2023	30	3
20	Awareness Program to PUC students	Biofuel Research Information and Demonstration Centre (BRIDC)	Biofuel Research	2023	40	3


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Teachers undergoing online/face-to-face Faculty development Programmes (FDP) during the year 2022-23

Name of teacher who attended	Title of the program	Duration (from – to) (DD-MM-YYYY)
Prof. Muktha R Desai	Five days FDP on " Amazon Web Services"	22/08/2022 to 27/08/2022
Prof. Apoorva G O	Five days FDP on " Amazon Web Services"	22/08/2022 to 27/08/2022
Dr.Manjunatha S C	Five Days FDP on "Ability Enhancement Courses"	13/12/2022 to 17/12/2022
Prof.Sushmita Deb	FDP on " A Step by step guide to write a good Research Paper"	20/12/2022 to 29/12/2022
Dr. Rajesh A M	One week FDP on Electric Vehicle Technology Srinivasa Institute of Technology, Mangalore	09-01-2023 to 13-01-2023
Prof. Prabhuswamy G S	One week FDP on Electric Vehicle Technology Srinivasa Institute of Technology, Mangalore	09-01-2023 to 13-01-2023
Prof.Anusha.V	Online Five Days FDP on "Environmental Engineering & Sustainability- Research Technologies and Challenges	27/02/2023 to 03/03/2023
Dr. Bharath P B	One week online FDP on "Innovation Research and IPR Journey Towards Excellence"	01/03/2023 to 05/03/2023
Dr. Shivakumar S P	One week online FDP on "Innovation Research and IPR Journey Towards Excellence"	01/03/2023 to 05/03/2023
Prof. Avinash G M	Five days FDP on " Deep learning and its applications"	06/03/2023 to 10/03/2023
Prof. Pavithra N	Three days FDP on " Research grants, publications and consultancy skills for academicians "06/03/2023 to 08/03/2023	06/03/2023 to 08/03/2023
Prof.Sudha.T	Online Five Days FDP on "Inculcating Universal Human Values in Technical Education"	22/05/2023 to 26/05/2023
Prof. Jayadavappa R S	One week AICTE VTU training program on," Introduction to cyber security"	22/05/2023 to 26/05/2023
Prof. Monisha R	One week AICTE-VTU training program on, "Fundamentals of Data Science and Analytics"	05/06/2023 to 09/06/2023
Prof. Noor Fathima	One week AICTE VTU Joint Teachers Training Programme on " Electronics circuit design using lab View"	12/06/2023 to 16/06/2023
Prof. Roopa S	One week AICTE-VTU training program on, " Introduction to python programming and its application"	19/06/2023 to 23/06/2023
Prof.Tanuja T	One week AICTE-VTU training program on, " Introduction to python programming and its application"	19/06/2023 to 23/06/2023

Prof. Nandini G R	One week AICTE-VTU training program on, " Introduction to python programming and its application"	19/06/2023 to 23/06/2023
Prof. Farzana Parveen B A	One week AICTE-VTU training program on, " Introduction to python programming and its application"	19/06/2023 to 23/06/2023
Prof. Basantha Kumari	One week AICTE-VTU training program on, " Introduction to python programming and its application"	19/06/2023 to 23/06/2023
Prof. Shruthi M K	One week AICTE-VTU training program on, " Introduction to python programming and its application"	19/06/2023 to 23/06/2023
Prof. Beena Sheril	One week AICTE-VTU training program on, " Introduction to python programming and its application"	19/06/2023 to 23/06/2023
Prof. Pradeep Kumar V H	Five days FDP on " Innovation ambassdor training program"	23/07/2023 to 27/07/2023
Prof. Ambika S	Five days FDP on " Innovation ambassdor training program"	23/07/2023 to 27/07/2023
Prof.Sanjay Kumar .K	Five Days FDP on "Recent Advancements in Electric vehicle Technology"	24/07/2023 to 28/07/2023
Prof.Chandrashekar R Kambali	Five Days FDP on "Recent Advancements in Electric vehicle Technology"	24/07/2023 to 28/07/2023
Dr.Kumarswamy.B.G	Online Five Days FDP on "Trends in Technologica Intelligence 2023"	21/08/2023 to 25/08/2023
Prof.Maruthi Naik R K	Online Five Days FDP on "Trends in Technologica Intelligence 2023"	21/08/2023 to 25/08/2023
Prof.Madhukumar.D	Five Days FDP on "Recent Advancements in Electric vehicle Technology"	24/07/2023 to 28/07/2023
Prof. Vinayaka V M	Five days FDP on " Pioneering Professional Android App Development"	09/08/2023 to 14/08/2023
Prof. Neelakantappa T T	Five days FDP on " NLP and CHATGPT A pplications"	14/08/2023 to 19/08/2023
Prof. Kumarswamy H	Five days FDP on " NLP and CHATGPT A pplications"	14/08/2023 to 19/08/2023
Prof.Shankar G S	Five Days FDP on "Technology Intervention In Civil Engineering"	21/08/2023 to 25/08/2023
Prof.Naveen Kumar K	Five Days FDP on "Technology Intervention In Civil Engineering"	21/08/2023 to 25/08/2023
Prof. Usman Ali A R	Five days FDP on " Trends in technological intelligence 2023"	21/08/2023 to 25/08/2023
Dr.Jagannatha.N	One week FDP on Digital Transfromation in Product Design & Manufacturing using Fusion 360"	21/08/2023 to 25/08/2023


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Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the year 2022 - 23

Sl No.	Organisation with which MoU is signed	Name of the institution/ industry/ corporate house	Year of signing MoU
1	SJM Institute of Technology	Government Tool Room and Training Center, Chitradurga	2022
2	SJM Institute of Technology	Abeyaantrix Softlab OPC Pvt Ltd Davanagere	2021
3	SJM Institute of Technology	GREP & AWK Technologies, #G03, Serene, 2nd Main, Jaralur Road, Ambalipur, Bengaluru 560102	2021
4	SJM Institute of Technology	PVC Agritech, Plot no. 1C, KIADB Industrial Area, Lokikere Road, Davanagere-577 005.	2021
5	SJM Institute of Technology	PVC Pumps Pvt Ltd, Davanagere	2021
6	SJM Institute of Technology	National Highways Authority of India Chitradurga 577502	2021
7	SJM Institute of Technology	Harsha Associates, Chitradurga	2018
8	SJM Institute of Technology	M.A. Associates, Old ZP office Road T.R.Nagar Challakere 577522	2022
9	SJM Institute of Technology	Abheyaantrix soft Lab	2021
10	SJM Institute of Technology	SKILLDZIRE Technologies pvt Ltd	2021
11	SJM Institute of Technology	Entuple Technologies Pvt Ltd	2021
12	SJM Institute of Technology	TATA Consultancy Services, Thane West, Maharashtra 400807	2021
13	SJM Institute of Technology	Abheyaantrix soft Lab OPC Private Limited, LIC Colony, Davanagere	2021
14	SJM Institute of Technology	Energia Technolabs, Bengaluru	2021
15	SJM Institute of Technology	Technologies Global Pvt Ltd R&D Lab	2021
16	SJM Institute of Technology	Vinyas Associates, 1st main, Kannika Commercial Layout, Chitradurga	2021
17	SJM Institute of Technology	Mile Stone Training Center Chitradurga	2018
18	SJM Institute of Technology	Universal Power Controls DB son	2021


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