



# ANNUAL REPORT 2023-24



## INTERNAL QUALITY ASSURANCE CELL (IQAC) Accredited by NAAC with B<sup>++</sup>





### **CONTENTS**

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



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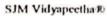


## Plan of action chalked out by the IQAC and the outcome achieved by the end of the Academic year 2023-24

Plan of Action	Achievements / Outcomes
A faculty workshop will be organized to focus on pedagogical practices.  An Intellectual Property Rights (IPR) and Innovation Cell will be established to develop courses pertaining to IPR and Social Entrepreneurship.	<ul> <li>Successful organization and execution of the workshop, leading to enhanced teaching methodologies and increased faculty awareness of contemporary pedagogical strategies.</li> <li>Faculty members reported a significant improvement in their understanding and application of effective teaching techniques, resulting in better student engagement and learning outcomes.</li> <li>The creation of the IPR and Innovation Cell has facilitated the development of specialized courses on Intellectual Property Rights and Social Entrepreneurship in collaboration with KSCST.</li> </ul>
A SWOT analysis will be conducted to identify and mitigate research barriers faced by faculty members.	<ul> <li>A comprehensive SWOT analysis was conducted through AICTE NBA Margadarshak scheme of AICTE, leading to the identification of key research barriers faced by faculty members, including funding, access to resources, and institutional support.</li> </ul>
The submission of the NAAC Self-Assessment Report (SSR) is also planned.	<ul> <li>The successful preparation and submission of the NAAC Self-Assessment Report (SSR) in alignment with the institution's quality assurance goals.</li> </ul>

Coordinator
Internal Quality Assurance Cell (IQAC)
SJMIT Chitradurga

PRINCIPAL SJMIT, Chitradurga

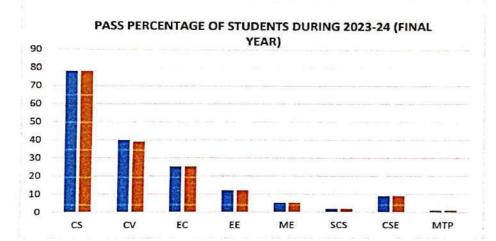






(Recognized by AICTE, New Delhi and Affiliated to Visvesvaraya Technological University, Belagavi)
NII-4 Bypass, P.B. No:73, CHITRADURGA -577502, Karnataka State.

2.0	6.3 Pass percentage	of Students during 2023-24	(excluding backlog students)	
SI. No.	Program Code	Program Name	Number of students appeared in the final year examination	Number of students passed in final year examination
1	CS	Computer Science & Engineering	78	78
2	CV	Civil Engineering	40	39
3	EC	Electronics & Communication Engineering	25	25
4	EE	Electrical & Electronics Engineering	12	12
5	ME	Mechanical Engineering	05	05
6	SCS	Computer Science & Engineering	2	2
7	CSE	Structural Engineering	9	9
8	MTP	Thermal Power	9	1



PRINCIPAL S.J.M.I.T., Chitradurga





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#### Research papers published in the Journals notified on UGC Website during the year 2023-24

Title of paper	Name of the author/s	Year of publication	Link to the recognition in UGC enlistment of the Journal
Supply Chain Resilience: Strategies for Mitigating Risk	Dr. Bharath P B Dr. S P Shivakumar Prof. Prabhuswamy G S Dr. Rajesh A M	2024	https://www.afjbs.com/uploads/paper/810f22dfb176e464dd9c 173009781189.pdf
Investigation of impact energy absorption of AA6061 & its composites : Role of post - aging cooling methods	Dr. Rajesh A M	2024	https://www.researchgate.net/publication/374277815 Investig ation of Impact Energy Absorption of AA6061 and Composites Role of Post-Aging Cooling Methods
Design of duty cycle correction circuit using ASIC implementation for high speed communication	Dr. Siddesh K B	2023	https://imanagerpublications.com/article/19969
A Review on types of real time image processing methods	Dr. Siddesh K B	2023	https://ijariie.com/AdminUploadPdf/A_Review_on_Types_of Real Time Image Processing Methods ijariie19524.pdf?sr sltid=AfmBOoo4WJHm70DIPuPhzMAL1SAO4g1C4352xXj 6wBQLnrCR48Hy6VWJ

Design and Performance Analysis of multiband Patch Antenna with Metamaterial for Wireless Applications	Prof. Chetan S	2024	https://indjst.org/articles/design-and-performance-analysis-of-multiband-patch-antenna-with-metamaterial-for-wireless-applications
Design of Frequency Reconfigurable Antenna with Split Ring Resonator and Diode Control for Omnidirectional Applications	Prof. Chetan S	2024	file:///C:/Users/Vastro/Downloads/Journal_ARDA_7170(final_ +article)AL3.pdf
Guardian Rover: Advanced Night Surveillance for Women's Safety and Monitoring	Prof. Chetan S	2024	file:///C:/Users/Vastro/Downloads/639-Article%20Text-1035- 1-10-20220830%20(1).pdf
E-Suite for Soldiers based on Photovalitic Cells	Prof. Raghu S	2024	https://ijsrem.com/download/e-suite-for-soldiers-based-on-photovoltaic-cells/
Sliding mode controlled step down converter using Reaching law Technique	Prof. Tanuja T	2023	https://ijariie.com/AdminUploadPdf/Sliding Mode Controlle d_Step_down_Converter_using_Reaching_law_Technique_ij ariie19354.pdf?srsltid=AfmBOorIwEJWkXZuGrNiP6miAuC WliWkE489vMlPO5p1Rs_gjtSeRiok
Structural, optical and humidity sensing studies of nickel oxide (NiO) nanoparticles: effect of calcination temperature	Dr.Kumaraswamy.B.G	2024	https://link.springer.com/article/10.1007/s11696-024-03314-8
Waste to Energy: Arduino based Thermoelectric Energy Harvesting	Mrs.Sushmita Deb	2023	https://www.ijert.org/waste-to-energy-arduino-based- thermoelectric-energy-harvesting
GSM Based Transformer Monitoring And Control	Mrs.Sushmita Deb Mr.Chandrashekahr R Kambali Mr.Sanjay Kumar K	2023	https://www.irjet.net/archives/V4/i3/IRJET-V4I330.pdf

Smart traffic signal and intelligent street light management system based on the IOT	Dr.Manjunatha S C Mrs.Sudha T Mr.Sanjay Kumar K	2023	https://www.ijert.org/smart-traffic-signal-and-intelligent- street-light-management-system-based-on-the-iot
Seismic Analysis of RCC Bracing of Framed Structures for Multistorey Building	Mr.Hussain Imran K M	2023	https://rajshree.ac.in/wp- content/uploads/2023/10/Yaseen_june23.pdf
Tuning the optical and electrical properties by gamma irradiation of silver nanoparticles decorated graphene oxide on glutaraldehyde crosslinked polyvynyl alchol matrix	Prof. A P Shashidhar	2024	https://www.sciencedirect.com/science/article/abs/pii/S00255 40824000151
Drug recommendation based on sentiment analysis using ML	Dr. Krishnareddy K R Dr. Aravinda T V Prof.B.E Ramesh	2023	https://www.irjmets.com/uploadedfiles/paper/issue_7_july_20 23/43424/final/fin_irjmets1690118387.pdf
Stress Detection in IT Employees Using CNN	Dr. Aravinda T V Prof. Poral Nagaraj Dr. Krishnareddy K R Prof. Ramesh B E	2023	https://ijsrem.com/download/stress-detection-in-it-employees- using-cnn/
A road accident prediction model using data mining and machine learning techniques	Dr. Aravinda T V Dr. Krishnareddy K R Prof. Ramesh B E	2023	DOI:10.1007/98-981-16-4103-9_3
Optimizing Agricultural Yield Through Sensor-Based Soil Nutrient Analysis	Mr.Avinash G M	2024	https://www.jetir.org/papers/JETIR2402470.pdf

Strengthening Forest Conservation with an IoT-Based Anti-Poaching Alarm System for Trees	Ramesh. B. E, Basantha kumari	2023	http://doi.org/10.37628/IJGC
Analysing the influence of magneti dipole on non-newtonain flid flow over a sheet with non uniform radation	Dr.Lokesh H J	2024	https://www.sciencedirect.com/science/article/pii/S266681812 4001384
Magneticswirling flow and cattaneo- christow heat and mass flux over a srategable cylinder: a Dual startification model	Dr.Lokesh H J	2024	https://www.researchgate.net/publication/380913198_Magnetic_swirling_flow_and_Cattaneo-Christov_heat_and_mass_flux_over_a_stretchable_cylinder_A_dual_stratification_model

PRINCIPAL SIMIT, Chitradurga

S J M Vidyapeetha®



## S J M INSTITUTE OF TECHNOLOGY

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## List of Books and chapters in edited volumes / books published and papers published in National/ International conference proceedings during the year 2023

Sl. No.	Name of the teacher	Title of the book/chapters published	Title of the paper	Name of the conference	Year of publication	
	2023-24					
1	Dr. Bharath P B Dr. Rajesh A M Prabhuswamy G S Dr. Shivakumar S P		Design and development of hybrid solar still - enhanneing efficiecy and productivity in water distillation	ISEMS - SOUVENIR - 2024	2024	
2	Dr. Rajesh A M		AI Based robotics for industrial Applications	Research and innovation on products	2024	
3	Dr. Rajesh A M	Investigation of fracture toughness analysis of polymer composites using finite element analysis			2024	
4	Prof. Sandeep V R		IoT Based Forest Fire Prevention System With Anti-Smuggling Identification: International conference on Next Generation Intelligence in Electronics and Communication Engineering	NGIEC-2024	2024	

5	Prof. LavaKumar T B		Enhancing Fishery Sustainability Through IoT- Enabled Environmental Monitoring National Conference on next generation intelligence in Electronics & Communication Engineering	NGIEC-2024	2024
6	Prof. Chetan S	Book chapter	Digital Convergence in Antenna Designs: Applications for Real-Time	Indian Journal Of Science and Technology	2024
7	Prof. Chetan S		Design of Frequency Reconfigurable Antenna with SRR & Diode control for omnidirectional Applications	International conference on ICSCR-2024	2024
8	Prof. Chetan S		IOT innovations in health management: A monitoring system approach	National conference on NGIEC-2024	2024
			Smart cap for visually impaired persons based on IOT		
9	Sudarshan M K		National Conference on next generation intelligence in Electronics & Communication Engineering	NGIEC-2024	2024





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## Professional development /Administrative training programs organized for teaching and non-teaching staff during the year 2023-24

Title of the professional development program organised	Dates (from-to) (DD-MM-YYYY)	No. of participants
Five Days workshop on "Emerging Trends in Signal Processing Image Processing and Artificia Intelligence"	12-09-2023 to 16-09-2023	220
Three days faculty development program on "AutoCAD Fusion 360" Medini Technologies, Bangalore	03-10-2023 to 05-10-2023	13
Five Days FDP on IOT and It's Applications	16-10-2023 to 20-10-2023	100
Intellectual Property Rights and Entrepreneurship Development (online seminar)	28-11-2023 to 28-11-2023	25
Intellectual Property Rights and IP Management forStartup (online seminar)	31-05-2024 to 31-05-2024	26



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## Teachers undergoing online/face-to-face Faculty development Programs (FDP) during the year 2023-24

Name of teacher who attended	Title of the program	Duration (from – to) (DD- MM-YYYY)
Prof.Shankar G S	5 Days Faculty Development Program on Technology Intervention in Civil Engineering	21-08-2023 to 25-08-2023
Dr.Srishaila J M	One week Faculty Development Program on Digital transformation in product design & manufacturing using Fusion 360	21-08-2023 to 25-08-2023
Prof.Sushmita Deb	5 Days Online Faculty Development Program on "Trends in Technological Intellignce Engineering"	21-08-2023 to 25-08-2023
Prof Pavithra N	Emerging Trends in Signal Processing Image Processing & AI	12-09-2023 to 16-09-2023
Prof Poral Nagaraj	Emerging Trends in Signal Processing Image Processing & AI	12-09-2023 to 16-09-2023
Prof Beenasheril	Emerging Trends in Signal Processing Image Processing & AI	12-09-2023 to 16-09-2023
Prof Shruthi M K	Emerging Trends in Signal Processing Image Processing & AI	12-09-2023 to 16-09-2023
Prof Basantha Kumari	5 Days online Faculty Development Program on IOT & Its Applications	16-10-2023 to 20-10-2023
Prof.M.R.Desai	5 Days online Faculty Development Program on IOT & Its Applications	
Prof Avinash G M	5 Days online Faculty Development Program on IOT & Its Applications	16-10-2023 to 20-10-2023
Prof.Meenakshi M	5 Days Faculty Development Program on 2nd Series of advancements in Concrete technology(AICT-2023)	02-11-2023 to 07-11-2023
Prof.Roopa.S	5 days online FDP on "Emerging Trends in signal processing,image processing and Artificial intelligence	12-12-2023 to 16-12-2023
Prof.Sudarshan M.K	5 days online FDP on "Emerging Trends in signal processing,image processing and Artificial intelligence	12-12-2023 to 16-12-2023
Prof.Sandeep V R	5 days online FDP on "Emerging Trends in signal processing,image processing and Artificial intelligence	12-12-2023 to 16-12-2023
Prof.Nandini G R	5 days online FDP on "Emerging Trends in signal processing,image processing and	12-12-2023 to 16-12-2023

	Artificial intelligence	5
Prof.Lavakumar T B	5 days online FDP on "Emerging Trends in signal processing,image processing and Artificial intelligence	12-12-2023 to 16-12-2023
Prof.Noor Fathima	5 days online FDP on "Emerging Trends in signal processing,image processing and Artificial intelligence	12-12-2023 to 16-12-2023
Prof.Sanjay Kumar K	5 Days Online Faculty Development Program on "Aiming towards 3Ds in Electrical Engineering"	11-03-2024 to 15-03-2024
Prof.Madhukumar .D	5 Days Online Faculty Development Program on "Aiming towards 3Ds in Electrical Engineering"	11-03-2024 to 15-03-2024
Prof.Sudha.T	5 Days Online Faculty Development Program on "Aiming towards 3Ds in Electrical Engineering"	11-03-2024 to 15-03-2024
Prof.Chandrashekhar R Kambali	5 Days Online Faculty Development Program on "Aiming towards 3Ds in Electrical Engineering"	11-03-2024 to 15-03-2024
Prof.Subramanya P G	5 Days National Webinar on Pathways to discovery and Innovation	25-04-2024 to 30-04-2024
Dr.Kumaraswamy B G	5 Days International Faculty Development Program on Digital Marketing	27-05-2024 to 31-05-2024
Prof Ambika S	5 Days International Faculty Development Program on Digital Marketing	27-05-2024 to 31-05-2024
Prof Anusha B	5 Days International Faculty Development Program on Digital Marketing	27-05-2024 to 31-05-2024
Dr. Rajesh A M	Training Programm on Solar PV Installer (Surayamitra)	22-05-2024 to 28-05-2024
Prabhuswamy G S	Training Programm on Solar PV Installer (Surayamitra)	22-05-2024 to 28-05-2024
Prof.Raghu.S	One week FDP on " Cyber security and Ethical Hacking"	12-02-2024 to 17-02-2024
Prof.Chethan S	Five days online FDP on "Exploring N ew Trends and Future Directions in VLSI technology"	22-07-2024 to 27-07-2024





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#### Functional MoUs with institutions, other universities, industries, corporate houses etc. during the year 2023 - 24

SI No.	Organisation with which MoU is signed	Name of the institution/ industry/ corporate house	Year of signing MoU	Duration	List the actual activities under each MOU year wise	Number of students/teachers participated under MoUs
1	SJM Institute of Technology	Internzlearn Private Limited, Hosur road, Kudlu gate, HSR, Bengaluru 560068	2023	2 YEARS	Internship and Techninal Training	12
2	SJM Institute of Technology	ExcelR Solutions, BTM Layout, Bengaluru 560068	2023	2 YEARS	Internship and Techninal Training	10
3	SJM Institute of Technology	Pygenicarc, Uttarahalli, Bengaluru 560061	2023	2 YEARS	Internship and Techninal Training	3
4	SJM Institute of Technology	CADD Center, 3rd cross, JCR, Chitradurga 577501	2023	2 YEARS	Internship and Techninal Training	12
5	SJM Institute of Technology	Karunadu Technologies Ltd, Chikkabanavara, Bengaluru 560090	2023	2 YEARS	Internship and Techninal Training	25
6	SJM Institute of Technology	Government Tool Room and Training Center, Chitradurga	2022	1 YEAR	Internship Training and Technical Training	30
7	SJM Institute of Technology	Abeyaantrix Softlab OPC Pvt Ltd Davanagere	2021	2 YEARS	Training on "An Indemand Programming Language (Python)"	10

8	SJM Institute of Technology	GREP & AWK Technologies, #G03, Serene, 2nd Main, Jaralur Road, Ambalipur, Bengaluru 560102	2021	5 YEARS	Training on "DevOps in Software Development"	NIL
9	SJM Institute of Technology	PVC Agritech, Plot no. 1C, KIADB Industrial Area, Lokikere Road, Davanagere-577 005.	2021	2 YEARS	Industrial visites, Interaction with students	NIL
10	SJM Institute of Technology	PVC Pumps Pvt Ltd, Davanagere	2021	2 YEARS	Industrial visites, Interaction with students	NIL
11	SJM Institute of Technology	National Highways Authority of India Chitradurga 577502	2021	5 YEARS	Internship	NIL
12	SJM Institute of Technology	SKILLDZIRE Technologies pvt Ltd	2021	3 YEARS	Skill training, Workshops, FDPs, Job oriented training, Certifications and Placements	NIL
13	SJM Institute of Technology	M.A. Associates, Old ZP office Road T.R.Nagar Challakere 577522	2022	2 YEARS	Laboratory Services and Material Testing	5 faculty
14	SJM Institute of Technology	Abheyaantrix soft Lab	2021	1 YEAR	Encourage interaction between Engineers, Scientists, Research fellows, faculty and students	NIL
15	SJM Institute of Technology	SKILLDZIRE Technologies pvt Ltd	2021	3 YEARS	Skill training, Workshops, FDPs, Job oriented training, Certifications and Placements	NIL
16	SJM Institute of Technology	Entuple Technologies Pvt Ltd	2021	2 YEARS	Training on "Cadence Tool Software"	NIL
17	SJM Institute of Technology	Abheyaantrix soft Lab OPC Private Limited, LIC Colony, Davanagere	2021	1 YEAR	Workshop Training on IOT	NIL
18	SJM Institute of Technology	Energia Technolabs, Bengaluru	2021	2 YEARS	Industrial Training and Visits, Guest Lectures, Placement of Trained	NIL

					students	
19	SJM Institute of Technology	Technologics Global Pvt Ltd R&D Lab	2021	3 YEARS	Guest Lectures, Placement of Trained students	NIL
20	SJM Institute of Technology	Vinyas Associates, 1st main, Kannika Commercial Layout, Chitradurga	2021	3 YEARS	Guest Lectures, Placement of Trained students	NIL
21	SJM Institute of Technology	Mile Stone Training Center Chitradurga	2018	5 YEARS	Training of Students for placement	NIL
22	SJM Institute of Technology	Universal Power Controls DB son	2021	1 YEAR	Industry oriented Training Programme	NIL

