

2023

# IQAC ANNUAL REPORT

## Outlay v/s Outcome

This document contains the account of initiatives taken for quality enhance and output thereto for the academic year 2022 – 23 .





## VISION

- ✓ To contribute to India and the world through excellence in Technical education;
- ✓ To serve as a valuable resource for industry, research and society; and remain a source of pride for our state Rajasthan.

## MISSION

- To create technical manpower for meeting the current and future demands of industry;
- To provide education in close interaction with industry with emphasis on development of leadership qualities in students of our college with sensitivity to social development and eye for opportunity for growth in international perspective.



**Manikya Lal Verma Textile & Engineering College, Bhilwara – 311 001 (INDIA)**

## MESSAGE FROM THE CHAIRMAN IQAC



M. L. V. Textile & Engineering College (a constituent college of Rajasthan Technical University, Kota), Bhilwara, having glorious past of about 35 years after its establishment in 1988, has been a unique engineering institute offering higher technical education especially Textiles in Rajasthan. This institution of higher learning has immensely contributed to development of nation by providing brilliant minds in Textiles possessing analytical, problem-solving, design, practical and leadership skills.

Annual report 2022-23 of IQAC embodies the account of quality enhancement initiatives for faculty and staff. Six guiding principles and smart hard work of all the stakeholders have resulted in tangible and intangible outcomes which are reflected through this document. It especially showcases big achievements of our faculty and students.

It is my strong belief that continued efforts of all the persons associated with the college in more effective manner and in a mission mode would certainly move it towards excellence in conformity with our vision statement. With these words, the report is presented to you for your kind perusal.

**Dr. Dhirendra Kumar Sharma**



## M. L. V. Textile & Engineering College, Bhilwara

(A constituent College of Rajasthan Technical University, Kota)

### INTERNAL QUALITY ASSURANCE CELL

AICTE - F. No. North-West/1-36539874797/2023/EOA, 2 June 2023



## IQAC ANNUAL REPORT for 2022 – 23

### The objectives of IQAC are

- To develop a system for conscious, consistent and catalytic action to improve the academic and administrative performance of the institution.
- To promote measures for institutional functioning towards quality enhancement through internalization of quality culture and institutionalization of best practices.

### IQAC shall evolve mechanisms and procedures for

- Ensuring timely, efficient and progressive performance of academic, administrative and financial tasks;
- The relevance and quality of academic and research programs;
- Equitable access to and affordability of academic programs for various sections of society;
- Optimization and integration of modern methods of teaching and learning;
- The credibility of evaluation procedures;
- Ensuring the adequacy, maintenance and proper allocation of support structure and services;
- Sharing of research findings and networking with other institutions in India and abroad.

### Some of the functions expected from IQAC are :

- Development and application of quality benchmarks/parameters for various academic and administrative activities of the institution;
- Facilitating the creation of a learner-centric environment conducive to quality education and faculty maturation to adopt the required knowledge and technology for participatory teaching and learning process;
- Arrangement for feedback response from students, parents and other stakeholders on quality-related institutional processes;
- Dissemination of information on various quality parameters of higher education;
- Organization of inter and intra institutional workshops, seminars on quality related themes and promotion of quality circles;
- Documentation of the various programs/activities leading to quality improvement;

- Acting as a nodal agency of the Institution for coordinating quality-related activities, including adoption and dissemination of best practices;
- Development and maintenance of institutional database through MIS for the purpose of maintaining /enhancing the institutional quality;
- Development of Quality Culture in the institution;
- Preparation of the Annual Quality Assurance Report (AQAR) as per guidelines and parameters of NAAC/NBA, to be submitted to NAAC/NBA.

## **IQAC will facilitate / contribute**

- Ensure heightened level of clarity and focus in institutional functioning towards quality enhancement;
- Ensure internalization of the quality culture;
- Ensure enhancement and coordination among various activities of the institution and institutionalize all good practices;
- Provide a sound basis for decision-making to improve institutional functioning;
- Act as a dynamic system for quality changes in HEIs;
- Build an organized methodology of documentation and internal communication.

## **Composition of IQAC**

S. No.	Name & Designation	On Board
1.	Dr. D. K. Sharma, Principal	Chairman
2.	Dr. D. N. Vyas, Associate Professor	Coordinator
3.	Dr. K. C. Jain, Associate Professor & OIC (Establishment)	Member
4.	Smt. Meenu Munjal, Assistant Professor (TT)	Dept. Coordinator (TT)
5.	Sh. Dinesh Kumar Sharma, Assistant Professor (ME)	Dept. Coordinator (ME)
6.	Sh. Jitendra Meena, Assistant Professor (TC)	Dept. Coordinator (TC)
7.	Sh. Anurag Jagetiya, Assistant Professor (IT)	Dept. Coordinator (IT)
8.	Smt. Sarita Chouhan, Assistant Professor (ECE)	Dept. Coordinator (IT)
9.	Sh. Rajeev Agarwal, Assistant Professor (BS-CH)	Dept. Coordinator (BS)
10.	Sh. Suraj Kumar Gupta, Visiting Faculty (ME)	Member
11.	Sh. L. N. Somani, Accounts Officer	Member
12.	Sh. Vijay Agarwal, MD, Calvintex Bhilwara	Member
13.	Sh. Shyam Verma, CEO, RBSL Bhilwara	Member
14.	Sh. Vinod Melana, Industrialist, 'APNA SANSTHAN'	Member
15.	Mr. Hemant Pokhra, Student (B. Tech - ME)	Member

## REPORT BEGINS

Paving a road approaching the quality in teaching and learning activities in an Engineering College requires collective and effective efforts with the flavor of Kaizen. The Internal Quality Assurance Cell was established in April 2022 to give insight into quality aspects of teaching – learning in undergraduate programs and strived to take initiatives for implementation of quality assurance strategies in the college through department coordinators.

The activities undertaken during the academic session 2022-23 and strategies adopted could contribute to the extent what was expected amidst all financial and circumstantial hardships.

### Guiding principles of quality initiatives:

- ✓ Technical Skill Development
- ✓ Research Aptitude Development
- ✓ Soft Skill Development including value education and professional ethics
- ✓ Confidence building and leadership skill development measure
- ✓ Awareness about physical fitness
- ✓ Social Outreach

Two meetings of IQAC were held in 2022-23. Several initiatives were taken to put a step ahead for quality assurance in the College:

### Technical Skill Development

- Faculty members were encouraged to attend FDP/STC
- Student Induction Program for effective orientation of new batch
- Extra efforts taken for problem solving in Engineering Mathematics of first year. Three additional lectures per week were allocated and delivered (a step forward towards improving transition rate;
- Encouragement and motivation for online certification through NPTEL
- Sensitization of OBE among new comers with regard to CO – PO mapping. Departments were encouraged to conduct Course Exit Survey in all the UG programs and result analysis;
- Organizing seminars/webinars, workshops and training programs;
- Formation of standards club in collaboration with Bureau of Indian Standards, Jaipur;
- Providing self-learning environment.

### Research Aptitude Development

- Formation of technical clubs (through multi-stage screening of student members) providing a platform where students can perform and showcase their technical skills;
- Problem solving through innovative projects utilizing all the learning levels;
- Awareness sessions on cutting edge technologies;



- Collaboration with industry.

## **Soft Skill Development including value education and professional ethics**

- Navigating towards value education;
- Pre-placement and pre-training sessions for soft skills;
- Mock Interview Drills.

## **Confidence building and leadership skill development measure**

- Formation of students' clubs and Students' Activity Group for structured and effective conduct of extra-curricular activities necessary for overall personality development;
- Effective leadership sessions
- Student – Faculty Connect and peer learning
- Encouraging students to take part in competitive technical, extra-curricular and sports activities outside the college;

## **Awareness about physical fitness**

- Steps for ensuring physical fitness;
- Collaborative sports activities in two formats mixed class (Auction Format) and Inter-class format.
- Providing fitness equipments under CSR.

## **Social Outreach**

- Green initiatives (Sapling plantation and their nurturing); Dense Forest Creation;
- Taking up small social projects of helping needy people, visit to old age home;
- Blood Donation for saving human lives;
- Cleanliness Drive;
- Crowed Funding for providing immediate relief to the victims of natural and man-made disasters through TEAM.
- Quick response to the passed out students and third party verification of education

What follows is the brief account of outcomes of such initiatives:

**Table 1: Technical Skill Development**

S. No.	Initiative	Outcome
1	Faculty members were encouraged to attend FDP/STC, conferences, seminars, workshops, training program etc.	<ul style="list-style-type: none"> <li>• <b>Dr. Ritesh Kumar Saraswat</b> attended 5 Faculty Development Programs / Short-term Courses</li> <li>• <b>Sh. Nitesh Chouhan</b> attended 2 conferences.</li> <li>• <b>Sh. K. G. Bhadada</b> attended two FDPs and is now UHV-I and UHV-II certified faculty member.</li> <li>• <b>Dr. Harshvardhan Saraswat</b> attended two conferences/seminars.</li> <li>• <b>Sh. A. Kaniraja</b> attended two FDPs and is now UHV-I and UHV-II certified supporting staff</li> <li>• <b>Two Technical Assistants</b> in ECE department were given training on using ERP.</li> </ul>
2	Student Induction Program for effective orientation of new batch	SIP-2K22 helped <b>150 new comers</b> get acquainted with changed academic environment, Dos & Don'ts well in advance during 2022-23.
3	Extra efforts taken for problem solving in Engineering Mathematics of first year. Three additional lectures per week were allocated and delivered (a step forward towards improving transition rate)	<b>1<sup>st</sup> year Students</b> appreciated the initiative which could reduce Math phobia to some extent. University result of 1 <sup>st</sup> and 3 <sup>rd</sup> Semester is awaited till the date this report is prepared. 2 <sup>nd</sup> semester exams were yet to commence as on date. Improvement in transition rate will be known only after the results are declared by RTU, Kota.
4	Encouragement and motivation for online certification through NPTEL	<p>Students were made aware of SWAYAM portal and NPTEL for acquiring ad-on technical skill through MOOCs. <b>15 students</b> from Textile Technology, Textile Chemistry, Mechanical Engineering and Information Technology performed well and earned up to 20 credits which helped them getting UG degree with honors.</p> <p><b>Two students of first year</b> had enrolled for online courses through NPTEL.</p>
5	Sensitization of OBE among new comers with regard to CO – PO mapping. Departments were encouraged to conduct Course Exit Survey in all the UG programs and result analysis	<p>All the <b>850 students</b> were made aware of Outcome Based Education in respect of Course Outcomes and their mapping with Program Objectives. Students are now fully aware of course exit survey. The faculty members' performance was measured through students' feedback and informed about the same.</p> <p>Corrective measures were taken depending upon students feedback and semester result analysis.</p>
6	Organizing seminars, webinars, workshops and training programs	<p>Following seminars, webinars, workshops and trainings were organized in 2022 – 23:</p> <ul style="list-style-type: none"> <li>• Handloom, 07/08/22</li> <li>• Investors Awareness Program, 22/03/23</li> </ul>



7	Formation of standards club in collaboration with Bureau of Indian Standards, Jaipur	Club started with <b>20 students</b> from I, II and III year of B. Tech under the guidance of Smt. Meenu Munjal, Assistant Professor (TT) and BIS, Jaipur Office. More students <b>20 more students</b> joined it later. <b>Two activities</b> were organized under this club. One of them was followed by industrial visit.
8	Providing self-learning environment	Students were allowed to utilize the computer lab and mechanical workshops facilities beyond contact hours providing self-learning opportunities.  Students from II year Information Technology and Computer Science learnt Angular language and other web development tools. As a result of it they could <b>developed the website of SAG</b> in the college. It is still under improvement process.

**Table 2: Research Aptitude Development**

S. No.	Initiative	Outcome
1	Formation of technical clubs (through multi-stage screening of student members) providing a platform where students can perform and showcase their technical skills	<ul style="list-style-type: none"> <li>Two clubs viz. TechBizz Club (<b>8 Members of IT, CS, ME</b>) and Team Mechanical (<b>20 Students – 4 Groups</b>) formed and are functioning in the college.</li> <li>Students of varied flavors came together and created a robotic arm which they demonstrated during SIP and at district level on Engineers' Day September 15, 2022.</li> <li><b>14 new student members</b> have been identified recently by the club team who are now inducted in the club.</li> <li>Same group of students developed the website of Students' Activity Group in the College.</li> <li>HACKATHON was organized in the college. 80 students of II year and III year took part in it. Students demonstrated good level of solutions.</li> </ul>
2	Problem solving through innovative projects utilizing all the learning levels	<p>Inspired by the ill health of 3D-printer in college and high cost of repair, waste papers lying the college, TEAM Mechanical ventured to develop the solution in-house. A group of <b>6 students</b> developed low-cost 3D printer in the College under the supervision of <b>Sh. Suraj Kumar Gupta</b>, Visiting Faculty and another group of 5 students used the waste/idle items/objects and developed paper recycling mechanism in the labs under the supervision of <b>Sh. Atul Sharma</b>, Visiting Faculty.</p> <p>A team of <b>4 students</b> from final year Electronics &amp; Communication Engineering modified the drone</p>

		(Quad copter) and reduced the cost under the guidance of <b>Smt. Hareetaa Mallani</b> , HOD (ECE). 4 students of final year Textile Technology carried out a project on composite textile material usable in automobile industry under the guidance of <b>Sh. Arvind Vashishtha</b> , Assistant Professor.
3	Awareness sessions on cutting edge technologies	<b>Sh. Suraj Kumar Gupta</b> , Visiting Faculty in Mechanical Engineering took a session of Industry 4.0 for 1 <sup>st</sup> year students during SIP. <b>Sh. Anurag Jagetiya</b> , Assistant Professor took a session on developing research temperament in this fast growing technologically advanced era in SIP. He also took one session for <b>120 students</b> of II and III year IT & CS on idea generation and implementation through HACKATHON.
4	Collaboration with industry	College signed MoUs with <b>4 industries</b> leading to mutual cooperation and technical support to students in making samples for their project work.

**Table 3: Soft Skill Development including Value Education and Professional Ethics**

S. No.	Initiative	Outcome
1	Navigating towards value education	<ul style="list-style-type: none"> <li>Organized One week workshop on “Inculcating Universal Human Values in Technical Education” during SIP-2K22 benefitting <b>150 students</b>.</li> <li>Organized two workshops each of one week duration: one on Happiness and other on Harmony in family.</li> <li>Sessions on value education were organized in collaboration with ISKON. <b>20 students</b> took part and learned the lessons of life.</li> </ul>
2	Pre-placement and pre-training sessions for soft skills	<ul style="list-style-type: none"> <li>Training &amp; Placement cell organized pre-placement and pre-training session making the students aware of soft skills required during undergoing practical training and placement drives. This resulted in good placement offers and their success.</li> <li>Sh. Anurag Jagetiya took a session on “How to prepare effective and job winning resume?” More than <b>100 students</b> attended it and benefitted.</li> </ul>
3	Mock Interview Drills	<ul style="list-style-type: none"> <li>Mock interview drives were organized for the students desirous of appearing in campus placement as well as online placement drives which helped them grabbing job opportunities.</li> </ul>

4	Awareness sessions on soft skills	<ul style="list-style-type: none"> <li>A session making new comers understand the importance of soft skill set required for a professional was organized during SIP for 150 students.</li> </ul>
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**Table 4: Confidence building and leadership skill development measure**

S. No.	Initiative	Outcome
1	Formation of students' clubs and Students' Activity Group for structured and effective conduct of extra-curricular activities necessary for overall personality development	<ul style="list-style-type: none"> <li>Considering extra-curricular activities as essential part of four years UG program, <b>8 clubs</b> were formed to discuss, plan, execute and implement various activities pertaining to confidence building, leadership skill development, spoken skill enhancement, manifesting hidden talent and what not.</li> <li>These clubs operate on the principle of "<b>Of the students, by the students and for the students</b>" Eight clubs include</li> <li>Art &amp; Craft, Cultural, Human Values, Journalism &amp; Mass Communication, Literal, Math, Management and Publication Club.</li> <li>Most commendable work of these clubs include <b>publication of bimonthly E-newsletter</b>, Reports of celebrated events (Independence Day, SIP, Republic Day, NOVATO's, GAIETY, Farewell, SAG Summit) Those reports are also the part of this document.</li> <li>A <b>high level of confidence</b> has been observed in the participating students which were reflected during viva-voce exams of practical subjects.</li> </ul>
2	Effective leadership sessions	A special session on Effective leadership was organized in collaboration with Vivekanand Kendra Kanyakumari, Branch Bhilwara on 22/01/2023. <b>30 students</b> from various colleges were benefitted in it.
3	Student – Faculty Connect and peer learning	One of the best practices in technical education is student-teacher connect. This resulted in removal of hesitation amongst students speaking to teachers. Although it is at initial stage but we are confident of intensifying the participation under this initiative.
4	Encouraging students to take part in competitive technical, extra-curricular and sports activities outside the college	<ul style="list-style-type: none"> <li>A team of <b>20 students</b> under the leadership of Dr. D. N. Vyas visited IIT Roorkee and participated in National event <b>THOMSO 2022</b>. Although they could not get any position but got excellent exposure and implemented the ideas in the events/activities organized in the college which</li> </ul>

		<p>improved the organizational capabilities of the students.</p> <ul style="list-style-type: none"> <li>• <b>50 students</b> took part in La Union event (A mixture of Extra-curricular activities and sports activities) organized by Sangam University, Bhilwara and won championship trophy scoring 2<sup>nd</sup> highest points among 52 teams from across the country. This win made them confident and created a next level enthusiasm in them.</li> <li>• <b>6 members</b> of Team Mechanical took part in JUGAD MELA organized by Sangam University, Bhilwara where they demonstrated 3D printer developed by them and got <b>FIRST PRIZE</b>.</li> <li>• A convoy of <b>25 students</b> visited MNIT, Jaipur and participated in various sports activities and won champions trophy.</li> <li>• <b>20 students</b> took part in a sports meet organized by JECRC, Jaipur where they performed well in a variety of activities and got FIRST POSITION in Kabaddi.</li> </ul>
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**Table 5: Awareness about physical fitness**

S. No.	Initiative	Outcome
1	Steps for ensuring physical fitness;	<ul style="list-style-type: none"> <li>• Sports activities were organized in well structured manner.</li> <li>• Students were made aware of sports facilities and importance of sports for physical fitness and yoga for mental fitness.</li> </ul>
2	Collaborative sports activities in two formats mixed class (Auction Format) and Inter-class format.	<ul style="list-style-type: none"> <li>• Team activities were organized in two formats Aarambh (through auction of players) and Sangarsh (Inter-class format). This resulted in enhancement of sports spirit among students as well as quality of games in both boys and girls.</li> </ul>
3	Providing fitness equipments under CSR.	<ul style="list-style-type: none"> <li>• Open GYM equipments (15 Nos) were installed in residential premises of students and staff. All the residents are getting the benefits out of it.</li> <li>• Hon'ble Vice-chancellor of Rajasthan Technical University, Kota inaugurated the open GYM facilities and appreciated the initiative taken by the College in collaboration with industry sponsor under CSR.</li> </ul>

**Table 6: Social Outreach**

S. No.	Initiative	Outcome
1	Green initiatives (Sapling plantation and their nurturing); Dense Forest Creation	<ul style="list-style-type: none"> <li>Initiative under One Student – One Tree was taken and <b>500 saplings</b> were planted in the college premises and are being nurtured.</li> <li>A part of land was planned to develop it as a dense forest providing shelter to more than <b>40 peacocks</b> staying in the staff colony area.</li> <li>Day scholars were motivated to plant <b>at least one sapling</b> in the nearby area of their residences. Result is encouraging: more than 100 students responded positively.</li> <li>Solar plant installed in the college was reviewed and decided to shift a part of it in the <b>boys' hostel</b> benefitting the institute in lowering electricity bill.</li> <li>All the students' activities were accounted electronically <b>saving a huge amount of papers</b>. Newsletters are also published electronically and available on <a href="http://www.mlvti.ac.in">www.mlvti.ac.in</a>.</li> <li>Campaign was launched for making college campus <b>plastic free</b> but it is yet to take momentum of desired level.</li> </ul>
2	Taking up small social projects of helping needy people, visit to old age home	<ul style="list-style-type: none"> <li>Groups of students visited nearby colonies and helped needy children and made them go to school for study.</li> <li>Another group of <b>10 students</b> visited Old age home in Bhilwara and experienced the reality of life of senior citizens in the present time. They pledge not to follow what their wards had done with them.</li> </ul>
3	Blood Donation for saving human lives	<ul style="list-style-type: none"> <li>Students (boys and girls) were encouraged for blood donation. A blood donation camp was organized in the College on 02/10/2022 where <b>50 units</b> were collected with the help of Arihant Hospital, Bhilwara.</li> <li>Students also donated blood in a camp organized at mass level at Ram Snehi Hospital. <b>18 eligible students</b> donated their blood.</li> </ul>
4	Cleanliness Drive	<ul style="list-style-type: none"> <li><b>28 student members</b> of Human Values Club and Eco Warrior Club took part and volunteered in campus cleanliness drive in the college.</li> </ul>
5	Crowed Funding for providing immediate relief to the victims of natural and man-made disasters through TEAM	<ul style="list-style-type: none"> <li>TEAM (Alumni) extended immediate financial help to one of the alumni whose entire family suffered severely in recent <b>Manipur violence</b> through crowd funding.</li> </ul>

6	Quick response to the passed out students and third party verification of education	<ul style="list-style-type: none"> <li>Although it is the duty of authorities at college to extend help to passed out student in need of some or the other document but quick response to their request is considered as a social responsibility which make them more than happy.</li> <li>More than <b>100 such requests</b> were entertained and responded immediately giving them great relief in urgent need of documents.</li> </ul>
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## Publications of IQAC:

- ❖ Rajasthan Technical University, Kota Rule Book 2022-23 (E-content)
- ❖ Students' Guide on OBE 2022-23 (Hard Content)
- ❖ Rajasthan Technical University, Kota Rule Book 2023-24
- ❖ Students' Conduct Rules: 2023 (E-content)
- ❖ What & How? (An action plan to ensure academic discipline at all levels) 2023
- ❖ Why ITP? (Bilingual) 2022-23
- ❖ Solutions of Examination Question Papers
  - ✓ Engineering Mathematics -2\_2022 (Main)
  - ✓ Advance Engineering Mathematics -1\_2023 (Main)\_Mechanical Engineering
  - ✓ Advance Engineering Mathematics -1\_2023 (Main)\_Information Technology
  - ✓ Advance Engineering Mathematics -1\_2023 (Main)\_Textile Technology/Chemistry
  - ✓ Engineering Mathematics -1\_2023 (Main)
  - ✓ Engineering Mathematics -1\_2023 (Back)

All these publications have been circulated among students and staff through Whatsapp sharing.

The Coordinator (IQAC) expresses his candid thanks and congratulates all those who have contributed towards the journey leading to quality in Teaching – Learning Process directly or indirectly. We shall require put-in more efforts by evolving smart mechanism in this regard.

Collectively we can become the reason of our pupil's delight.

**Dinesh Narain Vyas**  
Coordinator – IQAC

**Place: Bhilwara**

**Day & Date: Thursday, July 27, 2023**

**REPORT ENDS HERE**