

FOR 2nd CYCLE OF ACCREDITATION

SHREE L.R. TIWARI COLLEGE OF ENGINEERING

SHREE L.R TIWARI EDUCATION CAMPUS, KANAKIA PARK, MIRA ROAD
(EAST)
401107
slrtce.in

SSR SUBMITTED DATE: 09-02-2024

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL BANGALORE

February 2024

1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Shree L. R. Tiwari College of Engineering (SLRTCE) established in the year 2010 is a part of Rahul Education a conglomerate of over 60 institutions, under the visionary leadership of Shri Lallan R Tiwari the Chairman of the Institution.

The vision of the college is to be a world class institution with high quality technical education. SLRTCE believes that to achieve the vision they have to work on unique aspects to be recognized as a world-class institution among competitors and stakeholders, that is the reason why SLRTCE today can proudly say they have a Cybersecurity investigation center along with the dark web investigation to support law enforcement agencies. Similarly, we are the first Institute in the State of Maharashtra to start a blockchain-based transcript. The Institute has taken such fifteen-plus unique initiatives over the past years.

Even the faculty and management are interacting on the world stage carrying the SLRTCE flag. Our COO Mr. Utsav Tiwari is part of Cambridge Assessment International Education. Our Jt.Secretary Mrs Krishna Tiwari represented India at the United Nations platform focusing on women's empowerment. Principal Dr Deven Shah is the Associate Dean Faculty of Science and Technology of the University of Mumbai and delivered the keynote speech at the Dubai Crypto Expo.

SLRTCE is located outskirt of the Mumbai region and hence as per the Institute Chairman's vision, we are providing the most affordable education for the people of their region. The Institution's policy is working on a cost-effective budget without compromising the quality of education.

SLRTCE works on student-centric policy and empowers the faculties to work on the research-oriented industry-specific problem statements which are inculcated into consultancy.

The future is that SLRTCE along with adopting NEP 2020 creates an ecosystem for students and faculties to contribute towards Viksit Bharat – Vision of Government of India.

Vision

Vision: To be a world-class institute and a front-runner in the educational and socioeconomic development of the nation by providing high-quality technical education to students from all sections of society.

Mission

Mission: To provide superior learning experiences in a caring and conducive environment so as to empower students to be successful in life and contribute positively to society.

Page 2/84 12-02-2024 03:31:59

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- 1. The management and the governance function excellently to pursue the vision with a progressive approach and profound experience in running around 60 institutes.
- 2. The college is located at Mira Bhayander, a locality with a limited number of technical institutes thus providing a huge scope for the students to get technical education.
- 3. Quality education at affordable fees as compared to other technical institutions.
- 4. Faculties are motivated and content with the work environment, therefore retention rate is high at SLRTCE.
- 5. Better career opportunities for students. Good placements in IT and computer engineering.
- 6. Higher studies and entrepreneurship are taking a leap on the success graph.
- 7. Industry collaboration, increasing interaction with industries of diverse fields leading to new job opportunities
- 8. A robust alumni network linking with existing students to explore new fields of technology and job entries.
- 9. A well-formed advisory board with a range of experts suggestive of unbiased advice for the growth of the institution.
- 10. Formation of development centre to empower cross domain interaction for learning new knowledge.
- 11. inclusive (gender, social and abilities) through policies, infrastructure and cultural.

Institutional Weakness

- 1. Due to financial constraints the only revenue model is fee collection. A policy of affordable fees prevents the raising of funds.
- 2. Optimum utilization of resources with minimum wastage.
- 3. Limited hostel facility as per the admission pattern towards localization. A very few outside students opt for the hostel facility.
- 4. Placements in core branches throughout the country have reduced therefore enrollment in mechanical and civil branches has become a serious concern.
- 5. Being a part of University affiliated systems and regulatory bodies there are limitations designing, enhancing and implementing the curriculum.
- 6. Delayed procedures on the side of university for accreditation bodies like NAAC and NBA.
- 7. Limitation in developing a culture of research and entrepreneurship since the majority of students are from metrocity hence interested in placements.
- 8. Constrained academic flexibility and autonomy since part of affiliated system.

Institutional Opportunity

1. The parent body, Rahul Education has 60 institutes that help in the promoting and enhancing learning

Page 3/84 12-02-2024 03:31:59

thus widening the scope of multidisciplinary learning.

- 2. Engineering is one of the leading discipline
- 3. The placement in core branches can be improved through different projects based on societal needs after integrating core branches with ICT
- 4. Industrial linkage can be strengthened on large scale with separate verticals other than students revenue
- 5. Endeavors towards hitting the vision to be a world class institute by exploring new innovations in the field of technology
- 6. A shift in the mindset of the faculties to be content creators rather than content consumers

Institutional Challenge

- 1. A large number of private engineering colleges in the vicinity with more intake than SLRTCE.
- 2. Adhere to the change in the industry requirements in terms of various technology domains in emerging areas.
- 3. Non uniform admission patterns with various branches.
- 4. Align and calibrate with regulatory bodies norms that are shifting every year.
- 5. Implementation of OBE in true spirit as a part of institute culture among all stakeholders.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

Curricular planning & implementation of the curriculum is designed by respective Board of Studies in consultation with various stakeholders by MU. The academic calendar is strictly followed by every department, which is prepared on the basis of calendar circulated by MU. And based on Mumbai university calander Institution prepare its own academic calander & followed by each department. The culture of academic freedom and flexibility provides immense scope for introducing innovations in the curriculum to achieve the institutional vision and mission of striving for academic excellence. The institution also follows DISHA manual which plays vital role for execution & implementation of academic & administrative activities in college.

Academic flexibility runs mostly within the framework of the University curriculum. Almost few department of the institute has representative either in Board of Studies, Academic Council of MU. The syllabus is dynamic and is constantly revamped to keep pace with the rapid developments in various fields of study, scientific and technological advancements, and to meet the demands of academia, industry and society. The Choice Based Credit System, provides for flexibility by offering intra-departmental and inter- departmental optional courses. The institute offers multi-disciplinary internship among all departments & also provide minimum 18 electives subject per department & also provides 1 institutional level optional course in VII &VIII semester which provides horizontal flexibility in UG programmes. Lateral mobility is facilitated by the university with diploma students to enter into the second year for selected courses. The institute encourages the faculty to attend FDP, STTP refresher courses during vacation and organizes programs for effectively transacting the curriculum and improving teaching practices. The institute offers several honor courses & Minor courses laid by MU. The institute offers several Audit courses for students in their academics apart from the programs of MU.

Holistic development of students is main purpose of curriculum. All the departments of the institute make an effort to enrich the curriculum in the form of content beyond syllabus, project work/internship and enhance the

experiences of the students by coping with the rapidly changing technological innovations in industry. In addition, the institution conduct industrial visits, site visits, technical events and Student Training Programs. The institution ensures that curriculum enrichment grooms the students to cater to the needs of the society and become socially responsible. The institution also follows student diaries in each department which helps the students to set balance in every forum.

Feedback system in the College helps the management and faculty to understand the effectiveness of teaching methodologies in the curriculum implementation. The student feedback is taken in every semester to assess the quality of teaching-learning in all courses, and corrective measures are taken by the faculty based on the feedback. The institute has a formal mechanism to obtain feedback on curriculum from other stakeholders like final year students (Exit survey), alumni, parents and industry with that the feedback from stakeholders also reflected on institutional web site.

Teaching-learning and Evaluation

tSLRTCE is a Hindi Linguistic Minority Institute and follows the norms/guidelines stipulated by Director of Technical Education(DTE), Maharashtra. The admission process is carried out in association with DTE for CAP and Institute quota where 51% of seats are reserved for Hindi minority and in spite of this , the institute has diversified background of students with an Average enrolment percentage of 59.3% and Percentage of seats filled against reserved categories as 47.81% over the last 5 years.

Student- Full time teacher ratio is around 18.02:1 which caters to differential learning and fosters to develop healthy one-on-one mentoring relationships, enabling student success and engagement.

The Institute has adopted a structured and guided Student centric quality framework for teaching learning through effective curriculum delivery by Adherence to the Academic Calendar and Adherence to Academic and Administrative conduct Manual "Disha" (developed by IQAC, SLRTCE). Categorization of the learners based on varied learning profiles is done to facilitate effective learning. The teachers are equipped with a powerful support system to provide variety of learning experiences to the students through academic flexibility and multidisciplinary approach.

The Percentage of full-time teachers against sanctioned posts during the last five years is around 100% and average percentage of full time teachers with Ph. D.(last five years) is around 10 % SLRTCE follows a guided mechanism for internal/external assessment. To ensure transparency the institute has developed SOP of examination. Transparency in external exams is maintained through a planned process by adhering to the university guidelines. To ensure that grievances related to exam are addressed effectively and in due time, the institute follows healthy practices like Open House, Grievance redressal system etc. The college has its own Grievance Redressal cell which is also empowered to look into examination-related grievances Course Outcomes (COs), Programme Outcomes (POs) and Programme Specific Outcomes for all Programmes offered by the institution are stated and displayed on website. SLRTCE has incorporated AICTE examination reform guidelines, which covers Program Outcome-Competencies- Performance indicator link for CO-PO mapping of all subjects. Outcome is evaluated by direct and indirect calculations which are based on respective assessment processes. Examination is a major tool for direct assessment based on students performance which covers 80 % of overall attainment and remaining 20 % is based on students feedback. Average percentage of final year students who passed the university examination (

Page 5/84 12-02-2024 03:31:59

last five years) is around 96.06%. At SLRTCE Online student satisfaction survey is done every year regarding teaching learning process as per NAAC guidelines

Research, Innovations and Extension

Research plays a unique and irreplaceable role in higher education. Quality research is beneficial to student, society, industry and nation .The college management encourages teachers to submit research proposals. The college has been conducting periodic National level conferences for the benefit and promotion of research atmosphere encouraging faculty and students to involve in article presentations/publications and establishing a collaboration for research activity. The submission of patent applications are encouraged. The College has a development center in association with Lab Systems Pvt. Ltd. to cater to a wide range of business projects in a bid to move from an informal to a formal method of managing industrial projects. SLRTCE has a Transcript Issuance Blockchain Authentication platform in association with Sapphirus Systems Pvt. Ltd. Faculties of SLRTCE have conducted training for cyber security in association with PAL India Pvt/Ltd.

The IIC committee organizes workshops and sensitization programs to create research spirit among teachers and students. College has organized number of workshops/seminars/conference including programs conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship. SLRTCE Incubation center aims at providing an environment to translate knowledge and innovation into the creation of successful entrepreneurs.

Many teachers in the College have published books and research papers in reputed National and international journals with good impact factors. There are Scopus and IEEE publications by some faculty. College has organized national level conference ICETTSE-2022 in which many faculties and students have presented and published research paper.

The institution is also actively involved in extension activities to help society by its services. The college has unit of NSS and DLLE, Unnat Bharat Abhiyan through which college renders social and community services. The Mira Bhayandar Municipal Corporation (MBMC) awarded Shree L R Tiwari College of Engineering for exceptional contributions to the Swachhata League of Swachh Sundar Mira-Bhayander Abhiyan under Swachh Bharat Abhiyan Besides organizing blood donation camps, environmental awareness programs and helping in disaster management. In Covid -19 Pandemic institute has organized several awareness programs and donation drive to needy.

Several collaborations (MOU) are made with industries, training institutions and research institutions for purposes of research collaboration and training students in the college. Various activities are conducted under the MOUs.

Infrastructure and Learning Resources

To support students' overall growth, Shree L.R. Tiwari College of Engineering (SLRTCE) offers cutting-edge classrooms, laboratories, libraries, recreation areas, and sporting facilities. The laboratories, equipment, tools, computers, and software are sufficient and well-equipped. While keeping in mind the needs of the students, the institute offers a highly favourable atmosphere for the development of technical skills and to assist students in obtaining practical knowledge about the subject. By meticulously following AICTE regulations, SLRTCE was

able to extend approval based on a certificate of zero infrastructure and facility deficiencies. The SLRTCE has discovered departmental domain and lab duplication and redesigned the laboratories and domain to optimise resource sharing for the best possible utilisation of resources. At SLRTCE, there is a computer centre, a sizable reading area, and a vast digital library. The library has 20676 books, 69 national and 26 international journals, and 1100 educational CDs. The institute subscribes to Springer Nature E-books (Intelligent Technologies & Robotics) as well as 100 IT/CMPN journals, 10 ETRX/EXTC journals, 4 lifetime CS subscriptions, and 100 ETRX/EXTC journals. The collection provides NPTEL Video Lectures for in-depth concept learning and knowledge enhancement. The college includes fully equipped labs and excellent internet connectivity. Currently, the college is equipped with a 325 Mbps leased connection. For faculty and students, the college has 4G Jio WI-FI routers with unlimited downloading capacity. The installed operating system's licence is updated on a regular basis by the institute. The institute follows a policy of regularly replacing outdated computers. The system administrator performs twice-monthly maintenance on the IT facility.

Student Support and Progression

Shree. L. R. Tiwari College of Engineering believes in executing admission process smoothly. Needy and financially backward students are well informed about Government and Non- Government scholarships and other financial aids beforehand so that they can avail full benefit of such schemes. The Institute also has taken care of the students who were seriously suffering from the financial crisis during Covid years by helping them with the fee concessions.

Along with the curriculum, institute emphasizes on holistic development of students which is achieved through various national, international level cultural and sports activities and interdisciplinary internships. Students are encouraged to participate in such activities by providing them with credits and activity point in the Student Diary. Activities are also organized to provide guidance for competitive examinations and career guidance for placement and preparation for interviews.

Being an engineering institute, various activities like, Group discussions, mock interviews are conducted to educate and enhance students' communication skills and to boost their confidence. Training and placement cell along with English domain works on improving the Technical as well as soft skills of students.

The institute ensures healthy and encouraging environment which is free from nuisance, maltreatment having zero tolerance towards illegal things through various statutory committees like Grievance Redressal Cell, Anti Ragging Committee, Mahila Takrar Nivaran Cell and Internal Complaint Committee. This helps institute for better reforming and improvement in the system.

Institute believes in continuous improvement by taking feedback from the alumni. A healthy relation is maintained with the alumni members through an alumni association and guidance is taken from them for continuous improvement.

Governance, Leadership and Management

t

The vision of the Institute emphasizes on imparting quality education and involves all its stakeholders in the decision making process. The established policies and procedures in the Institute evolved overtime, ensure the

Page 7/84 12-02-2024 03:31:59

integrity and effectiveness in the governance and administration.

The Institute promotes decentralisation and involvement of staff in various administrative and academic activities. Strategic plans are framed with goals in line with the Institute's vision and mission statements and several committees and bodies are constituted within the Institute to monitor day to day activities. The Institute already follows a light but tight administrative setup which is envisioned in NEP 2020.

As satisfied employees are key ingredients for the progress of any organization, several employee welfare schemes like medical insurance are in place for the benefit of teaching and nonteaching staff. The Institute encourages the entire workforce to upgrade their technical and soft skills by providing suitable training and financial support. Further, the Performance Appraisal System contributes to enhancing the professional competence of the workforce.

Being a self-financed organization, the Institute has laid down processes for effective utilization of financial resources. Also the system of internal and external financial audit has helped to monitor available financial resources. The institute has started working on separate verticals for revenue generation by supporting the Industry through the Development Centre to adopt new challenges.

Internal Quality Assurance Cell is established by the Institute for continuous improvement of quality and achieving academic excellence. IQAC has initiated several quality reforms to improve teaching-learning.

Institutional Values and Best Practices

CRITERION-7

The institution designs and implements wide-ranging procedures in accordance with the larger educational system of the country ensuing NEP 2020. The mission is to give students skill based education and develop them as personalities of immense practical knowledge and vast industrial exposure in an environment free from discrimination in the name of gender and other social inequalities. The institution provides equal opportunities and facilities to the women and physically disabled. The institution upholds many awareness creating programmes through *NSS*, *UBA*, *ISREW and DLLLE* for making students sensitive towards society and its concerns, individual moral duties, and professional ethics. At SLRTCE, we have a rain harvesting system, drip irrigation system, and composting to initiate and support environment conservation. The institution believes in "Enhancing Knowledge Spectrum Through Interdisciplinary Approach and Peer to Peer Learning" For this, The Honour and Minor Programme, In-house internship and Unified learning are invigorated in providing emerging area knowledge to the students. The institution also works on the holistic modeling of education. The unique concept of domain interface along with extension activities operates remarkably to create an exceptional

environment for the students that help them develop as an equitable blend of technically sound personalities with a genuine responsiveness to be a responsible citizen of the country. SLRTCE reflects its distinct attributes in the activities encompassing scholastic and non-scholastic spheres. Cryptocurrency labs, Block chain transcript authentication system, Development centre. Smart India Hackathon, Forensic Science lab, 'Prayas' initiative are some rewarding endeavors towards promoting academic excellence through enriched knowledge and industrial exposure. Moreover, it helps cross-domain interaction through domain interaction methodology.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College			
Name	SHREE L.R. TIWARI COLLEGE OF ENGINEERING		
Address	Shree L.R Tiwari education campus, kanakia park, Mira Road (East)		
City	Thane		
State	Maharashtra		
Pin	401107		
Website	slrtce.in		

Contacts for Communication						
Designation	Name	Telephone with STD Code	Mobile	Fax	Email	
Principal	Deven N. Shah	022-28120144	9820897360	022-2817257	principal.naac@slrt ce.in	
IQAC / CIQA coordinator	Sheetal Mahadik	022-281201145	9821227744	022-2817257	iqac.naac@slrtce.in	

Status of the Institution	
Institution Status	Private and Self Financing

Type of Institution		
By Gender	Co-education	
By Shift	Regular	

Page 10/84 12-02-2024 03:31:59

Recognized Minority institution				
If it is a recognized minroity institution	Yes Minority certificate compressed.pdf			
If Yes, Specify minority status				
Religious				
Linguistic	Hindi Linguistic Minority			
Any Other				

Establishment Details

State	University name	Document
Maharashtra	University of Mumbai	View Document

Details of UGC recognition				
Under Section	Date	View Document		
2f of UGC	09-10-2023	View Document		
12B of UGC				

Statutory Regulatory Authority	Recognition/Appr oval details Instit ution/Department programme	Day,Month and year(dd-mm- yyyy)	Validity in months	Remarks
AICTE	View Document	06-07-2023	12	All UG and PG courses
AICTE	View Document	06-07-2023	12	All UG and PG courses
AICTE	View Document	06-07-2023	12	All UG and PG courses
AICTE	View Document	06-07-2023	12	All UG and PG courses
AICTE	View Document	06-07-2023	12	All UG and PG courses

12-02-2024 03:31:59

Recognitions		
Is the College recognized by UGC as a College with Potential for Excellence(CPE)?	No	
Is the College recognized for its performance by any other governmental agency?	No	

Location and Area of Campus					
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.	
Main campus area	Shree L.R Tiwari education campus, kanakia park, Mira Road (East)	Urban	1.5	11984	

2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Pro gramme/Co urse	Duration in Months	Entry Qualificatio n	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BE,Electroni c And Teleco mmunication	48	HSC Science with CET or JEE	English	60	53
UG	BE,Electroni cs And Computer Science,	48	HSC Science with CET or JEE	English	60	60
UG	BE,Compute r Engineering,	48	HSC Science with CET or JEE	English	180	180
UG	BE,Informati on Technology,	48	HSC Science with CET or JEE	English	180	180
UG	BE,Mechanic al Engineering,	48	HSC Science with CET or JEE	English	30	7

UG	BE,Civil Engineering,	48	HSC Science with CET or JEE	English	30	8
UG	BVoc,Cyber Security And Digital Forensics,	36	HSC	English	30	14
UG	BVoc,Big Database And Cloud Computing,	36	HSC	English	30	0
PG	ME,Electroni c And Teleco mmunication	24	Graduation with GATE or working professional as sponsored	English	12	3
PG	ME,Compute r Engineering,	24	Graduation with GATE or working professional as sponsored	English	12	8

Position Details of Faculty & Staff in the College

	Teaching Faculty											
	Profe	Professor			Assoc	Associate Professor			Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	12				24				55			'
Recruited	3	1	0	4	5	2	0	7	17	38	0	55
Yet to Recruit	8	'			17			0				
Sanctioned by the Management/Soci ety or Other Authorized Bodies	0				0				21			
Recruited	0	0	0	0	0	0	0	0	12	9	0	21
Yet to Recruit	0	'	1		0	1	1	'	0	'	'	1

Non-Teaching Staff						
	Male	Female	Others	Total		
Sanctioned by the UGC /University State Government				2		
Recruited	2	0	0	2		
Yet to Recruit				0		
Sanctioned by the Management/Society or Other Authorized Bodies				40		
Recruited	32	8	0	40		
Yet to Recruit				0		

	Technical Staff						
	Male	Female	Others	Total			
Sanctioned by the UGC /University State Government				6			
Recruited	6	0	0	6			
Yet to Recruit				0			
Sanctioned by the Management/Society or Other Authorized Bodies				9			
Recruited	8	1	0	9			
Yet to Recruit				0			

Qualification Details of the Teaching Staff

Page 14/84 12-02-2024 03:31:59

Permanent Teachers										
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	2	1	0	5	2	0	0	5	0	15
M.Phil.	0	0	0	0	0	0	1	1	0	2
PG	0	0	0	0	0	0	16	32	0	48
UG	0	0	0	0	0	0	0	0	0	0

	Temporary Teachers									
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	1	0	0	0	0	0	0	0	0	1
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	12	9	0	21
UG	0	0	0	0	0	0	0	0	0	0

	Part Time Teachers									
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	1	0	0	1
UG	0	0	0	0	0	0	0	0	0	0

Details of Visting/Guest Faculties						
Number of Visiting/Guest Faculty	Male	Female	Others	Total		
engaged with the college?	0	0	0	0		

Provide the Following Details of Students Enrolled in the College During the Current Academic Year

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	1226	64	0	0	1290
	Female	254	17	0	0	271
	Others	0	0	0	0	0
PG	Male	8	1	0	0	9
	Female	8	1	0	0	9
	Others	0	0	0	0	0
Certificate /	Male	100	0	0	0	100
Awareness	Female	25	0	0	0	25
	Others	0	0	0	0	0

Provide the Following Details of Students admitted to the College During the last four Academ	ıic
Vears	

Category		Year 1	Year 2	Year 3	Year 4
SC	Male	3	4	2	0
	Female	0	0	1	0
	Others	0	0	0	0
ST	Male	0	0	0	1
	Female	0	0	0	0
	Others	0	0	0	0
OBC	Male	6	2	1	4
	Female	0	0	0	1
	Others	0	0	0	0
General	Male	310	191	191	198
	Female	76	39	42	29
	Others	0	0	0	0
Others	Male	0	1	1	2
	Female	0	0	0	0
	Others	0	0	0	0
Total	·	395	237	238	235

Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:

Multi-Disciplinary approach: Multi-Disciplinary and Interdisciplinary In-house Internship Reshaping the domain of the department (Domain interface and special highlight to English and Math Domain), Cross-domain interaction through domain interaction methodology, and Honor and Minor degree.

SLRTCE started the Internship policy in line with the AICTE Internship policy Guideline during the summer semester Academic year 2021-2022. This policy was set up as an ad hoc since it was just the beginning but now, there is a time to formulate a uniform plan of action to streamline the implementation of internships for all the departments from first year students to final year students. As per

the AICTE guidelines, the internship policy is the responsibility of the placement cell of the college. Apart from this, the role of placement coordinators of all the departments is also quite evident in facilitating the entire internship process. The following points are part of a uniform plan of action for internship policy: All HODs and Placement coordinators need to work together to create better internship opportunities for all the students to cater their needs. It is mandatory for all the students of higher technical education to complete 600 hours of internship throughout four years of degree course hence, students primarily need to avail the opportunities provided by the college during in-house internship. The placement cell of the college needs to make all the possible efforts to create opportunities for outhouse internships targeting students of all departments. However the volatile dynamics of industry requirements and its own way of scrutinizing students and providing them the opportunities prevent students from getting equal out-house internship opportunities. Consequently, weaker students get fewer opportunities while bright students get more. Therefore, to create equal opportunities among students, an in-house internship is strengthened by providing industry-relevant problem statements under the mentorship of senior staff members, where students need to submit project reports describing only technical aspects. But SLRTCE gives more preference to the out house internship.

2. Academic bank of credits (ABC):

The heart of NEP 2020 is multiple entry and multiple exit along with the mobility of students across higher education institutes. SLRTCE has mandated all students to create an ABC account through abc.gov.in which is also linked with the digilocker. To promote NEP 2020 at the college level, SLTCE has started offering many subjects as open electives and credit can be transferred to their program and promoted MOOC/SWAYAM courses to all the students. Also for old alumni and passed-out students, SLRTCE is the first institute to provide a blockchain-based transcript system for all.

3. Skill development:

SLRTCE promotes skill development through various industry relevant certification courses by having more than 10 MOUs. Also as a part of knowledge management, skill development through

peer-to-peer learning is the best choice for students. SLRTCE started B.Voc courses as per AICTE guidelines which is aligned with NSQF(National Skill Qualification Frame Work). All their courses are highly practical oriented and hence to support offering of this course institute started investing on development and creation of new facilities through state of art Lab which will be supported by industry and hence in academic year 2022 onwards institute has created cyber security lab and crypto currency investigation lab through support of Lab System (I) PVT LTD. The entire cyber security lab is handle by student only under the mentorship of faculty. Student has developed a cyber security club and solved many challenges given by Lab System(I) Private Limited. After getting this knowledge students started offering highly skilled courses through their colleagues as a part of peer learning and this initiative was so successful that other college students started participating. SLLRTCE has designed Student Diary in alignment with AICTE activity points which reflects credits for their academic performance. At the end of the four year program along with a University degree certificate, a separate Certificate of Achievement reflecting skill development achived by the student.

4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):

NEP 2020 realizes the importance of the ancient traditional methods of learning Science and Technology to bring back co-existence with the latest technology through the curriculum. To start with engineering education is promoted in Indian languages as a paradigm shift in the education system. To align with this shift all teaching staff are instructed to take at least one lecture per subject in the local language. The topic for the same should be the toughest in curriculum and after the lecture, we take feedback to assess the effectiveness of the lecture. The institute is implementing and making it mandatory for all college staff to attend a 3-week UHV program to promote Indian Culture. Student council arranges various events to promote cultural activities in college.

5. Focus on Outcome based education (OBE):

Outcome based education is not only confined to getting Accreditation but SLRTCE wants to be part of their culture. And that culture is developed through well-established process Manual "Disha" which is "Academic and Administrative conduct Manual". All

NAAC, NBA, and NIRF frameworks brought together in Disha Manual. SLRTCE promotes Outcome-Based Education (OBE) based studentcentric teaching and learning methodology in which the course delivery, and assessment are planned to achieve stated objectives and outcomes. It focuses on measuring student performance i.e. outcomes at different levels. As part of outcome-based education, we need to measure the outcomes of all courses. This is done through assessment of students learning. Examination is a direct assessment tool for calculating the attainment and carries 80% weightage. Based on the syllabus designed by the University of Mumbai. The program level CO-PO matrix (Course Articulation Matrix) is designed by faculty members using the unique technique of Performance Indicators given in the AICTE Examination Reform Policy. This implies that the mapping done is around 80% correct leaving only 20% for ambiguity; which is subjective in nature. 6. Distance education/online education: As a part of UGC guidelines institute promotes NPTL courses and also other Mock courses for certification. For Effective implementation of MOOC courses institute has appointed a faculty mentor for a group of students.

Institutional Initiatives for Electoral Literacy

1. Whether Electoral Literacy Club (ELC) has been set up in the College?	Election is the most crucial pillar of a democratic country like India and Shree L. R. Tiwari college of Engineering believes in becoming part of this mission. Electoral Literacy club (ELC) has been set up in the institution. The Dean of Students Affairs has been appointed as the chairperson of the club and a faculty member and Nation Service Scheme (NSS) student members are also part of this club. The club functions to create awareness among students about the importance of casting a vote in the elections and using their democratic rights to become part of a successful country.
2. Whether students' co-ordinator and co-ordinating faculty members are appointed by the College and whether the ELCs are functional? Whether the ELCs are representative in character?	Yes, Faculty co-ordinator and student co-ordinators are appointed for Electoral Literacy club by Dean of student Affairs and Head of the Institutions. The ELC is functional and many activities are conducted under

	this club with an objective of making the students a responsible person of country. To give an insight of the election process selections of Students Council members like General Secretory(GS), Technical Head, Cultural Head etc are done through democratic process.
3. What innovative programmes and initiatives undertaken by the ELCs? These may include voluntary contribution by the students in electoral processes-participation in voter registration of students and communities where they come from, assisting district election administration in conduct of poll, voter awareness campaigns, promotion of ethical voting, enhancing participation of the under privileged sections of society especially transgender, commercial sex workers, disabled persons, senior citizens, etc.	Initiatives undertaken by the ELC include • Accelerating the voter registration through a campaign in which all students 18 years are asked to fill online/ Offline Voter registrations forms.
4. Any socially relevant projects/initiatives taken by College in electoral related issues especially research projects, surveys, awareness drives, creating content, publications highlighting their contribution to advancing democratic values and participation in electoral processes, etc.	• Joint Comissioner of Mira Bhayander invited for special session for students to tell them importance of the Election Process.
5. Extent of students above 18 years who are yet to be enrolled as voters in the electoral roll and efforts by ELCs as well as efforts by the College to institutionalize mechanisms to register eligible students as voters.	Newly admitted students of first year are on the verge of becoming 18 years. ELC arranges the comp for these students and get the voter registration form filled for them.

Extended Profile

1 Students

1.1

Number of students year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
1676	1496	1540	1570	1846

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

2 Teachers

2.1

Number of teaching staff / full time teachers during the last five years (Without repeat count):

Response: 152

2	File Description	Document
	Institutional data in prescribed format	View Document

2.2

Number of teaching staff / full time teachers year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
93	106	91	98	105

3 Institution

3.1

Expenditure excluding salary component year wise during the last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
711.51	599.03	698.32	438.62	481.00

File Description		Docume	nt		
	Upload Supporting Document		View Do	<u>ocument</u>	

5
el
f
St
110
lv
R
le:
nc
m
. (
ıf
S
H
R
R
CIF.
C 1
Γ,.
R
₹.
Т
T
V
1/
1
R
T
(
1
)
L
I
Æ
7.0
G
\mathbb{E}
(
)
F
F
ĊŢ.
V
G
П
N
F
ŀ
CII
₹1
1(
G

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curricular Planning and Implementation

1.1.1

The Institution ensures effective curriculum planning and delivery through a well-planned and documented process including Academic calendar and conduct of continuous internal Assessment

Response:

Shree L. R. Tiwari College of Engineering (SLRTCE), an esteemed institution affiliated with the University of Mumbai (UoM), has ardently adopted the principles of Outcome Based Education (OBE). Although the institution follows the academic and examination syllabus as set forth by the affiliated University, the institution's Internal Quality Assurance Cell has meticulously crafted the DISHA Manual, an Academic and Administrative Manual that intricately directs the successful execution of curriculum planning, delivery, and continuous assessment – the pivotal elements of OBE. This comprehensive manual extends its purview to encompass 72 processes or key indicators, structured in a Plan-Do-Check-Act (PDCA) cycle. Each key indicator provides explicit details regarding the requisite documents and delineates the responsibilities assigned to specific individuals or departments. This systematic approach ensures not only compliance but excellence, aligning seamlessly with the standards set forth by accreditation bodies NBA, and NAAC. SLRTCE envisions the execution of the curriculum, specifying activities, responsible departments, methods, and timelines through the 'Disha Manual.'

The objectives of the academic and administrative manual 'DISHA' are as follows:

- To prevent duplication of documentation for NAAC, NBA, and NIRF.
- To clarify roles and responsibilities, thereby avoiding conflicts.
- Ensure the timely and efficient execution of academic and administrative activities.

The Manual provides a structured framework for 17 academic activities, categorizing them into three phases: pre-semester planning, during-semester delivery, and post-semester monitoring.

Pre-Semester: Disha Manual identifies tasks for curriculum planning, including strategic mapping of course outcomes to program outcomes (P.O.) in alignment with AICTE exam reform policy. Here is a list of a few pre-semester activities:

- 1. An institute-level academic calendar fosters interdisciplinary engagement in co-curricular and extracurricular pursuits
- 2. Detailed planning activities cover timetable creation, compilation of course files, lesson plans, continual internal assessment .lab activities coordination.

During Semester:

Disha Manual outlines 42 academic and administrative tasks for effective curriculum execution and conduct of continuous internal assessment.:

Page 24/84 12-02-2024 03:32:00

- 1.**Deliverary of lectures and practical:**Disha Manual uses a guided, organised, and student-centered quality framework for teaching and learning.
 - Tasks include HOD orientation, Innovative padelogies, lab checks, mentoring, student diaries, field visits, and feedback mechanisms.
 - Emphasis on dynamic evaluation practices and engagement with professional bodies.

2. Coduct of Continuous assessments:

According to the UOM assessment framework, the Disha Manual outlines the procedure for carrying out continuous evaluation through formative assessments (quizzes, internal assessments, and laboratory assessments) and summative assessments (end-of-semester examination).

3. Continuous observation and verification ensures seamless curriculum delivery with reflective measures.

- Compliance with academic calendar, Disha Manual, and daily reports.
- Monthly analyses compare planned vs. conducted activities.
- Review meetings address deviations and incorporate continuous assessment feedback.

4. Faculty lectures, tracked in reports, create a feedback loop for ongoing evaluation.

- Reports enable real-time gap analysis and adjustments.
- Comprehensive evaluations contribute to ongoing improvement.
- Regular internal assessments facilitate continuous evaluation and strategy adjustments.

Post Semester Activities:

Disha Manual post-semester actions make sure that all processes are properly documented and updated on time by adhering to statutory bodies guidelines.

- 1. Internal Audit: Auditors (senior faculties of the college) assess administrative and academic processes for efficiency.
- 2. External Audit: Third-party auditor conducts year-end external audit.
- 3. Feedback: Implemented at semester-end for continuous improvement in planning and execution.
- 4. All audit reports are submitted to UOM as a part of good governance.

These activities collectively verify overall efficacy of pre and during semester actions, ensuring a comprehensive assessment of educational processes and systems.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

1.2 Academic Flexibility

1.2.1

Number of Certificate/Value added courses offered and online courses of MOOCs, SWAYAM, NPTEL etc. (where the students of the institution have enrolled and successfully completed during the last five years)

Response: 64

File Description	Document
List of students and the attendance sheet for the above mentioned programs	View Document
Institutional programme brochure/notice for Certificate/Value added programs with course modules and outcomes	View Document
Institutional data in the prescribed format	View Document
Evidence of course completion, like course completion certificate etc. Apart from the above:	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

Other Upload Files	
1	View Document

1.2.2

Percentage of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years

Response: 53.33

1.2.2.1 Number of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
1520	507	34	1070	1204

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

1.3 Curriculum Enrichment

1.3.1

Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability in transacting the Curriculum

Response:

Our institution stands out for its unwavering commitment to providing a comprehensive and inclusive educational experience by integrating crosscutting issues into the curriculum. At the core of our academic framework is the seamless integration of professional ethics, gender equality, human values, and environmental sustainability.

Professional Ethics holds a significant place in our curriculum, with courses like Business and Professional Ethics, Human Resource Management, Professional Ethics and CSR, and Entrepreneurship Development and Management. These courses go beyond imparting technical skills; they aim to develop students' professional and interpersonal communication abilities, instil values, and emphasize ethical and responsible behaviour. The inclusion of case studies, projects, and various activities enhances the learning experience. Committees such as DLLE, Unat Bharat, and NSS contribute to the holistic development of students, reinforcing the importance of professional ethics. Pre-placement training activities and mock interviews further groom students and cultivate a sense of ethical conduct, exemplifying our commitment to academic integrity through the promotion of plagiarism software. Ensuring assessment fairness, we have a zero-tolerance policy for bias. Open house sessions at SLRTCE promote transparency, highlighting our commitment to continuous evaluation improvement.

Gender Equality is a inclusive point in our institution, we conduct regular surveys on the teaching environment with female faculty. Furthermore, we appreciate the government's 30% reservation policy for female admissions, showcasing our dedication to fostering a diverse student body. Seminars and workshops on gender-related issues, including those held during International Women's Day, contribute to sensitizing students and transgender individuals towards gender equality. Our active support for female students and employees through various activities emphasises our commitment to their overall development..All activities are linked with the UNSDG 1,2,5 and 10

Environmental Studies is seamlessly integrated into our curriculum, covering essential topics such as renewable and non-renewable energy sources, ecosystems, biodiversity conservation, Sustainable Development, Green Judicial Activism, and Green Tribunal. The Honors Course on Environment and Sustainability further explores areas of Sustainable Studies such as Water Management, Green Technology, Smart Cities, Sustainable Energy, System Energy Resources, and Nonconventional Energy Sources. The curriculum delves into global warming, waste disposal, and pollution through case studies. Our proactive engagement in environmental issues is facilitated through DLLE activities, including Guest Lectures, Industrial Visits, and observance of World Environment Day, Water Day, and Earth Day.

Page 27/84 12-02-2024 03:32:00

Initiatives like the E Waste Collection System and the adoption of ICT-enabled teaching-learning processes demonstrate our commitment to being a Green Campus. All activities are linked with UNSDG 6,7,11 and 13

Human Values are initiated at the beginning of the academic year through a Student's Induction Programme, fostering a holistic perspective about life. This self-reflective approach explores students' roles as individuals, family members, societal contributors, and units in nature, helping them discover intrinsic values. Combined with relevant courses and activities, this approach contributes to the development of human values within our student body.

In conclusion, our institution is an inclusive education model, integrating crosscutting issues into the curriculum. Graduates gain a comprehensive understanding of professional ethics, gender equality, human values, and environmental sustainability, reflecting a well-rounded perspective. Embracing inclusivity, transparency, and holistic development, we foster a dynamic learning community, embodying values that shape our educational philosophy.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

1.3.2

Percentage of students undertaking project work/field work/ internships (Data for the latest completed academic year)

Response: 74.82

1.3.2.1 Number of students undertaking project work/field work / internships

Response: 1254

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

1.4 Feedback System

1.4.1

Institution obtains feedback on the academic performance and ambience of the institution from various stakeholders, such as Students, Teachers, Employers, Alumni etc. and action taken report on the feedback is made available on institutional website

Response: A. Feedback collected, analysed, action taken& communicated to the relevant bodies and feedback hosted on the institutional website

File Description	Document
Feedback analysis report submitted to appropriate bodies	View Document
At least 4 filled-in feedback form from different stake holders like Students, Teachers, Employers, Alumni etc.	View Document
Action taken report on the feedback analysis	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document
Link of institution's website where comprehensive feedback, its analytics and action taken report are hosted	View Document

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1

Enrolment percentage

Response: 55.93

2.1.1.1 Number of seats filled year wise during last five years (Only first year admissions to be considered)

2022-23	2021-22	2020-21	2019-20	2018-19
387	234	221	222	332

2.1.1.2 Number of sanctioned seats year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
504	528	528	528	408

File Description	Document
Institutional data in the prescribed format	<u>View Document</u>
Final admission list as published by the HEI and endorsed by the competent authority	View Document
Document related to sanction of intake from affiliating University/ Government/statutory body for first year's students only.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.1.2

Percentage of seats filled against reserved categories (SC, ST, OBC etc.) as per applicable reservation policy for the first year admission during the last five years

Response: 47.89

2.1.2.1 Number of actual students admitted from the reserved categories year wise during last five years (Exclusive of supernumerary seats)

2022-23	2021-22	2020-21	2019-20	2018-19
187	95	81	82	167

2.1.2.2 Number of seats earmarked for reserved category as per GOI/ State Govt rule year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
258	270	270	270	210

File Description	Document
Institutional data in the prescribed format	<u>View Document</u>
Final admission list indicating the category as published by the HEI and endorsed by the competent authority.	View Document
Copy of communication issued by state govt. or Central Government indicating the reserved categories(SC,ST,OBC,Divyangjan,etc.) to be considered as per the state rule (Translated copy in English to be provided as applicable)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.2 Student Teacher Ratio

2.2.1

Student – Full time Teacher Ratio (Data for the latest completed academic year)

Response: 18.02

2.3 Teaching- Learning Process

2.3.1

Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences and teachers use ICT- enabled tools including online resources for effective teaching and learning process

Response:

The Institute has adopted a structured and guided, student-centric quality framework for teaching and learning. **To frame the academic activities** DISHA manual is utilized as a guideline to shape academic activities. The following practices have been adopted:

1. Catering to diverse students learning needs and styles

Learner groups are identified by faculty members and counselor through group discussion and the assessment is done on the basis of performance in internal assessments, observation by faculties and using the baseline assessment like AICTE Parakh. The guidelines are followed from DISHA manual key indicator 10.

2. Quality of classroom teaching and conduct of experiments

To enhance the effectiveness of the teaching and learning process, guidelines from key indicator 9 of the DISHA manual are followed. Teachers are provided with a robust support system to make learning meaningful, offering various learning experiences such as participative learning, experiential learning, internships, and industrial visits. Teachers are well-versed in different learning management systems, effectively using tools like Google Classroom, PPTs, Mentimeter, Kahoot, and NDLI platforms. All classrooms are equipped with LCD projectors and internet access. Each laboratory maintains a lab manual, ensuring that all experiments in the prescribed syllabus are completed by the end of the semester. Faculty and students enroll for NPTEL courses. The concept of a smart classroom involves the use of multimedia and digital infrastructure for interactive PPT presentation using LCD projectors, interactive smart boards etc.

Academic flexibility and multidisciplinary approach.

The system incorporates academic flexibility and multidisciplinary approach. Every department conducts add on course to capture the quality framework of Multidisciplinary Education. The Value added courses are open to all programs e.g. Mechanical Engineering student can participate in the add-on course offered by the Computer Department and vice-versa. Honors and Minor programs are offered by all departments and these are related to the emerging areas of technology where there is a lot of interdepartmental participation. To foster peer-to-peer learning, various initiatives under Prayas and unifying learning are undertaken. Supportive measures like English communication courses are also offered.

SLRTCE employs a diverse range of instructional methods and pedagogical initiatives to enhance the effectiveness of Teaching-Learning Processes (TLP). Some of these initiatives encompass:

1. Experiential Learning

- Conducting experiments in practical and tutorial sessions.
- Undertaking hands-on projects, both mini and major.
- Organizing industrial visits.
- Offering add-on courses.
- Providing internship opportunities.

2. Participative Learning

- Collaborative group work during practical and tutorial sessions, projects, and case studies.
- Presentation of mini/major projects at the college level during project exhibitions.

- Participation in intra and inter-college competitions, hackathons, and Tech-Fests.
- Delivering technical papers in conferences.
- Engaging in group discussions during lab sessions and training sessions.
- Participation in cultural fests, fostering a sense of unifying learning.

3. Problem-Solving Methodologies

- Implementing Project-Based Learning (PBL) and hands-on projects (mini and major).
- Facilitating internships.
- Providing consultancy opportunities.
- Participation in hackathons, Tech-Fests, intra and inter-college competitions.
- Involvement in the Prayas initiative for real-time problem-solving.

4.ICT Supportive Learning

- Utilizing e-learning resources, including platforms such as Google Classroom.
- Accessing Virtual Labs for practical simulations.
- o Conducting online tests for assessment.
- Leveraging the National Digital Library of India (NDLI) portal.
- Utilizing AICTE PARAKH for educational support.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

2.4 Teacher Profile and Quality

2.4.1

Percentage of full-time teachers against sanctioned posts during the last five years

Response: 98.4

2.4.1.1 Number of sanctioned posts year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
101	106	91	98	105

File Description	Document
Sanction letters indicating number of posts sanctioned by the competent authority (including Management sanctioned posts)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.4.2

Percentage of full time teachers with NET/SET/SLET/Ph. D./D.Sc. / D.Litt./L.L.D. during the last five years (consider only highest degree for count)

Response: 9.74

2.4.2.1 Number of full time teachers with NET/SET/SLET/Ph. D./ D.Sc. / D.Litt./L.L.D year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
15	09	7	9	8

File Description	Document	
List of faculties having Ph. D. / D.Sc. / D.Litt./ L.L.D along with particulars of degree awarding university, subject and the year of award per academic year.	View Document	
Institution data in the prescribed format	View Document	
Copies of Ph.D./D.Sc / D.Litt./ L.L.D awareded by UGC recognized universities	View Document	

2.5 Evaluation Process and Reforms

2.5.1

Mechanism of internal/ external assessment is transparent and the grievance redressal system is time-bound and efficient

Response:

At SLRTCE, the commitment to transparency extends to the mechanisms of both internal and external assessments. Adding to its distinctiveness, the institution boasts an expeditious and efficient grievance redressal system which is time-bound, ensuring a seamless experience for students.

1. Transparency in Internal Assessment:

- i) Internal assessment: The internal assessment comprises project work, assignments, laboratory assessments, and term tests(IAT) 1 and 2.
- a) Project, Assignment, and Laboratory Assessment: Continuous evaluation and assessments are also

carried out for laboratory courses, project work, and assignments. Laboratory experiments and viva, along with the submission of records, constitute the major components of laboratory course evaluation (timely submission 2 marks, neatness 4 marks, and understanding 4 marks). Laboratory assessment is conducted in front of students, ensuring transparency in the evaluation process. Assignments are evaluated and discussed with students during the lecture session. Rubrics for project work, laboratory experiments, and assignments are communicated to students to maintain transparency in assessment.

b) Internal Assessment Term Test I and II: The process for setting and evaluating internal semester question papers is defined in key indicator 14 of the "DISHA" academic and administrative conduct manual. The semester of any academic session spans 15 weeks, with two planned internal assessments (IA).

To ensure transparency in the internal assessment, the following processes are defined in the Standard Operating Procedure (SOP) for examinations:

- i. Internal Assessment Timetable: The timetable is included in the academic calendar prepared at the beginning of the semester. It considers the following points:
 - 1. Avoidance of academic loss
 - 2. Maintenance of proper time gaps between papers
 - 3. Prevention of crowding of students
- ii. Open House: After the successful submission of internal assessments, examination marks, and papers, students are shown their results during the open house. Faculty members discuss model answers prepared for clarity.
- iii. Zero Tolerance Policy: The institute maintains a zero-tolerance policy for malpractice during examinations. Any leniency by faculty regarding examination work is treated as a disciplinary act and handled according to institute norms.

2. Transparency in External Assessment:

Transparency in external exams is ensured through a planned and transparent process. One month before the exam, the university releases a notification, which is circulated to all departments and notice boards after bringing it to the Principal's attention. On each exam day, 30 minutes before the exam, question papers are downloaded from COLLEGE SLRTCE and copied to the COLLEGE SLRTCE Decryption folder.

SLRTCE ensures that grievances related to exams are addressed in a timely and efficient manner by implementing the following practices:

- a. Open House: Any grievance related to internal assessment is addressed during an Open House session. Official records indicate that no grievances have been recorded regarding the conduct and evaluation of internal examinations.
- b. Grievance Redressal Committee: The college has its own Grievance Redressal system, supervised directly by the Principal. The Grievance Redressal cell was established on June 20, 2016. The cell is responsible for handling complaints lodged by students, including those related to academics, non-

academics, attendance, assessment, or harassment by fellow students. The Grievance Redressal Cell conducts regular meetings to address grievances and takes necessary steps. A Suggestion/Complaint Box is installed for students who wish to remain anonymous, allowing them to submit in writing their grievances and suggestions for improving academics and administration in the college.. Students can also submit their covernance online and the provision is created on the website.

File Description	Document	
Upload Additional information	View Document	
Provide Link for Additional information	View Document	

2.6 Student Performance and Learning Outcomes

2.6.1

Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the institution are stated and displayed on website

Response:

Faculty members and students are the primary stakeholders directly involved in the successful implementation and attainment of the Program Outcomes (POs). Awareness among stakeholders requires continuous efforts by the department.

Dissemination of Programme and course outcomes

Sr.	Location	Vision	Mission PEOs	
	(Publication)			
No.				
1	Department	Yes	Yes	Yes
	website:			
	(https://slrtce.in/dep			
	artments/information			
	technology)			
2	Course Files	Yes	Yes	Yes
3	Department	Yes	Yes	Yes
	Newsletter			
4	Prominent Places in	Yes	Yes	Yes
	the department			
5	Displayed on sun-	Yes	Yes	Yes
	board in the			
	corridor			
6	Classrooms	Yes	Yes	Yes
7	Laboratory Manuals	Yes	Yes	Yes

The integral collaboration between teachers and students assumes a central role in the realization of an educational institution's vision and mission. Their involvement extends beyond conventional academic responsibilities, incorporating the fulfillment of specific educational objectives such as Course Outcomes (COs) and Program Outcomes (POs). This outlines their pivotal contribution and active participation in shaping the educational landscape.

A key focal point in this context is the concept of awareness, deemed a critical element in the ongoing educational process. Maintaining this awareness necessitates continuous efforts from both the department and the institute, encompassing not only the overarching vision and mission but also specific educational goals outlined in the form of COs and POs.

To systematically assess and fortify awareness among stakeholders, a thoughtful strategy is employed within the department. Faculty members receive explicit instructions to evaluate students' awareness of VMS (Vision, Mission, and Strategy) and PEO (Program Educational Objectives) through indirect methods like case study discussions. This ensures that students connect in deeper and more practical understanding of the institution's goals.

Additionally, the implementation of Program Exit Surveys and Course Exit Surveys serves as a valuable tool for assessing awareness among students and alumni. Program exit survey and course exit survey questions are indirectly reflecting the measurement of VMS and PO awareness among Students and Alumni. These surveys, aligned with VMS and POs, provide indirect insights into stakeholders' familiarity and understanding of the institution's educational objectives. Feedback from exiting students and alumni becomes instrumental in the continuous refinement of educational practices. In essence, this narrative reflects a comprehensive approach to stakeholder engagement, emphasizing the dynamic synergy between theory and practice. The strategic integration of awareness-building activities aims not only to assess but also to enhance the understanding of the institution's vision, mission, and educational objectives among both current students and alumni.

File Description	Document
Upload Additional information	<u>View Document</u>

2.6.2

Attainment of POs and COs are evaluated.

Explain with evidence in a maximum of 500 words

Response:

In Outcome-Based Education (OBE), the attainment of course outcomes is evaluated through both direct and indirect calculations, which are derived from the respective assessment processes. The institute has integrated the guidelines of AICTE examination reforms, encompassing the link between Program Outcomes (PO), Competencies, and Performance Indicators for Course Outcome and PO mapping across

all subjects. Examinations serve as a primary tool for direct assessment, evaluating students' performance and accounting for 80% of the overall attainment. The remaining 20% is based on students' feedback.

CO Attainment Processes:

The department follows two types of processes for assessment of CO ,PO and PSO using assessment tools which are categorized into direct and indirect methods to assess Course Outcomes(CO), Program Outcomes (POs) and Program Specific Outcomes (PSOs). Direct Assessment tools have the weightage of 80% and indirect assessment have the weightage of 20%. Direct methods display the students' knowledge and skills from their performance in the continuous assessment tests, end-semester examinations and classroom assignments etc. These methods provide a sampling of what students know and/or can do and provide strong evidence of student learning.

Indirect methods such as surveys ask the stakeholders to reflect on the students learning. They assess opinions or thoughts about the graduate's knowledge or skills and their value by different stakeholders.

The tools are described in table

Table 1 Direct Assessment Process

	Direct Assessment Methods		
Sr. No	Sr. No Methods		
Sr. No		 Process provides subject faculty with the opportunity to assess students' knowledge in the respective subject. conducted twice in a semester. Each examination is conducted for 20 marks, with 40-50% of the syllabus covered in the first test and the remaining syllabus covered in the second test The first test covers 50% of COs, while the second test covers the remaining 50% of COs. Each question in the paper 	
		 is mapped to a specific CO. The marks obtained by students are utilized to evaluate the attainment level of the mapped COs in the question paper. 	
	End Semester Examination	• this evaluates the students'	

		 ability to learn. At the end of each semester, theory and oral/practical examinations are conducted according to the University schedule for each course. The marks obtained by students in the end-semester examination are used for direct attainment of COs.
	Lab Assessment	 • Uunique learning environment that facilitates and consolidates "learning through doing." • Assessing this learning can enhance student's conceptual understanding of the theory. • Every individual student is continuously assessed throughout the semester during the regular practical sessions based on various rubrics • .Rubrics, which Preparedness and Efforts, Knowledge of Tools, Debugging and Results, Documentation, Punctuality, and Lab Ethics, are used for assessment.
4	Assignments	 Purpose is to enhance the learning capabilities of students. The university has specified assignments in the lab courses. Assignments are assessed using rubrics. Rubrics include Timely submission, Originality of the material, Neatness and Innovative solution. They are mapped to COs. A student's performance in

	an assignment is used for
	direct CO attainment.

Table 2 Indirect Assessment Process

Indirect Assessment Methods		
Sr. No	Methods	Process
1	Course Exit Survey	 used to assess and evaluate the student's perceptions of course outcome. Conducted at the end of the semester, on a scale of 1-5 regarding the COs of the courses .
		 The marks obtained are used to determine the attainment of COs for that specific course

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

2.6.3

Pass percentage of Students during last five years (excluding backlog students)

Response: 96.06

2.6.3.1 Number of final year students who passed the university examination year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
357	398	516	487	484

2.6.3.2 Number of final year students who appeared for the university examination year-wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
411	416	516	487	504

File Description	Document
Institutional data in the prescribed format	<u>View Document</u>
Certified report from Controller Examination of the affiliating university indicating pass percentage of students of the final year (final semester) eligible for the degree programwise / year-wise.	View Document
Annual report of controller of Examinations(COE) highlighting the pass percentage of final year students	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.7 Student Satisfaction Survey

2.7.1

Online student satisfaction survey regarding teaching learning process

Response:

File Description	Document
Upload database of all students on roll as per data template	View Document

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

3.1.1

Grants received from Government and non-governmental agencies for research projects / endowments in the institution during the last five years (INR in Lakhs)

Response: 31.84

3.1.1.1 Total Grants from Government and non-governmental agencies for research projects / endowments in the institution during the last five years (INR in Lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
27.03	0.52	0.39	3.7	0.2

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	<u>View Document</u>

3.2 Innovation Ecosystem

3.2.1

Institution has created an ecosystem for innovations, Indian Knowledge System (IKS),including awareness about IPR, establishment of IPR cell, Incubation centre and other initiatives for the creation and transfer of knowledge/technology and the outcomes of the same are evident

Response:

i) Innovation through the research and development (R & D) cell:

R & D cell organizes periodic workshops/ seminars/ interactions with entrepreneurs, investors, and professionals for student innovators. SLRTCE is proud to be a part of the Institution's Innovation Council (IIC), established by the Ministry of Education, Govt. of India. Dr. Mayur Dube, Director of Incubation and Collaboration center engages a large number of faculty, students, and staff in various innovation and entrepreneurship-related activities. These activities are reated to UNSDG-9.

2. Indian Knowledge System

SLRTCE conducts a teacher training program on Yogic Science. The Audit course on environmental ethics and value-added-based courses are conducted for students. Immersive sessions on Yoga and Meditation are conducted to give students some grounding in the experiential aspects of IKS. The syllabus for the student introduction programme that SLRTCE offers includes the Indian system of knowledge's universal human values. Through the practise of art forms including dance, drama, music, painting, ceramics, and sculpture, the student induction program syllabus involves helping students gain a clear understanding of humanistic culture and its creative, joyous expression. SLRTCE has UHV certified faculties to conduct the course. Faculties are motivated to conduct at least one lecture in a local language.

3.IPR Awareness through Seminars and Workshop

The IPR Cell was established in the college to assist the students and alumni interested in matters of IPR. The cell offers assistance to learners by making them aware of the rights over their intellectual property, prior-art search report, patentability opinion, drafting patent specifications, preparing filing documents, filing application and follow-up, prosecuting the filled application by responding to office action such as FER, advisory services on various IPR, and IP management..

4.Incubation Centre: SLRTCE Incubation centre aims at providing an environment to translate knowledge and innovation into the creation of successful entrepreneurs. Entrepreneurship is an evergrowing domain in the competitive commercial market. Incubation centres simulate (incubate) these startups, giving young entrepreneurs a chance to shape their businesses before facing the real world.

The following faculty-centric policies are in place to support the research culture in colleges: reimbursement of staff members' fees for attending FDP, STTP, NPTEL courses, international/national conferences, etc.; on-duty leave for Ph.D. work; and training programmes for teaching staff.

The College has a development centre in association with Lab Systems Pvt. Ltd. to cater to a wide range of business projects in a bid to move from an informal to a formal method of managing industrial projects. SLRTCE has a Transcript Issuance Blockchain Authentication platform in association with Sapphirus Systems Pvt. Ltd. Faculties of SLRTCE have conducted training for cyber security in association with PAL India Pvt/Ltd.

The submission of patent applications and the publication of academic journals are encouraged. Faculty members have published journals and conference papers. Ten research projects were funded by external organizations including Lab Systems and Mumbai University. In the past five years, eight patents have been submitted by faculties.

The list of incubates is as follows:

Serial No.	Name of Students	Name of Company	Registration number	
01	Mr. Brijesh Yadav	RadiusPC	Registration Number:27A	
		RadiusPC.com	UYPY2060L1ZN	
02	Miss Yashika Parab	Influencer marketing		
03	Mr. Dishant Chandura	Cillyfox and CO	Application No:	
			4780004519482	
04	Mr. Rohan Chaubey	Rohanchaubey It and	CIN NO. U74999MH201	
		Consultancy Service	s8PTC310845	

	Private Limited
File Description	Document
Upload Additional information	View Document

3.2.2

Number of workshops/seminars/conferences including on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship conducted during the last five years

Response: 45

3.2.2.1 Total number of workshops/seminars/conferences including programs conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
15	12	6	10	2

File Description	Document	
Upload supporting document	<u>View Document</u>	
Institutional data in the prescribed format	View Document	

3.3 Research Publications and Awards

3.3.1

Number of research papers published per teacher in the Journals notified on UGC care list during the last five years

Response: 1.09

3.3.1.1 Number of research papers in the Journals notified on UGC CARE list year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
42	16	41	46	20

File Description	Document
Link to the uploaded papers, the first page/full paper(with author and affiliation details)on the institutional website	View Document
Link to re-directing to journal source-cite website in case of digital journals	View Document
Links to the papers published in journals listed in UGC CARE list or	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.3.2

Number of books and chapters in edited volumes/books published and papers published in national/international conference proceedings per teacher during last five years

Response: 1.12

3.3.2.1 Total number of books and chapters in edited volumes/books published and papers in national/international conference proceedings year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
23	104	20	10	13

File Description	Document
List of chapter/book along with the links redirecting to the source website	View Document
Institutional data in the prescribed format	<u>View Document</u>
Copy of the Cover page, content page and first page of the publication indicating ISBN number and year of publication for books/chapters	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.4 Extension Activities

3.4.1

Outcomes of Extension activities in the neighborhood community in terms of impact and sensitizing the students to social issues for their holistic development during the last five years.

Response:

The Institute insists on inculcating moral, ethical, and social values in students to develop them as responsible citizens of India. Various committees, involving students and faculties, are active in the college. The college has an NSS unit, DLLE, Unnat Bharat unit, and a Student Welfare and Development Cell (SWDC). SWDC helps to develop interpersonal skills for maintaining better social relationships and also prepares them to excel in a particular area of their creative interests. Various social activities are organized and successfully conducted for the neighborhood community.

- Blood donation camp in collaboration with Nair Hospital and Lions Club
- Awareness of organ donation
- "HIV-AIDS Awareness Program" with MDACS
- During the COVID-19 pandemic, awareness about COVID-19 was raised through videos/posters, and an application named COVID-19 Awareness Video was developed using sign language for special citizens (deaf and mute).
- Fit India movement
- Yoga sessions
- Swachatha Bharat Abhiyan supported by Mira Bahayender Municipal Corporation.
- Swachh Bharat Abhiyan carried out by Beach cleaning

To inculcate ethical values among students, various activities are organized, such as:

- The Chiplun Mahad Flood relief donation drive was completed.
- Say No to Drugs and Yes to Life
- Anti-Tobacco Oath

Many activities are carried out to sensitize students to social issues like:

- Tree plantation
- Paper bag making & distribution in the local area by volunteers on NSS Day
- E-waste and wet/dry waste segregation Awareness (Majhi Vasundhara Mitra)
- Green Holi: Herbal Holi color making
- STREET PLAY ON "NATURE OF SOCIAL HELP"

SLRTCE promotes a conducive environment for sensitizing students to social issues and holistic development. As an outcome of this, SLRTCE students develop qualities to enhance coordination between individual and social interests by participating in various activities. A total of 10 events were held to assist the nearby community and have an impact on the wide scope of social responsibilities, inspiring the community to become responsible citizens. A total of 54 activities were held to sensitize students. As an outcome-based approach, SLRTCE is dedicated to ensuring that after four years of engineering, all of our students possess graduate attributes. Graduate aptitude promotes students' holistic development.

Outcomes of Extension activities in the neighborhood community in terms of sensitizing to social issues for their holistic development is as follow:

By educating students on social issues and holistic development, the institute seeks to incorporate the following graduate attributes as outcome:

- i) Program Outcome -The engineer and society: Apply reasoning informed by contextual knowledge to assess societal, health, safety, legal, and cultural issues and the consequent responsibilities relevant to professional engineering practice.
- ii) Program Outcome Environment and sustainability: Understand the impact of professional engineering solutions in societal and environmental contexts and demonstrate the knowledge of and need for sustainable development.
- iii) Program Outcome -Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

Outcomes of Extension activities in the neighborhood community in terms of impact to social issues for their holistic development is as follow:

i) Environment Development

Students are educated to aware of environment for creating eco-friendly society.

ii) Social Development

Students are motivated for the community service and they are made aware of their responsibility towards social issues

iii) Humanity and helping tendency Imparting practical life and cultivating humanity and helping tendency among young minds for developing good human being in the society

File Description	Document	
Upload Additional information	View Document	

3.4.2

Awards and recognitions received for extension activities from government / government recognised bodies

Response:

The Mira Bhayandar Municipal Corporation (MBMC) honored Shree L R Tiwari College of Engineering with the Swachhata League of Swachh Sundar Mira-Bhayander Abhiyan Excellence Award under the Swachh Bharat Abhiyan. Mr. Utsav Rahul Tiwari, COO of Rahul Education, Dr. Deven Shah, Principal of Shree L R Tiwari College of Engineering, and Mr. Dhiraj R Singh, Dean of Student Affairs at

SLRTCE, accepted the award at the ceremony on 13th Dec 2022, alongside distinguished guests, including MBMC commissioner Mr. Dilip Dhole and Padmshree Manoj Joshi (Actor, Social Worker & Trustee of HEMA Foundation) Dept. Commissioner (Health) Mr. Ravi Pawar, Joint Commissioner Mr. Sambhaji Panpatte and Mr. Mahendra Kabra, Trustee of HEMA Foundation and DGM of RR cables were the dignitaries present on that day.

.

NSS, SLRTCE, in collaboration with Nair Hospital, Mumbai, organized a Blood Donation Camp on 7th September 2022, sponsored by the Lions Club. The hospital recognized the college's efforts with an appreciation certificate.

Additionally, the college received accolades for a five-day National Level Faculty Development program on "Industry 4.0" organized by the Department of Mechanical Engineering, in association with IET (Institution of Engineering and Technology), from 12th to 16th Dec. 2022. This program earned the college the AWARDS-2022 from IET for its outstanding response from faculty and aspiring researchers across multiple universities.

In recognition of its commitment to excellence, Shree L R Tiwari College of Engineering has been honored with several prestigious awards, including The Economics Times Excellence Award, Indo Global Education Summit Award, Times Power Certification of Appreciation Award, and the Adarsh Engineering Mahavidyalay Award by Navbharat Times.

These achievements showcase the college's dedication to academic and societal contributions, further exemplified by its active participation in the Swachh Bharat Abhiyan initiated by the Mira Bhayandar Municipality.

File Description	Document	
Upload Additional information	<u>View Document</u>	

3.4.3

Number of extension and outreach programs conducted by the institution through organized forums including NSS/NCC with involvement of community during the last five years.

Response: 109

3.4.3.1 Number of extension and outreach Programs conducted in collaboration with industry, community, and Non- Government Organizations through NSS/ NCC etc., year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
22	23	14	32	18

File Description	Document
Photographs and any other supporting document of relevance should have proper captions and dates.	View Document
Institutional data in the prescribed format	<u>View Document</u>
Detailed report for each extension and outreach program to be made available, with specific mention of number of students participated and the details of the collaborating agency	View Document

3.5 Collaboration

3.5.1

Number of functional MoUs/linkages with institutions/industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the last five years.

Response: 31

File Description	Document
Summary of the functional MoUs/linkage/collaboration indicating start date, end date, nature of collaboration etc.	View Document
List of year wise activities and exchange should be provided	View Document
List and Copies of documents indicating the functional MoUs/linkage/collaborations activitywise and year-wise	View Document
Institutional data in the prescribed format	<u>View Document</u>
Provide Links for any other relevant document to support the claim (if any)	View Document

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1

The Institution has adequate infrastructure and other facilities for,

- teaching learning, viz., classrooms, laboratories, computing equipment etc
- ICT enabled facilities such as smart class, LMS etc.

Facilities for Cultural and sports activities, yoga centre, games (indoor and outdoor), Gymnasium, auditorium etc (Describe the adequacy of facilities in maximum of 500 words.)

Response:

Shree L.R. Tiwari College of Engineering (SLRTCE) provides state-of-the-art classrooms, laboratories, libraries, recreational spaces, and sports facilities to enhance the holistic development of students.

Classroom: All classrooms are spacious, well-ventilated, and designed to have abundant natural light. The furniture is custom-made to suit students' requirements. Smart classrooms with Wi-Fi support teaching and learning by facilitating innovative pedagogy through ICT support. An ICT-enabled smart classroom is essential, emphasizing that it's not just about PowerPoint presentations. Faculty can use the entire smart board through a pen, conduct lectures like a whiteboard on the smart board, and store the entire presentation in PDF format. The attendance system is integrated directly into the Learning Management System (LMS).

Laboratory: As laboratories are the focal point in an engineering college, care has been taken to equip them with quality instruments and accessories. The computer lab and computer centers feature the latest models of desktop PCs from an internationally acclaimed brand. Almost all PCs have SSD storage devices for better performance and are linked to a high-end IBM server through a structured LAN following the CISCO hierarchy standard..SLRTCE is proud to collaborate with IIT Bombay to bring the e-Yantra Lab to our campus. As a college-level program under the National Mission on Education through Innovative Classroom Teacher (ICT) program, e-Yantra aims to promote innovation and entrepreneurship in the field of robotics.

IPR Cell: This cell protects students' interests by raising awareness about Intellectual Property rights and IP management. SLRTCE has purchased Plagiarism software to assist staff and students in their research work. Some of the BE projects are copyrighted.

Incubation Centre: The SLRTCE Incubation Centre aims to provide an environment to translate knowledge and innovation into the creation of successful entrepreneurs. The entire college is Wi-Fienabled, and students are encouraged to embrace an anytime, anywhere learning experience.

Library: SLRTCE has a spacious Digital Library with a vast reading room and a computer center. The Library boasts a rich collection of 20,676 books, 69 National and 26 International Journals, and 1,100 CDs for learning. The institute has subscribed to Springer Nature E-books (Intelligent Technologies & Robotics), Springer Nature E-Journals including 100 IT/CMPN Journals, 10 ETRX/EXTC Journals, and

Page 50/84 12-02-2024 03:32:00

4 lifetime subscriptions for CS.. The Library provides NPTEL Video Lectures for advanced learning of concepts and knowledge upgrading. The Library is ICT-enabled, featuring 15 audio-video resources for students beyond traditional reading, including podcasts.

In addition to the above infrastructure facilities, SLRTCE has a seminar hall, boys' hostel, first aid room, sports ground, gymkhana, and Boys and Girls common rooms. The parent trust, Rahul's Education, provides access to world-class amenities such as a volleyball court, Basketball, turf football swimming, pool, and badminton court. SLRTCE offers facilities like drinking water supply, conference room, safety provisions, including fire and other calamities, vehicle parking, CCTV security system, LCD projectors in classrooms, facilities for the physically challenged, food court, cleaning/janitorial services, internet & Wi-Fi, and backup electric supply.

By strictly adhering to AICTE norms, SLRTCE has obtained an extension of approval based on a zero deficiency certificate related to infrastructure and facilities. Before NEP 2020, all departments in SLRTCE operated in silos with hardly any cross-domain activities. Now, SLRTCE has identified duplication of domains and labs to facilitate resource sharing, thus creating space for innovation in new domains required for emerging areas prescribed by AICTE.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

4.1.2

Percentage of expenditure for infrastructure development and augmentation excluding salary during the last five years

Response: 34.58

4.1.2.1 Expenditure for infrastructure development and augmentation, excluding salary year wise during last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
252.07	351.61	164.36	116.39	128.11

File Description	Document
Institutional data in the prescribed format	View Document
Audited income and expenditure statement of the institution to be signed by CA for and counter signed by the competent authority (relevant expenditure claimed for infrastructure augmentation should be clearly highlighted)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

4.2 Library as a Learning Resource

4.2.1

Library is automated with digital facilities using Integrated Library Management System (ILMS), adequate subscriptions to e-resources and journals are made. The library is optimally used by the faculty and students

Response:

The college library is a vital resource canter within the campus, designed to support the academic needs of students and faculty and foster a conducive learning environment. Since 2021, the library has been automated using an Integrated Library Management System (ILMS) called MCB Smart App, Version 1.8.5.

Facilities:

- 1. Size and Layout: The library is spacious, spanning across multiple sections. It has designated areas for quiet study, group collaboration, computer workstations, and reference materials. The layout is organized for easy navigation with labeled sections.
- 2. Collection: The library hosts an extensive collection of resources specifically tailored to engineering disciplines. This includes textbooks, reference books, technical journals, research papers, and periodicals covering various fields like mechanical engineering, electronics and telecommunication engineering, civil engineering, computer science, and more. The collection is regularly updated to keep up with the latest advancements in the field.
- 3. Digital Resources: In addition to physical materials, the library provides access to a wide range of digital resources, including e-books, e-journals, online databases, and digital archives. Students can access these resources through library computers or personal devices, enabling them to conduct research and access information remotely.
- 4. Study Areas: The library offers different types of study areas to accommodate various learning preferences. The reading area provides a calm and focused environment for individual study, and group collaboration areas encourage teamwork and project discussions.
- 5. Reference and Research Support: Librarians with expertise in engineering subjects are available to assist students and faculty with their research needs. They can guide individuals in finding relevant resources, navigating databases, and citing academic sources correctly. The library

- utilizes Urkund Software for plagiarism checks.
- 6. Computer Facilities: The library provides computer workstations equipped with internet access, engineering software, and tools required for academic projects and research. The library uses e-Granthalaya, a library automation software from the National Informatics Centre, Department of Electronics and Information Technology, Ministry of Communications and Information Technology, Government of India. The software has been designed by a team of experts from software as well as Library and Information Science disciplines..Students can access the National Library information services and online public access catalogue using computers.
- 7. Students can also use the library's raprography facilities..
- 8. NDLI Club: Our institute has been registered as an NDLI Club under the National Digital Library of India on 20 November 2021. Each department conducts subject-wise quizzes based on the NDLI repository. Events conducted under the NDLI Club include:
 - 1. Online event on "User Awareness Programme" on 3rd December 2021.
 - 2. Online session on "Teaching and Learning Materials" on 25th February 2022.
 - 3. Online session on "Sustainable Engineering and Technology" on 28th April 2022.
 - 4. Online session on "Data Science A New Phase" by Dr. Gayatri V. Bachhav, Associate Professor in VPP College of Engineering, Sion, on 30th July 2022.
 - 5. Online Aptitude Test on 7th September 2022.
 - 6. Online session on "User Awareness Programme" on 21st January 2023.

Library hours are included into a timetable by SLRTCE to ensure maximum library utilisation. During library hours, faculty members and students visit the library together. Students are encouraged to access NPTEL resources, journals, and technical magazines during this time.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

4.3 IT Infrastructure

4.3.1

Institution frequently updates its IT facilities and provides sufficient bandwidth for internet connection

Describe IT facilities including Wi-Fi with date and nature of updation, available internet bandwidth within a maximum of 500 words

Response:

In this day and age, ICT infrastructure is essential for educational institutes. Following are the points the college considers for design and implementation:

1. Minimal digital waste to support the green campus initiative.

- 2. Optimum utilization of ICT infrastructure on campus.
- 3. Cybersecurity to protect the digital data of students and staff.
- 4. Automation of administrative work.
- 5.ICT infrastructure not only supports pedagogy, but also stores the intellectual property of students in the form of projects.

Hence, the college plans to support the above points.

- I. Internet bandwidth is used during college hours in labs, classrooms, library, and offices of all departments. After that, it is utilized for activities related to the Incubation Cell, and 24 x 7 for hostel students.
- II. Similar to the machine, write-off only after new upgradation in the form of hard disc type of hardware from IDE to SSD, RAM upgradation in size and type aspects.
- III. Structured cabling of the entire college through Cisco Hierarchy Standard for optimum distribution of bandwidth without loss due to collision traffic and broadcast traffic.
- IV. Storage of projects in a virtual machine to support data security and lab development.

The college has well-equipped laboratories and internet facilities. Currently, the college is equipped with a 325 Mbps leased line. The institute has three entry lines, out of which one line is dedicated to the Development Centre exclusively where a live Bitcoin node is deployed for cryptocurrency investigation. The institute has 4G Jio Wi-Fi routers for both faculties and students, with unlimited downloading capacity. Almost all classrooms have LCD projector facilities for enhancing the teaching-learning process. Each laboratory is provided with one printer. The internet is secured with a firewall and antivirus. All the software installed is either licensed or open-sourced. The institute regularly updates the license of the operating system installed. The institute has the policy to regularly replace the old computers. The maintenance of the IT facility is done twice a month by the system administrator.

Security arrangements: The entire network of the college is protected by the Fortinet Gate 200F Firewall from Fortinet. It protects against malware and malicious websites in both encrypted and unencrypted traffic. It prevents and detects known and unknown attacks using continuous threat intelligence from AI-powered FortiGuard Labs security services.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

4.3.2

Student – Computer ratio (Data for the latest completed academic year)

Response: 2.7

Page 54/84 12-02-2024 03:32:00

4.3.2.1 Number of computers available for students usage during the latest completed academic year:

Response: 621

File Description	Document
Purchased Bills/Copies highlighting the number of computers purchased	View Document
Extracts stock register/ highlighting the computers issued to respective departments for student's usage.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

4.4 Maintenance of Campus Infrastructure

4.4.1

Percentage expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, during the last five years (INR in Lakhs)

Response: 30.47

4.4.1.1 Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component year wise during the last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
270.01	232.06	139.27	155.82	95.23

File Description	Document
Institutional data in the prescribed format	View Document
Audited income and expenditure statement of the institution to be signed by CA for and counter signed by the competent authority (relevant expenditure claimed for maintenance of infrastructure should be clearly highlighted)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

Criterion 5 - Student Support and Progression

5.1 Student Support

5.1.1

Percentage of students benefited by scholarships and freeships provided by the institution, government and non-government bodies, industries, individuals, philanthropists during the last five years

Response: 71.52

5.1.1.1 Number of students benefited by scholarships and freeships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
967	915	922	1169	1840

File Description	Document
Year-wise list of beneficiary students in each scheme duly signed by the competent authority.	View Document
Upload Sanction letter of scholarship and free ships (along with English translated version if it is in regional language).	View Document
Upload policy document of the HEI for award of scholarship and freeships.	<u>View Document</u>
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.1.2

Following capacity development and skills enhancement activities are organised for improving students' capability

- 1. Soft skills
- 2. Language and communication skills
- 3. Life skills (Yoga, physical fitness, health and hygiene)
- 4.ICT/computing skills

Response: A. All of the above

Page 56/84 12-02-2024 03:32:00

File Description	Document
Report with photographs on Programmes /activities conducted to enhance soft skills, Language and communication skills, and Life skills (Yoga, physical fitness, health and hygiene, self-employment and entrepreneurial skills)	View Document
Report with photographs on ICT/computing skills enhancement programs	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.1.3

Percentage of students benefitted by guidance for competitive examinations and career counseling offered by the Institution during the last five years

Response: 45.51

5.1.3.1 Number of students benefitted by guidance for competitive examinations and career counselling offered by the institution year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
1313	636	1071	291	388

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

5.1.4

The institution adopts the following for redressal of student grievances including sexual harassment and ragging cases

- 1. Implementation of guidelines of statutory/regulatory bodies
- 2. Organisation wide awareness and undertakings on policies with zero tolerance
- 3. Mechanisms for submission of online/offline students' grievances
- 4. Timely redressal of the grievances through appropriate committees

Response: A. All of the above

Page 57/84 12-02-2024 03:32:00

File Description	Document
Proof w.r.t Organisation wide awareness and undertakings on policies with zero tolerance	View Document
Proof related to Mechanisms for submission of online/offline students' grievances	View Document
Proof for Implementation of guidelines of statutory/regulatory bodies	View Document
Details of statutory/regulatory Committees (to be notified in institutional website also)	View Document
Annual report of the committee motioning the activities and number of grievances redressed to prove timely redressal of the grievances	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.2 Student Progression

5.2.1

Percentage of placement of outgoing students and students progressing to higher education during the last five years

Response: 55.26

5.2.1.1 Number of outgoing students placed and / or progressed to higher education year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
171	266	282	261	296

5.2.1.2 Number of outgoing students year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
389	379	519	489	533

File Description	Document
Number and List of students placed along with placement details such as name of the company, compensation, etc and links to Placement order(the above list should be available on institutional website)	View Document
List of students progressing for Higher Education, with details of program and institution that they are/have enrolled along with links to proof of continuation in higher education.(the above list should be available on institutional website)	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.2.2

Percentage of students qualifying in state/national/international level examinations during the last five years

Response: 15.3

5.2.2.1 Number of students qualifying in state/ national/ international level examinations year wise during last five years (eg: IIT/JAM/NET/SLET/GATE/GMAT/GPAT/CLAT/CAT/ GRE/TOEFL/ IELTS/Civil Services/State government examinations etc.)

2022-23	2021-22	2020-21	2019-20	2018-19
5	5	21	27	100

File Description	Document
List of students qualified year wise under each category and links to Qualifying Certificates of the students taking the examination	View Document
Institutional data in the prescribed format	<u>View Document</u>
Provide Links for any other relevant document to support the claim (if any)	View Document

5.3 Student Participation and Activities

5.3.1

Number of awards/medals for outstanding performance in sports/ cultural activities at University / state/ national / international level (award for a team event should be counted as one) during the last five years

Response: 53

5.3.1.1 Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one) year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
29	2	1	5	16

File Description	Document
list and links to e-copies of award letters and certificates	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.3.2

Average number of sports and cultural programs in which students of the Institution participated during last five years (organised by the institution/other institutions)

Response: 33.8

5.3.2.1 Number of sports and cultural programs in which students of the Institution participated year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
38	45	24	38	24

File Description	Document
Upload supporting document	<u>View Document</u>
Institutional data in the prescribed format	<u>View Document</u>

5.4 Alumni Engagement

5.4.1

There is a registered Alumni Association that contributes significantly to the development of the institution through financial and/or other support services

Response:

The success of higher education is assessed by quality education and employable graduates. Shree L. R. Tiwari College of Engineering values alumni as crucial stakeholders, leveraging their experiences for accurate feedback and project guidance.

The institute's steadfast commitment to alumni engagement is vividly exemplified through the establishment of the "UTSAV ALUMNI ASSOCIATION" (Registration No. MAHA/1858/17/THANE in 2017). At Shree L. R. Tiwari College of Engineering (SLRTCE), alumni are recognized as pivotal stakeholders, actively contributing to the institution's success and continuous improvement. The inception of the Alumni Association in 2014-15 serves as a testament to the institution's dedication to fostering enduring connections with its graduates.

The Annual Alumni Meets serve as a strategic networking platform, connecting current students with alumni in a purposeful manner. Beyond being a nostalgic gathering, these meets represent a crucial initiative aimed at tapping into the wealth of alumni experiences. Students benefit significantly from these gatherings, gaining insights into the professional world by learning from the triumphs and challenges shared by alumni. The feedback provided by alumni serves as a guiding compass, steering the institute towards refining teaching methods, enhancing campus placements, and overall, enriching the learning experience. Given their involvement in various committees, alumni play an integral role in shaping the institution's continuous improvement efforts.

The Alumni Association's activities extend beyond the annual meets. Successful alumni are invited to deliver guest lectures, sharing the latest trends in technology and their professional experiences. These engagements serve a dual purpose, motivating current students and providing them with a glimpse into the ever-evolving industry landscape. Alumni also actively participate as judges in various technical and non-technical competitions, enriching the academic environment with their practical insights.

In a ground-breaking move, the institute recognized the challenges faced by alumni in the transcript process, prompting a dedicated commitment from a group of Alumni. Committed to providing the minimum number required for the implementation of the transcript system for all alumni, their support allowed the college to implement this system without incurring any cost to the institute. Consequently, the institute can now issue transcripts to all Alumni seamlessly, from anywhere and at any time. This transformative initiative has positioned SLRTCE as the first institute in Maharashtra to implement a Block chain-based system for transcript verification, showcasing the proactive role of Alumni in advancing the institution's technological infrastructure and alumni services.

Furthermore, the institute has forged global collaborations to broaden horizons for both students and alumni. A Memorandum of Understanding (MoU) with Hult University, facilitated under the mentorship of Alumni, reflects the commitment to providing international internship opportunities and collaborative

Page 61/84 12-02-2024 03:32:00

ventures. Alumni, in this context, play a crucial role in extending internship opportunities to current students, enriching their learning experiences. Alumni members form an integral part of the Placement Advisory Committee at the institute.

SLRTCE maintains strong alumni connections through newsletters and social media, fostering ongoing communication and networking for educational enhancement. Valued alumni play a key role in guiding and contributing to ongoing academic excellence. Top of Form

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1

The institutional governance and leadership are in accordance with the vision and mission of the Institution and it is visible in various institutional practices such as NEP implementation, sustained institutional growth, decentralization, participation in the institutional governance and in their short term and long term Institutional Perspective Plan.

Response:

SLRTCE, under the guidance of the Governing Body (GB), exhibits visionary leadership through a quality framework, involving strategic planning and decentralized structures overseen by committees. Faculty and students are encouraged for ownership and commitment. To achieve sustainable growth, SLRTCE collaborates with the industry, implements green initiatives, integrates sustainability-focused coursework and displaying adaptability.

The GB, as the apex governance body, collaboratively shapes the perspective plan to support the institute's overarching vision and mission. SLRTCE adopts a practical approach to address global challenges and specific issues related to private colleges, establishing clear long and short-term plan. The institution follows the "Light but Tight" governance principles outlined in the DISHA MANUAL, serving as a strategic framework aligned with NBA, NAAC, and NIRF requirements, providing clear objectives and strategies for effective administration.

Purpose of vision and mission are discussed in GB meetings to plan strategies for their achievement, creating a roadmap. The College Development Committee and the IQAC approve the practices necessary for the deployment of this roadmap. To practice decentralization, SLRTCE maintains a light but tight administrative setup with various committees in place. Internal Academic Council oversees academics, Departmental Quality Assurance Committee maintains quality, and Dean of Research and Development manages research. Dean of Student Affairs handles extracurricular and co curricular activities, Exam Controller focuses on exam reforms, and Training and Placement Officer oversees career development including higher studies. GB meetings strategize sustained institutional growth.

The recent achievement of UGC 2F status is a noteworthy milestone, reinforcing the institution's commitment to academic excellence.

Envisioning integration with Rahul Education, SLRTCE is actively shaping its trajectory to align with these ambitious goals. Upholding transparent practices in accordance with UGC Guidelines for academic leadership, the institution ensures adherence across all statutory and non-statutory committees. This multifaceted approach emphasizes SLRTCE's commitment to excellence and continuous improvement in its academic pursuits.

To facilitate NEP2020, in the pursuit of promoting interdisciplinary studies, SLRTCE has introduced Honours and Minors, allowing cross-departmental engineering specializations in the circuit branch. Collaborating under the Rahul Education banner, SLRTCE has conducted semester Audit Courses with Smt. K. L Tiwari College of Architecture on Structural & Architectural Aspects and with Shree L R

Page 63/84 12-02-2024 03:32:00

Tiwari Law College on cybersecurity and Law. Students benefit from the Academic Bank Credits (ABC) scheme, and BVOC programs based on National Skills Qualifications Framework (NSQF) guidelines provide direct entry to fourth-year students.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

6.2 Strategy Development and Deployment

6.2.1

The institutional perspective plan is effectively deployed and functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment, service rules, and procedures, etc

Response:

The governing body shapes the institute's path with a strategic and perspective plan. The Institutional Quality Assurance Cell (IQAC) serves as the nerve centre, work on deployment of prespective plan, while the College Development Committee (CDC) active in delibraiting on these strategies. DAB guides DQAC for oversight. The CDC and IQAC, key players, approve roadmap practices. Stakeholders are informed via the website and meetings, ensuring effective dissemination. SLRTCE aims for NBA accreditation, NAAC second cycle prep, and proudly holds UGC 2f status.

The Governing Body of the College plans and executes policy and development related matters by setting effective goals and facilitating a participative process of decision-making. The same is very important not only to the fulfilment of the vision and mission of the college but also in building the institutional philosophy. The Governing Body members meet once in a year, where the Principal as a member secretory presents probable prespective plan in consideration of compititors colleges and their enrollment status, starting of new brachhes, probable enrollment dynamics, staff requirement. Prospective plans also cover revenue target, enrollment predication and revenue predication considering Fee Regulatory guidlines. It also cover Salary and non salary expenditure to support of finance for prespective plan. Deliberations and discussions are held and decisions are taken on policy changes (if required), budgetary allocations and on any other issue that needs to be addressed for the forthcoming year. The Institute has an elected College Development Committee (CDC) for the betterment of the institute, staff and students. IQAC has a well-developed process to ensure quality benchmarks of academic and administrative activities. CDC and IQAC works on the implementation of roadmap led by Governing body. As an affiliated institute, we adhere to UGC and AICTE guidelines for higher technical education, aiming to become an autonomous body by strictly following statutory and non-statutory rules.

Each committee is directed to follow the norms outlined in the framed policy. We adhere to the Vishakha

guidlines to create a better working environment for female faculty. Committees such as Mahila Takrar Nivaran follow the policy of safeguarding the identity of the victim. To support student grievances, a Redressal Cell, Internal Complaints Committee and a full time Counsellor are made available in the college. Advertisements of staff recruitment are published in the state and national level newspapers. All the staff appointments are as per Mumbai University Staff Selection Procedure. All service rules related to leaves, gratuity, and study leave are as per University norms. Annual meetings decide policy changes, budgets, and key issues, showcasing the institute's dedication to effective functions.

Noteworthy features include:

- 1. The establishment of Development Centre, a collaboration with the industry on a cryptocurrency investigation lab supporting various law and enforcement cells.
- 2. Implementation of a block chain-based transcript system.
- 3. Internship policies aligned with AICTE guidelines, offering paid internships to selected students.
- 4. Reputable faculty positions, with the institute head serving as a BOS member and Associate Dean for Science and Technology.
- 5. Faculty members invited as Keynote Speakers on the world stage, with many acting as resource persons for ATAL FDP schemes.
- 6. Hosting university-level competitions with world-class facilities on campus under Rahul Education.

File Description	Document
Upload Additional information	View Document
Institutional perspective Plan and deployment documents on the website	View Document
Provide Link for Additional information	View Document

6.2.2

Institution implements e-governance in its operations

- 1. Administration
- 2. Finance and Accounts
- 3. Student Admission and Support
- 4. Examination

Response: A. All of the above

File Description	Document
Screen shots of user interfaces of each module reflecting the name of the HEI	View Document
Institutional expenditure statements for the budget heads of e-governance implementation ERP Document	View Document
Annual e-governance report approved by the Governing Council/ Board of Management/ Syndicate Policy document on e-governance	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

6.3 Faculty Empowerment Strategies

6.3.1

The institution has performance appraisal system, effective welfare measures for teaching and non-teaching staff and avenues for career development/progression

Response:

Faculty empowerment is vital for educational success and student career advancement. Our institute emphasizes a holistic approach to development, focusing on recruitment, continuous professional growth, positive working environments, and favourable service conditions. This framework evaluates aspects like Teaching Process, Students' Feedback, Participation in Activities, Research, Annual Confidential Report, and Contribution to Society, with adjustments to enhance its effectiveness, including Research and Publications elements.

Individualized support is offered through one-on-one interactions and mentorship, benefiting both teaching and non-teaching staff. Non-teaching staff undergo thorough annual evaluations, with feedback from Heads of Departments ensuring a comprehensive assessment

Our welfare initiatives cater to both teaching and non-teaching staff, supporting professional development activities and higher education pursuits. This includes leaves aligned with university norms, provision of uniforms for Class 4 staff, compensatory time off for holiday work, and facilities like safe drinking water, parking, and a canteen.

The institute actively promotes the career development and progression of its faculty members, encouraging engagement in research, publication, conferences, professional associations, and collaborative projects beyond their departments. Multidisciplinary Faculty Development Programs, aligned with the criteria of NAAC and NEP 2020, underscore our dedication to fostering academic growth.

In response to the challenges posed by the Covid-19 pandemic, we organized a free RT PCR testing camp for both teaching and non-teaching faculties. The campus is well-equipped with first aid boxes, a furnished Gymkhana offering recreational facilities, and health awareness programs covering topics such as Cancer Awareness, Yoga Sessions, and Organ Donation. Additionally, the college provides counselling services for faculty members, recognizing the importance of mental health support.

A significant session titled "Yogyapath for Guru to Transform Sishya" highlighted the transformative power of yoga in mentor-student relationships, adding a unique dimension to faculty development initiatives.

. Initiatives like workshops on Python for mechanical engineering have been positively received, showcasing the proactive role of the faculty in enhancing the academic experience.

Faculty benefits align with University of Mumbai guidelines, covering various leave categories, study leaves for advanced education, OD leave for access to nationally important labs, and additional support such as Staff Group Insurance Policy, Reimbursement Policy, and Gratuity, remuneration for extra responsibilities, Traveling Allowance, load concessions, on-campus counselling facilities, and residential quarters.

Recognizing and appreciating dedication, the institute presents Recognition Awards to long-serving employees, honouring their consistent hard work. Special provisions address the specific needs of female staff and students, including automatic sanitary napkin vending machines.

In conclusion, SLRTCE's commitment to comprehensive faculty and staff development is demonstrated through appraisal systems, welfare initiatives, and clear pathways for career progression. Nurturing a culture of continuous improvement and empowerment, the institute stands dedicated to fostering the growth and well-being of its academic community, providing an environment where both faculty and students can thrive.

File Description	Document	
Upload Additional information	View Document	
Provide Link for Additional information	View Document	

6.3.2

Percentage of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the last five years

Response: 58.62

6.3.2.1 Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
78	53	64	51	43

File Description	Document
Policy document on providing financial support to teachers	View Document
Institutional data in the prescribed format	<u>View Document</u>
Copy of letter/s indicating financial assistance to teachers and list of teachers receiving financial support year-wise under each head.	View Document
Audited statement of account highlighting the financial support to teachers to attend conferences / workshop s and towards membership fee for professional bodies	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

6.3.3

Percentage of teaching and non-teaching staff participating in Faculty development Programmes (FDP), Management Development Programmes (MDPs) professional development /administrative training programs during the last five years

Response: 55.22

6.3.3.1 Total number of teaching and non-teaching staff participating in Faculty development Programmes (FDP), Management Development Programmes (MDPs) professional development /administrative training programs during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
106	98	110	87	22

6.3.3.2 Number of non-teaching staff year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
55	52	51	58	57

File Description	Document
Institutional data in the prescribed format	<u>View Document</u>
Copy of the certificates of the program attended by teachers.	View Document
Annual reports highlighting the programmes undertaken by the teachers	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

6.4 Financial Management and Resource Mobilization

6.4.1

Institution has strategies for mobilization and optimal utilization of resources and funds from various sources (government/nongovernment organizations) and it conducts financial audits regularly (internal and external)

Response:

Shree L R Tiwari College of Engineering, recognized for its University Grant Commission (UGC) 2F status, excels in financial management, upholding a commitment to engineering education excellence.

To ensure efficient financial management, the institute has implemented a two-step policy process during governing body meetings. The initial step involves a meticulous projection of expected revenue, considering first-year enrolment and the direct second year, with predictions derived from competitor enrolment analysis. Our commitment to excellence is further emphasized by a robust focus on student merit, ensuring a high- quality intake aligned with our academic standards.

In the second step of revenue projection, a focused approach is taken towards expenditures, beginning with a thorough assessment of staff salary expenditure. This includes considerations for strengthening the cadre through new branches and recruitment efforts, aligning with NEP 2020 guidelines. Annual increments are thoughtfully factored in, ensuring a comprehensive financial planning approach prioritizing staff well-being.

Budgetary planning for recurring and non-recurring expenses is meticulously based on departmental requirements, adhering to Fees Regulatory Authority (FRA) limits. Non-salary expenditures are judiciously considered, with only 45% of the total salary being allocated. This strategic approach ensures a balanced and thoughtful allocation of resources, maximizing their impact on various facets of the institution.

Upon tying up departmental budgets, the institute strategically plans lab infrastructure within the allocated budget, emphasizing optimal resource utilization. Embracing NEP 2020 principles, we actively encourage collaboration among departments, fostering an environment where faculties can seamlessly move across different departments, promoting collaboration and enabling a broader spectrum of technical

domains across the institute.

Initially dependent on student financial contributions, SLRTCE now actively seeks funding from government initiatives like Start-up India and Defence India Startup Challenge, as well as private industry. In 2023, SLRTCE registered 24 lakhs in funding for various industry-level projects and submitted proposals for 9 challenges in IDEX, with 2 advancing to the final round.

In strict adherence to Institute of Chartered Accountant of India (ICAI) guidelines, our college conducts comprehensive financial audits, ensuring compliance, and transparency. External audits occur annually, scrutinizing purchases, payments, and salaries. Simultaneously, internal audits by the Accounts Department maintain meticulous records, encompassing purchases, quotations, purchase orders, and payments. These routine checks on salaries, voucher entries, and accounting ledgers align with our commitment to high financial standards and ethical practices. No major objections or irregularities have surfaced, affirming our dedication to responsible financial practices for graduates in the dynamic engineering landscape.

Beyond finances, SLRTCE's diversified resource mobilization initiatives foster a dynamic research culture aligning with industry needs, creating valuable avenues for student placement and internships. The synergistic approach between financial strategies and resource mobilization underscores our dedication to providing a dynamic learning environment. We aim to prepare students not just for academic success but to thrive in the ever-evolving field of engineering, equipped with a holistic skill set and a deep understanding of industry dynamics.

File Description	Document	
Upload Additional information	View Document	
Provide Link for Additional information	View Document	

6.5 Internal Quality Assurance System

6.5.1

Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes. It reviews teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals and records the incremental improvement in various activities

Response:

The goal of IQAC is to strategically approach ongoing improvement in administrative and academic operations to institutionalize quality processes. Plan-Do-Check-Act (PDCA) is the division of procedures used in academics and administration. This strategy offers an iterative design and management approach for process control and continuous improvement that is utilized in administrative and academic settings. In the plan do check activities, IQAC has identified 72 necessary academic activities mentioned in the Academic manual (Disha Manual). In addition to the regulation to adhere to the university curriculum, the institution offers a wide range of program options and courses pertinent to the needs of the community aligned with emerging national and international trends. In the PDCA cycle --a means of continual improvement, input on the curriculum is collected from all stakeholders. The collected feedback is analyzed and summarized to derive relevant recommendations to improve the efficacy of learning. The graduate attributes under OBE are reviewed and the gap analysis report is sent to the university for suggestions for syllabus revision.

Addressing the student's varied classroom learning abilities is quite challenging. The policy for differentially abled students was started by IQAC with AICTE Parakh to find out student's different mental abilities. Another initiative by IQAC for creative teaching methodology is mapping NDLI eresources with curriculum course objectives. This helps students to use virtual learning resource repositories including textbooks. By NEP 2020, this aids students in accessing resources in local language. IQAC creates a roadmap for smooth adaption of NEP 2020 towards light but tight administrative system with student-centric approach. Provision for leave for Ph.d work encourages and motivates faculties to create research culture in the college. IQAC coordinates in conduction of CDC and GB meetings to seek advice on varied issues the institution encounters. IQAC conducts both internal and external audits, using the Red, Amber, and Green techniques to assess the maturity of administrative and academic activities. Red indicates that there is no system in place. Amber indicates that there must be regular follow-up. Green denotes a functioning system.

The IQAC plays a pivotal role in this framework:

1. Institutionalization of Quality Assurance Strategies

- Disha Manual outlines the operational structures and procedures of academic and administrative activities.
- DQAC's key responsibility areas are defined within the manual.

2. Review of Teaching-Learning Process

• Controls and measures, such as daily reports, syllabus coverage, course files, CO-PO-PSO attainment reports, lesson plans, and feedback, are incorporated.

3. Review of Structures and Methodologies of Operations

- Internal Audits ensure adherence to Disha Manual activities throughout the semester.
- External Audits provide an additional layer of scrutiny.

4. Review of Learning Outcomes

- CO-PO-PSO articulation matrix is assessed.
- Gap identification in CO-PO-PSO attainment is conducted.
- Semester reviews by HOD
- Communication with the university regarding gap identification based on stakeholder feedback

Following incremental improvements are recorded in the number of activities practiced to achieve Quality and academic excellence:

1.2018-2019

- Student Counsellor appointed
- NPTEL policy for students

2.2019-2020

• E-yantra Lab setup

3.2020-2021

- o Recommendation for Bridge Courses
- CO- PO mapping
- Slow learner and Advance learner Policies

4.2021-2022

- Recommendation SOP for R And D Cell
- Recommendation of Bloom's Taxonomy
- Recommendation of Audit Procedure by NAAC

5.2022-2023

- NBA
- NIRF participation
- Review by ISO Audit
- Academic Calendar
- Domain Interface
- FDP and Professional Development for Administrative and Non-Administrative Staff
- Audit Course
- Formation of IAC
- o Disha Manual
- Prayas
- Incremental progress Plan
- o External Audit

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

6.5.2

Quality assurance initiatives of the institution include:

- 1. Regular meeting of Internal Quality Assurance Cell (IQAC); quality improvement initiatives identified and implemented
- 2. Academic and Administrative Audit (AAA) and follow-up action taken
- **3.** Collaborative quality initiatives with other institution(s)
- 4. Participation in NIRF and other recognized rankings
- 5. Any other quality audit/accreditation recognized by state, national or international agencies

such as NAAC, NBA etc.

Response: A. Any 4 or more of the above

File Description	Document
Quality audit reports/certificate as applicable and valid for the assessment period.	View Document
NIRF report, AAA report and details on follow up actions	View Document
List of Collaborative quality initiatives with other institution(s) along with brochures and geo-tagged photos with caption and date.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document
Link to Minute of IQAC meetings, hosted on HEI website	View Document

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1

Institution has initiated the Gender Audit and measures for the promotion of gender equity during the last five years.

Describe the gender equity & sensitization in curricular and co-curricular activities, facilities for women on campus etc., within 500 words

Response:

The institution persistently focuses on providing equal opportunities to, and safeguarding the rights and benefits of females to create an environment free of harassment and discrimination. The institution ensures gender equity and sensitization in curricular and co-curricular activities. Equal opportunities are provided for active participation in curricular (teaching-learning) activities and, also in co-curricular activities to all the students irrespective of their gender. They have equal rights and opportunities to learn new knowledge related to the curriculum and also have equal chances to participate in various co-curricular activities viz. seminars, workshops, project competitions, internships, intercollegiate and interdepartmental activities for their all-round development. Likewise, at SLRTCE, faculties also get equal opportunities for their exposure and development without having a disparity based on gender. They equally participate in activities like seminars, workshops and different FDPs, (Faculty Development Programmes). Apart from this, some seminars, workshops and surveys are exclusively conducted on the pressing issues of gender inequality that help in developing gender sensibility by adopting a positive attitude towards common gender predicaments.

Apart from this, there are several committees under the Student Welfare and Development Cell (SWDC), continuously working for the holistic development of the students. Every student is free to take part in the activities conducted by SWDC as per their interest. These opportunities are available without any discrimination for the students to learn multidisciplinary knowledge with skill development.

Through a number of committees, including the Grievance Redressal Cell, Anti Ragging Committee, Mahila Takrar Nivaran Cell, and Internal Complaint Committee, the institution safeguards the basic rights of women at the institution and firmly assert zero tolerance for illicit activities and sexual harassment at workplace situations.

A fair gender ratio is maintained during the process of first year and direct second year admission of the students. The institution follows the provision in Government resolution for the reservation of 30% seats for female students for full time undergraduate technical courses. The same practice is thoroughly witnessed during the staff recruitment process too. Reservation criteria as per the university norms are equally adopted for the female candidates applying for different job positions at the institution.

The institution provides all necessary facilities for women. First, the utmost, keeping safety and security of women in view, security cameras are positioned in the lobby, corridors, staff rooms and classrooms. The CCTV surveillance ensures total safety of girls and female staff from any type of sexual harassment, verbal or physical. Common rooms are there in the departments to secure the privacy for girls. Safety and

Page 74/84 12-02-2024 03:32:01

security of women is kept on primacy at SLRTCE. To maintain cleanliness and hygiene, vending machines for sanitary napkins are available for the comfort of girl students and female staff.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	<u>View Document</u>

7.1.2

The Institution has facilities and initiatives for

- 1. Alternate sources of energy and energy conservation measures
- 2. Management of the various types of degradable and nondegradable waste
- 3. Water conservation
- 4. Green campus initiatives
- 5. Disabled-friendly, barrier free environment

Response: A. 4 or All of the above

File Description	Document
Policy document on the green campus/plastic free campus.	View Document
Geo-tagged photographs/videos of the facilities.	View Document
Circulars and report of activities for the implementation of the initiatives document	View Document
Bills for the purchase of equipment's for the facilities created under this metric	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

7.1.3

Quality audits on environment and energy regularly undertaken by the Institution. The institutional environment and energy initiatives are confirmed through the following

- 1. Green audit / Environment audit
- 2. Energy audit
- 3. Clean and green campus initiatives
- 4. Beyond the campus environmental promotion activities

Response: A. All of the above

File Description	Document
Report on Environmental Promotional activities conducted beyond the campus with geo tagged photographs with caption and date	View Document
Policy document on environment and energy usage Certificate from the auditing agency	View Document
Green audit/environmental audit report from recognized bodies	View Document
Certificates of the awards received from recognized agency (if any).	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

7.1.4

Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and Sensitization of students and employees to the constitutional obligations: values, rights, duties and responsibilities of citizens (Within 500 words)

Response:

SLRTCE strengthens the practice of educational experiences with reference to gender, regional, linguistic and social diversity. Since the institution has minority status (Hindi Linguistic), we have students from different socioeconomic backgrounds. To establish concord throughout, the institution adopts a fair and genuine system across all levels. Admission in the first year is done purely on the basis of merit list/ ranking in CET exam. Equal opportunities are available for all the students to excel in academics as well as in other fields. Student Induction Programmes are conducted for first year students to make them aware about various academic activities and opportunities available to them. The placements are done as per the competencies of the students. In spite of cultural diversity, students wholeheartedly promote unification during the celebration of various activities thus giving equal respect and regard to all the cultural and regional practices to maintain harmony at campus. To promote and preserve the languages, events like Marathi Diwas, Hindi Diwas, etc. are celebrated in the college. Holidays are given to the students and faculties on account of festivals like Ganesh Chaturthi, Diwali, EID, Parsi Day, Guruparab and Christmas to show respect to all religious faiths. Faculties under various committees organize and conduct these events at the departmental or institutional level with the active involvement of students to imbue a spirit of amiability among them.

SLRTCE also attempts to sensitize faculties and students to be socially responsible and to be active participants in maintaining the right values, rights and duties. Various bodies like DLLE, NSS, and UBA at the institution work for the students to get involved in different activities and to be a part of varied schemes. This helps to facilitate the sensitization of students to socio-cultural realities. Under DLLE (The Department of Lifelong Learning and Extension), students take up extension work projects related to social issues. The projects under DLLE are: Annapurna Yojana (APY) Industry Orientation

Page 76/84 12-02-2024 03:32:01

Project (IOP), Population Education Club (PEC), National Institute of Open Schooling (NIOS), Survey of Women's Status (SWS), and Career Project (CP). Unnat Bharat Abhiyan (UBA) is a second effort by the institution in the same direction that is not only responsible for the overall development of the student but here students are also provided funding by various government schemes. NSS, is one of the popular bodies working at our Institution. Their activities and services - Tree Plantation, Blood Donation, helping victims of natural calamities like floods, educating deprived children, etc. are conducted by institution to promote community service. This is one of the best platforms for the student to get exposed to many important social issues of the nation. In this way, they would be able to lead their lives as responsible citizens of the country.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

7.2 Best Practices

7.2.1

Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual

Response	:
----------	---

1. Best Practice 1:

Enhancing knowledge spectrum through interdisciplinary approach and peer to peer learning.

2. Objectives

- To prepare students for real-life challenges encountered in interdisciplinary settings.
- To initiate and strengthen peer-to-peer culture as students are more adapted to learn from peers.

3. Context

The present curriculum, designed by the affiliating university, doesn't reflect interdisciplinary learning. Additionally, the current competitive scenario in education discourages a composite work culture based on cooperation and coordination. Contrary to this, the industry demands engineers with a combination of core engineering knowledge with IT knowledge. In addition to this, and as per the challenges published by Technovision 2023 and NEP 2020, knowledge of multi disciplines is required to accomplish industry projects.

Since we only have core branches at the institution, which do not support learning of multiple domains. Infrastructure constraints don't allow the incorporation of emerging area branches as per AICTE administrative norms. To overcome the constraints, the institution has developed a system of providing knowledge of multiple domains to meet the Industry needs and NEP 2020 guidelines by promoting interdisciplinary approach and peer to peer learning.

4. Practice

The institution takes all possible initiatives to make students industry-ready with recent technical knowledge, especially in emerging areas of technology. In this direction, Honors and Minor Degree Programmes are introduced and implemented with a positive spirit at the institution as per AICTE guidelines. There is a provision for students to choose a specialized course in the emerging areas of their choice. By exploring the knowledge of other fields they can build up their competence in the interdisciplinary domains too. The institution has succeeded in implementing Honors and Minors for all branches and helped students to get knowledge of different domains. The courses undertaken are:

- -Artificial Intelligence and Machine learning
- -Green Technology and Sustainability Engineering
- -Blockchain
- -Data Science
- -3D Printing

The institution believes that an interdisciplinary approach backed by a peer-to-peer learning culture is necessary in order to close the gap between industry demands and curriculum. To provide the latest technical knowledge to the students, the institution has employed some strategies and modernizations in the teaching learning process, demarcating it from the conventional system. Students can undergo external/in-house internships. As out-house internship is not available for the majority of students, the institution has initiated a system of providing equal opportunities for all the students by providing inhouse internships.

- AWS Cloud computing (Ownership: Computer, Participation by other department students)
- IOT Ownership: EXTC, Participation by other department students)
- Data science (Ownership: ECS, Participation by other department students)

5. Evidences of Success

Continuous efforts have led to satisfactory participation of students. So far as the implementation of the Honors and Minors Degree Programme, the institution has achieved a milestone success in enrolling 120 students throughout all the disciplines, despite having many constraints - only six core branches at the institution, infrastructure restraints, etc.

6. Problems Encountered

It is difficult to bring a sudden change in students' outlook and attitude/ mindset for adopting new areas of learning.

1. Best Practice II

Holistic Modeling of Education Through Domain Interface and Extension Activities

2. Objectives

- To create a new model of education suitable for the holistic development of the students.
- To acquaint students with societal issues and prepare them to be responsible member of the society

3. Context

The recent educational model is outcome based hence form the basis of a quality educational system. The OBE framework recommended by NAAC and NBA hints students' acquisition of 12 graduate attributes after graduating from any organization. These specified graduate attributes lead to holistic development in students. Basically, these attributes are inclusive abilities that must be possessed by any graduate after completing an undergraduate degree program. They form the Programme Outcome (POs) to judge the knowledge, skills and abilities of graduates regardless of their field of study in correspondence with the course outcomes (COs) – individual learning experience. Courses are the primary units of the specific programme. The PO attainment is calculated in relevance to the attainment level of the courses offered under any specific programme. The overall attainment of each PO is computed as follows: Direct Assessment Course CO (80%) and indirect assessment (20%). The performance of the students in the examinations during the semester in each course is used to compute the level of attainments of the Cos. To develop high level cognitive abilities the institution has created the concept of Domain Interface by constituting two domains from each department. These domains are working to introduce new technology through creating unique industry level research based problems provided with the latest solutions to acquaint students with fresh knowledge.

4.Practice

At SLRTCE, all departments have their technical domains. Most of the domains are working independently to strengthen the department by adding latest information through conducting a large number of activities. There are six departments in the college and thirteen interdisciplinary domains at institute level. Each department has ownership of two domains whereas one domain is from the department of humanities and applied science. A specific domain team consists of one domain incharge from the department having ownership of the domain and a group of 5-6 faculties as domain experts from other departments. The first task of the domain team is to orient students to take part in different activities conducted by these domains. Under 'Prayas' initiative everyone has the freedom to arrange or conduct any technical activity. For this, The proposal is sent to the domain in-charge under the title of domain interface. The domain incharge has to sign and approve the activity with remarks. A good number of opportunities are provided to the students to play active roles in different activities. The

Page 79/84 12-02-2024 03:32:01

institution has initiated the concept of Student Diary to acknowledge the achievements of students in escalating extension activities

5. Evidences of Success

Under 'Prayas' initiative students are more interested to take part in technical activities conducted by different domains. As the credits are assigned for the internship, we have more enrollments in each domain.

6. Problems Encountered

The college hours prevent many students from partaking in different domain activities. some of the students if they take part in technical activities they won't get time to participate in extension activities. Since both serve different motives. So, students decide their priorities. Motivation is a little difficult in this regard.

File Description	Document
Any other relevant information	<u>View Document</u>
Best practices as hosted on the Institutional website	View Document

7.3 Institutional Distinctiveness

7.3.1

Portray the performance of the Institution in one area distinctive to its priority and thrust within 1000 words

Response:

Institutional Distinctiveness: Promoting Academic Excellence Through Enriched Knowledge and Industrial Exposure.

Private engineering college graduates face challenges in securing direct employment, as indicated by NASSOM statistics. The industry perceives a gap in employability, attributing it to students lacking real-time knowledge of current industrial scenarios. Despite efforts for industry interaction, there is scepticism towards the capabilities of private engineering college faculties, particularly in executing project-based work. In response, the college has undertaken a mission to enhance industry readiness through internships and on-the-job training.

To address this challenge, the focus is on establishing trust and showcasing the institution's capabilities. The college has identified a unique opportunity in a national-level institute, with the status of being

Page 80/84 12-02-2024 03:32:01

nationally recognized being a key criterion. This institute, despite its prestige, currently lacks a specific element that the private engineering college can provide, making it a top priority for collaboration.

The Technology Information, Forecasting & Assessment Council (TIFAC), initiated by the Government of India, plays a crucial role in evaluating technology's current state and charting paths for future technological development in key socio-economic sectors. TIFAC has been at the forefront of envisioning future technology trajectories through comprehensive foresight reports on short, medium, and long-term scales, contributing significantly to the nation's technological landscape.

Recognizing the importance of aligning education with industry needs, our institution embarked on a strategic initiative, starting with the establishment of the Bitcoin Investigation Lab. In response to the notable increase in cryptocurrency usage in India, we successfully attracted a leading company in digital forensics. A development center was established with a committed monthly investment of 2 Lakhs for a year, benefitting students through on-the-job internships.

The maturity of this setup expanded our investigative capabilities beyond Bitcoin to five other cryptocurrencies. The college's achievements reached new heights as we participated as a keynote speaker in the Largest Cyber Currency Expo in Dubai. Building on this success, we extended our focus to the dark web investigation, aiming to combat illicit organ trading and trace illegal goods. This initiative led to the college becoming the first institute in Mumbai University to introduce a B.Voc Course, a skill-based program that garnered interest from two additional companies.

Our global connections strengthened as we collaborated with a U.S.-based company. The head of our institute assumed the role of a Board of Studies Member, launching a Blockchain-based transcript system. The positive outcome of this initiative is reflected in students' eagerness to engage in real-time projects, showcasing the college's commitment to practical and industry-relevant education.

Students are motivated to start their own clubs at SLRTCE, aiming for exposure and industry readiness. Various clubs, such as the Google Code Club, Cybersecurity Club, and Web Development Club, are formed to promote knowledge exchange through technical activities. The institution collaborates with Edunet, offering industry-relevant career-oriented courses to prepare students for multidirectional careers in technology's vast field. Key components of industry 4.0, including IoT, cloud computing, AI, machine learning, and cybersecurity, are emphasized.

SLRTCE stands out for adopting technical pinnacles in education, collaborating with the IIT Bombay FOSSEE Project for workshops on Open Source technologies. To foster innovation and economic growth, the institution houses a development center dedicated to advancing methods, protocols, and innovations. Subject specialists from diverse fields execute activities, providing workstations for trainees to engage in ongoing initiatives and participate in internships, enhancing their technical knowledge base.

Encouraging participation in a Smart India Hackathon, SLRTCE aims to elevate students' creative and innovative capabilities, aligning with AICTE guidelines. Students can showcase their technical potential, with project teams evaluated on innovation, viability, utility, societal use, and applicability. The best projects earn a wild card entry into the SLRTCE Experience Centre, cultivating a research culture and

honing students' professional creativity and self-expression.

File Description	Document
Any other relevant information	View Document
Appropriate web in the Institutional website	<u>View Document</u>

5. CONCLUSION

Additional Information:

Shree L.R. Tiwari College of Engineering was established in the year 2010 as a result of the dedication, diligence and far-sighted vision of the honorable chairman, Shri. Lallan Ram Tiwariji ---- a "Shiksha Samarat", earnestly working for the pursuit of knowledge. With an intent to haul up the standard of education by embedding inclusive technological advancements, the management strives hard to cast a significant imprint in modeling a new and diverse education system of the country. SLRTCE is an important part of Rahul Education Society managing more than 60 institutes in Maharashtra and Uttar Pradesh states of India.

In the beginning, with the permission for only four branches of engineering (Electronics Engineering, Electronics And Telecommunication Engineering, Computer Engineering and Information Technology Engineering), the institution achieved remarkable success in providing technical education to students residing at Mira-Bhayander— a locality with a limited number of technical institutes. Soon it became the most sought-after college for the students of Mira Bhayander and other nearby areas too. The tremendous success in achieving good results ultimately fetched permission for two core branches of Mechanical and Civil Engineering to the institution in the year 2012. This helped raise the state of the college as a competitor for many other technical institutes in its proximity. At present, the college offers six full time UG courses to confer the degree of Bachelor of Engineering (B.E.) at University of Mumbai. For the convenience of the students pursuing higher studies, postgraduate programmes in Electronics and Telecommunication (EXTC) and Computer Engineering (CE) were started in the year 2013 to offer the degree of Master of Engineering (M.E.) in Computer Engineering, and Electronics & Telecommunications at University of Mumbai. All courses are approved by All India Council for Technical Education (AICTE), New Delhi & Directorate of Technical Education (DTE), Maharashtra State.

The college has its development center, cryptocurrency labs, and cyber security labs to promote technical education enabling students to be right fit for the industries.

The Institute received an ISO 9001 Certification in the very first year of establishment (2010). In the year 2019 the college attained NAAC accreditation. The computer Engineering Program earned National Board Accreditation in the year 2022. and Information Technology Program in year 2023.

In addition to this, the college also offers technical education through various programs like Honors and Minor courses, and in-house internship-a channel via which students are getting opportunities to learn the latest technological knowledge of the emerging areas as per industry requirements.

Under the visionary leadership of the management and HOI, well- qualified faculties and deserving students, the institution is continuously on the way to reach the heights of success towards achieving autonomy.

Concluding Remarks:

To adopt skill based course along with engineering courses we are the only affiliated non autonomous Institute in Mumbai to start B.Voc courses.

SLRTCE has ardently adopted the principles of Outcome Based Education (OBE) This entails a regular

Page 83/84 12-02-2024 03:32:01

methodology for ascertaining the attainment of outcomes, and benchmarking these against the program outcomes consistent with the objectives of the program. The institution's Internal Quality Assurance Cell has meticulously crafted the DISHA Manual, an Academic and Administrative Manual that intricately directs the successful execution of curriculum planning, delivery, and continuous assessment – the pivotal elements of OBE.

SLRTCE is marching towards achieving the goal of becoming a world class Institute by providing quality education for students through outcome based education. All stakeholders should be proud of SLRTCE that is our ultimate goal by providing conducive working and learning environment.