



SELF STUDY REPORT

FOR

1st CYCLE OF ACCREDITATION

BHARATIYA VIDYA BHAVAN'S SARDAR PATEL INSTITUTE OF TECHNOLOGY

BHAVANS CAMPUS, MUNSHI NAGAR, ANDHERI(WEST)

400058

www.spit.ac.in

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BANGALORE

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

The institute is a Numero Uno, self-financed, empowered autonomous engineering institution affiliated to University of Mumbai (UoM). It is the flagship institution of the Bharatiya Vidya Bhavan, a trust of national eminence, a culture by itself.

The institute currently offers graduate programmes in Electronics & Telecommunication Engineering, Computer Engineering, and Computer Science Engineering, as well as Postgraduate (PG) and Ph.D. programmes in Electronics & Telecommunication Engineering, Computer Engineering, and Masters of Computer Applications. Since its establishment in 2005, institute continued to attract top of the line students from the State to its undergraduate programs. It is top self financed institute of Maharashtra as per the social ranking. It was bestowed with the academic autonomy in 2017 and it has constantly innovated in curriculum design and delivery, T-L-E processes to excel. Over several years it has observed a spectacular placements and is rated **number one in the state** with regards to the average/median salary of the campus. It demonstrates transparency in administration, admissions, academics, and follows all rules and regulations of the State Government / parent university / AICTE / UGC. It regularly implements the pay revisions, empowers students and faculty for professional growth, adopts good governing practices, has a decentralized approach, observes financial delegation.

It has demonstrated a leadership in implementation of NEP-2020 since its inception. It has adopted many best practices of elite institutions like IITs and marching towards academic excellence. It is presently providing leadership to few institutions for enterpreneral activities and implementation of autonomy/ NEP. **It is constantly ranked in AA category by NPTEL, was a receipt of NIRF ranks, and ARIIA ranking.**

It has a technology business incubation, supported by the DST, GoI. It has incubated more than 150 start ups.. It has established AICTE-IDEA lab and is imparting skills to many stakeholders. Institute is aggressive in continuing education. **It has excellent collaboration with IITB** and it invites industry experts in all facets of institutional functioning. **It has a vibrant student community and club culture to promote all rounded development. All eligible undergraduate programs of the institute are NBA accredited three times.**

Vision

Bharatiya Vidya Bhavan's was established in 1946, by Kulapati Dr K.M.Munshiji, a freedom fighter with faith in Indian culture, values and Indian People. Bhavan's Institute at Andheri is the first institute of higher learning established by Munshiji. The Institute is situated on the land which was acquired by Munshiji way back in 1937 which was a marshy land at Andheri (W), in Mumbai (then Bombay). It was Munshiji's vision and foresight to have established the institute in such a remote area. "Amrutum Tu Vidya", the motto of the Bhavan is best translated as "Knowledge is Nectar." The Bhavan's Vision is to combine ancient learning with intellectual aspirations of the land, impart traditional education amalgamated with modern contemporary skills and technology, to teach the generations of students to imbibe Indian Culture afresh, in order to preserve and propagate 'Bharatiya Vidya' The Institute is affiliated to the prestigious University of Mumbai.

Keeping in view the growing and changing needs of industry and society, Sardar Patel Institute of Technology is committed to creating an environment which will raise the intellectual and moral standards of our students. Its endeavor is to strive for the overall development of students, thereby enabling them to accept challenges. In tune with, the institute's Vision and Mission is:

Vision

“To build a renowned institute this will produce graduate engineers with Global Competency and Social Sensitivity.”

Mission

In line with, the institute's Vision, the Institute's Mission is:

- Provide high quality education in engineering and technology promoting the Indian Values and Ethos that will prepare the participants to lead lives of personal integrity and civic responsibility in a global society.
- Promote an Educational Environment that combines academic study with the excitement of intellectual curiosity for engineers of tomorrow.
- Enhance career opportunities for students through Industry-Institute interaction, value-added courses and projects in cutting edge technology.
- Inculcate an Entrepreneurial mindset in students to make them job creators. Focus on applied research to create next generation technologies.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

Location: Sardar Patel Institute of Technology (SPIT) is one of the most reputed and well-known institute, located in Mumbai's bustling Andheri West, is a premier institute under Bharatiya Vidya Bhavan known for its excellence in engineering education. SPIT's location in the heart of Mumbai offers several advantages, including proximity to reputed academic and research organizations like IIT, NIIT, BARC, TIFR, etc and industries like Barclays, L&T, Siemens, Morgan Stanley, Duetsche Bank, Quantiphi, providing students with ample opportunities for exposure and learning. The lush green campus, spread over a vast area, provides a serene and conducive environment for learning, enhancing the overall educational experience. The institute's location in Andheri West makes it easily accessible by metro, trains, buses, and the airport, further enhancing its appeal to students and faculty alike.

Students & Faculty: The institute's strength lies in its meritorious students which contribute to its reputation as a top-tier educational institution. The institute boasts a highly qualified and experienced faculty who are dedicated and always updated to provide students with the best possible education.

Empowered Autonomy with Enriched Curriculum: One of the institute's key strengths is its empowered autonomy status, which allows it to maintain a high quality of education and attract top students. The

comprehensive and updated curriculum, which includes flavors of social activities, ensures that students receive a well-rounded education that prepares them for the challenges of the modern world. Research and industry internships, which are an integral part of the curriculum and last for six months, allow students to gain practical experience and apply their theoretical knowledge in real-world settings.

Incubation Culture: SPIT's well-equipped and extensively funded Technology Business Incubator provides students with the opportunity to develop entrepreneurial skills and turn their innovative ideas into successful ventures.

Excellent Placement: The institute also offers 100% excellent placement with an average CTC at par with reputed institutes with a **median CTC @12 Lakhs per annum** in year the academic year 2022-23 and has historical record of @0.5 Lakh increase in median CTC for last five years.

Institutional Weakness

The institute, however, has several areas that require improvement.

Unavailability Residential Campus: One significant challenge is the unavailability of a residential campus for students and faculty, which can limit the sense of community and engagement outside of class hours.

Limited Consultancy: Weaknesses are also evident in the consultancy aspects, with a need for improvement in quality publications. Strengthening these areas can enhance the institute's reputation and attract more opportunities for collaboration and funding.

Transportation: The institute does not provide Transportation facility to any of its students, faculty and staff. However, the institute is easily accessible by metro, trains, buses, and the airport.

Limited Visibility on Social Media: In terms of marketing and outreach, there is a need to improve the institute's social media presence and marketing efforts to attract more students and faculty. However, in last few years the institute is trying to do it at a large scale through its Social Media Team.

To address these challenges, the institute is focusing on enhancing its infrastructure, increasing support staff, strengthening research and consultancy, improving alumni connect, and expanding industry reach. By addressing these weaknesses, the institute can enhance its overall reputation and provide a better learning experience for students and faculty alike.

Institutional Opportunity

The institute has several opportunities that can be leveraged to enhance its overall standing and reputation.

Vertical Expansion in the Programmes offered: One such opportunity is incorporating cutting-edge technologies into its curriculum and research, which can attract top students and faculty interested in working with the latest advancements. Offering integrated programs, such as combining B.Tech and M.Tech programs or offering dual degree programs in partnership with foreign universities, can attract a diverse range of students

and enhance the institute's global reputation. Strengthening alumni connect can also provide valuable support and resources in this regard.

Empowerment of Faculty: Industry-based skill development programs for faculties can enhance their teaching capabilities and industry relevance, while initiatives like national and global connect programs can expand the institute's reach and impact.

Expanding Outreach: Leveraging government initiatives and grants can significantly enhance research and infrastructure development, providing the institute with the resources needed to expand its capabilities and offerings. Empowering collaborations with neighbouring institutes and industries for research and consultancy work can also open up new avenues for growth and development. Open forums and discussion groups can facilitate knowledge sharing and networking opportunities, further enhancing the institute's reputation and influence.

Centre of Excellence: Establishing well-equipped laboratories and centers of excellence can also enhance the institute's research capabilities and attract top talent.

Overall, the institute has several opportunities to enhance its reputation and offerings, which can lead to increased success and impact in the field of education and research.

Institutional Challenge

The institute faces several challenges that need to be addressed to maintain and enhance its quality standards.

Meeting accreditation requirements and upholding high-quality standards can be challenging, especially in the face of rapidly advancing technology. Continuous updates to the curriculum based on new trends are necessary to ensure that students are receiving relevant and up-to-date education.

Admissions to programs like M.Tech, Ph.D., and UG, particularly in EXTC, may be challenging due to competition and limited seats. The non-residential campus for students and faculties can also pose challenges in terms of maintaining a sense of community and engagement. The absence of a cafeteria on the college premises can inconvenience students and faculty, impacting their overall experience.

The lack of advanced facilities for differently-abled students can hinder their access to education and opportunities. A clear credit transfer policy is needed to ensure that students can easily transfer credits between programs and institutions.

Sustainability is another challenge, as the institute must ensure that its operations are environmentally friendly and socially responsible. The ambience of classrooms and laboratories, as well as cleanliness and sanitation, are also important factors that can impact the overall learning experience.

Upgradation of faculty's skills is necessary to ensure that they are equipped to deliver high-quality education. Strengthening alumni connect can also be challenging, as it requires ongoing effort and resources.

Several faculty positions being on an ad-hoc basis can impact the stability and continuity of the academic

programs. The absence of a hostel facility for students can also be a challenge, especially for out-of-town students.

Ensuring a good cafeteria facility is important for the overall well-being of students and faculty. The presence of virtual university and other university competitors can also pose challenges in terms of attracting and retaining students.

Insufficient enrollments in PG/PhD programs can impact the institute's revenue and academic standing.

The institute also faces challenges in attracting consultancy and funded research projects, which are important for enhancing its reputation and resources.

Implementing a monitoring system to track progress and identify areas for improvement is essential for addressing these challenges effectively.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

Engineers & Technologists form the backbone of any nation's economic development. Today's engineering graduates are facing numerous challenges like rapid change in technologies, emergence of new career opportunities and social/environmental concerns. Engineers work for 40-50 years of their life. In view of these challenges, at S.P.I.T. the objective of curriculum design for UG, PG and Ph.D. levels is to create an all-round person and finally develop professionals with competencies which is clearly stated in the Vision and Mission Statements along with the quality policy and objectives of the institute. **S.P.I.T. focus on "How to learn?" rather than "What to learn?"**. It believes in **multidisciplinary** exposure to the learners, yet ensuring growth in one vertical, cherishing human sensitivity and empathy. The institute uses the **academic freedom conferred by autonomy** to tune the curriculum to the present needs after detailed deliberations and discussions with senior experts from leading academic institutions, Industry Experts and Alumni. It implements UGC's CBCS , AICTE Model Curriculum (January 2018), NBA directives for Outcome-Based Education (OBE) and Latest syllabus for national competitive examinations like GATE.

The curriculum aims at development of an **all-rounded personality**. The curriculum design follows holistic approach of education, **ensures strong science, mathematics foundation and program core**, develops expertise in domain vertical though sequel of Programme & Open electives, ensures significant exposure of additional discipline through **"Minor"** program, collaborates outside world for the imparting relevant skills through **"SCOPE"** courses, challenges good learners through **"Honors"** evaluation, and systematically develops soft skills, and social, physical, mental, spiritual personality through carefully articulated Liberal Learning and Humanities sequels. It is aggressive model of learning by doing, offering **full semester industry and research internship** to interested students.

From the inception of its autonomous status in AY 2017-18 till now, the institute has always taken visionary steps to design its Liberal and Holistic **"Pi-Model"** of Engineering Education 158-Credit based curriculum and allied activities, integrating cross-cutting issues relevant to professional ethics, gender, human values, and environmental sustainability in enriching its goals exactly in pursuit of objectives laid down in **NEP-2020** aiming at development of an **all-rounded personality**.

Teaching-learning and Evaluation

Institute admits the top of the class students in the State, strictly on the merit basis, as per the guidelines of the State. Institute observes 100 % admissions from past several years to its undergraduate programs. Students are regularly oriented through various orientation programs. **All the academic and non-academic events for the year are preplanned and published in the academic calendar.** Verification of Academic Course Plan and its adherence in every semester are audited by various ways such as internal audit through Dean, Q&A and external audit.

Student centric methods to enhance student involvement as a part of participative learning and problem solving methodology are practiced regularly. All faculty members are required to make daily and weekly lecture plans at the beginning of every semester. Various learning platforms are created for effective implementation of teaching learning process as per the quality standards. **Moodle and various other online platforms are used for continuous internal assessment.** Teaching methods like debates, laboratory experimental learning, and project based learning, case studies, learning through competitions, self-learning through MOOCs, and presentations for project work are practiced regularly.

The institute has the mechanism to identify **the advanced and slow learners** through a continuous evaluation process. Advanced learners are encouraged to participate in national level contest, pursue research internships. The Institute strongly believes in improvement of the slow learners. **Slow learners are assigned bright students to have one to one learning. Faculty members conduct remedial coaching.** Institute also has professional counselor in case of psychological problems. To implement the various academic activities and to ensure the success of the students, the institute has qualified, experienced and committed faculty and staff members. The faculty and staff members are trained frequently for performance excellence and meeting the requirement of stakeholders' w.r.t. academics and other support services meant for students. The institute has a well established system for direct and indirect assessment. Institute has a well defined examination procedure of continuous internal assessment. **The institute observes total transparency in evaluation. The answersheets of all examinations are shown to the students.**

Research, Innovations and Extension

The institute has developed research centers for Ph.D. courses in four programs with ICT facility, and **incubation center.** R & D center with ICT facility has plagiarism software which helps to check original content of research work. **Institute organizes international conference once in two years.** Ph.D. scholars present their work as posters in the Colloquium event. Prize money and certificates are awarded for both undergraduate and Ph. D. scholars to motivate them.

Institute has created a stable ecosystem for innovation which includes establishing **E-Cell**, an Innovation and Entrepreneurship Center, having a robust process for filing patents for the work done by students and a vibrant Incubator. Innovation and Entrepreneurship Development Centre. Institute was funded by the Department of Science and Technology, New Delhi for five years with a total sanctioned grant of Rs 44 Lakhs. The goal of IEDC is to select students with good product ideas, train them towards preparation of Business plan and company formation and patent drafting. Institute runs a unique workshop on Intellectual Property known as Patent Drafting. Funding is given to select few to file their patent.

Institute in tune with its Vision, has nurtured an Incubation initiative since 2009. Institute has an Incubator which has its affiliation with DST, Govt. of India. Institute has **adapted policy of deferred placement** wherein

students can opt to join our Incubator with their start-up ideas and are given a 2 years' time to work on it that motivate our students to become Entrepreneur. Our most successful incubate till date is Mallar Inc which was acquired by Flipcart in 2011.

In accordance with our vision, students should become graduate engineers with "social sensitivity"; Institute runs the activities under the program called **"SEVA – Social Education through Various Activities"**. The institute works with NGO, the government's "Swachha Bharat Abhiyaan" and recognized by UN on World Environment Day in 2017.

In collaboration with SPJIMR and Abhyudaya-an NGO, our students extend help to underprivileged children, by tutoring them for subjects like Mathematics, English and Science etc.

Infrastructure and Learning Resources

The institution is situated in the midst of a **lush green holy campus spread over 47 acres** and it provides a conducive learning environment. The infrastructure facilities are further classified under administration, academics and amenities/support facilities. Therefore, the institute has large spacious ICT enabled classrooms, laboratories, tutorial room, with high ceiling constructed with acoustic considerations in all the buildings are well ventilated.

The entire Institute is under CCTV surveillance. The ground floor of the main building houses the Administrative office, Principal's office & Board Room, and Examination Cell.

Ground floor houses a fully ICT equipped Seminar hall with a seating capacity of about 200 with Public Address System which is one of the most demanding facilities for conducting F.E. admission process as well as any academic activities. Training and Placement office on the First floor with Interview rooms, Group Discussion Room and a Seminar Hall.

At strategic locations fire-extinguishers are mounted and the staff have been trained to use them. First-aid kits are available in the laboratories and office, as well as a pair of stretchers for medical emergencies.

The Administrative office, Examination Cell activities are conducted through proprietary software. Accounts section use Tally for maintaining Institute accounts.

Library re-sources are made available at departmental as well as central level to all the students to meet the requirement of regulatory and affiliating body. The institute widely uses the digital platforms for learning resources such as NPTEL and various databases available from leading publication houses relevant to the engineering programmes. Library is Wi-Fi enabled with collection of more than 20000 books, subscribed to National and International periodicals along with several online journals. The library has Institutional membership of British Council Library, subscribed IEEE ASPP and ACM digital Library. Easy access is possible using SLIM library management software. Infrastructural facilities and the learning resources available at the institute even after regular college timings.

SPIT has shared facilities like 3 sports grounds, Yoga center, Nursery, Natures club, Temple, Bhavan's cultural center and are maintained by Campus Administration. Institute has a full time Maintenance Superintendent and electrician.

Student Support and Progression

To ensure the effective communication for academic support, all the relevant information and schedules are put on the notice board and Institute website. The orientation is also carried out for detailing of the activities to be conducted during the semester through Semester Orientation Programme. **The co-curricular and extra-curricular events are conducted with certain themes with well-defined objectives and outcomes which help the institute to measure the attainment of programme educational objectives.** The academic progress of the students on a continuous basis by notification of their performances and attendance holding the meetings with parents. **The institute has a well established mentoring system for student performance, counseling and guidance records.**

For the welfare of the students two committees are formed namely, Student Welfare Committee which is comprising of Faculty members and Student Council comprising of student members. Institute has a well documented Student welfare policy which narrates various empowerment and support given by the institute to various activities of the students. **A regular budget of 1% is approved by the Governing Body towards students support and progression.** institution encourages their participation in the professional activities, participation in the technical competitions, publications, filing patents, becoming member of the professional societies etc.

To provide natural justice to the students, the institute has a **Grievance Redressal Committee** and to safeguard the interest of the women faculty, staff and students. The institute has a **Women Development Cell**. Other institute committees include: Anti-Ragging Committee, Unfair means Committee and other student relevant committees. Training & Placement cell facilitates internship as well as guidance on examinations such as GRE, TOFEL and GATE.

Institute also has a registered **Alumni association**. Alumni association regularly contributes towards financial assistance for students' educational needs. The alumni members are also involved in curriculum design. Alumni members are in every department's Board of Studies (BoS). Several Alumni engage current students by delivering guest lecturers in their respective domains.

Governance, Leadership and Management

The institute's vision to provide high quality education promoting Indian values and ethos with global competency lies in the philosophy of Bhartiya Vidya Bhavans and in turn founder Dr. K. M. Munshiji's statement that ***Education would fail ignominiously in its objective if it manufactures only a robot and called him an economic man stressing the adjective economic and forgetting the substantive man.....***". The entire governance process, execution process reflects the core values that every Bhavanite must practice in order to attend the Institute's and Founder's vision. **The institute organogram has a well defined structure with roles and responsibilities.**

The Governing Board (GB) has been formed in accordance with the UGC norms to oversee the institute's operations and offer guidance for its effective functioning. The GB meets regularly to evaluate the institution's endeavors, strategic plans, and provide guidance for continuous improvement, taking into account its vision-mission. The Principal has been empowered fully for the functioning of the institute with regard to curricular, co-curricular and extra-curricular activities. **The institute observes a clear delegation of the financial powers, and decentralization of the authorities. The institute also observes rotation policy for various functionary positions such as CoE, HoDs and Deans.**

Institute observes a systematic process in articulation and approval of the annual budget. Institute has a constitutional financial committee which goes through the budget meticulously and gives its recommendations to the Governing Body. The Governing Body has members appointed from the Trust, representatives of the Mumbai University and Govt of Maharashtra, and eminent faculty from IIT Bombay. Institute follows all the norms and regulations of AICTE/Mumbai University and Government of Maharashtra. **All faculty members and staff draw 7th pay salaries** with present DA rates accepted by the State Government.

There are several committees like students' welfare committee, Library committee, Purchase committee/Procurement Cell, R & D Cell, E-cell, IEEE-student Chapter, CSI-student Chapter. Each of them has representatives of either faculty or students or both. All the bodies prepare their working calendar and hold activities throughout the year.

Institutional Values and Best Practices

Bharatiya Vidya Bhavan's S.P.I.T. has a set of institutional values which includes **integrity, excellence, social sensitivity and globalization**. Every stakeholder of the institution practices these values by incorporating them in every aspect of its functioning including academics, research, and administration.

The Institute believes in equality, irrespective of gender, all the staff and students are treated equally. All processes followed in the Institute make sure that there is no biased behavior with the women/men in the Institute. The gender audit is regularly conducted by the S.P.I.T. Internal Quality Assurance Cell (IQAC). The institution has several quality initiatives for green campus waste management, energy conservation, usage of renewable sources of energy and clean environment which are regularly audited by the institution. The institute always conducts awareness programme related to the environment such as tree plantation, pollution control, Ganapati Visarjan in artificial ponds created by BMC, etc.

The best practices of the institute include constant innovations in curriculum design, deployment and evaluation. **It has unique grading system. First time in the country, it has introduced a 6-month research internship for its undergraduate students. It has a unique practice of providing smooth academic transition for the lateral entry students. It arranges special examinations for the challenged students. It conducts regular internal and external audit, question paper audit etc to ensure the quality in academics. It has a well thought, faculty appraisal which is superset of AICTE/UGC/Govt. of Mah. appraisal systems.**

The institute practices the right teaching approach such that it can inspire students to learn and grasp new concepts quickly, increase their interest in the course, and help them develop critical thinking skills. Implementation of Innovative TLE practices to engage the present day learners while providing equal opportunities to intellectual capabilities of all learners through Adaptive Evaluation. The evidence of success of these best practices are various awards/achievements received to students and faculty, excellent placement, and students opting higher studies.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	BHARATIYA VIDYA BHAVAN'S SARDAR PATEL INSTITUTE OF TECHNOLOGY
Address	Bhavans Campus, Munshi Nagar, Andheri(West)
City	Mumbai
State	Maharashtra
Pin	400058
Website	www.spit.ac.in

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	Bhalchandra Nemichand Chaudhari	022-69846927	9423582027	-	principal@spit.ac.in
Professor	Pooja Raundale	022-69846996	9322020589	-	poojaraundale@gmail.com

Status of the Institution	
Institution Status	Private and Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minority institution	No

Establishment Details	
Date of Establishment, Prior to the Grant of	07-06-1995

'Autonomy'				
Date of grant of 'Autonomy' to the College by UGC		06-04-2017		
University to which the college is affiliated				
State	University name	Document		
Maharashtra	University of Mumbai	View Document		
Details of UGC recognition				
Under Section	Date	View Document		
2f of UGC	09-06-2015	View Document		
12B of UGC	09-06-2015	View Document		
Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)				
Statutory Regulatory Authority	Recognition/Approval details Institution/Department programme	Day,Month and year(dd-mm-yyyy)	Validity in months	Remarks
AICTE	View Document	02-06-2023	12	Recognition by AICTE year on year basis

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	Bhavans Campus, Munshi Nagar, Andheri(West)	Urban	47	10000

2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Programme/Course	Duration in Months	Entry Qualification	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BTech,Computer Department,Computer Engineering	48	HSC MHT CET	English	240	240
UG	BTech,Electronics And Telecommunication Department,Electronics and Telecommunication Engineering	48	HSC MHT CET	English	120	120
UG	BTech,Computer Science And Engineering,Computer Science and Engineering	48	HSC MHT CET	English	120	120
PG	Mtech,Computer Department,Computer Engineering	24	BTECH GATE	English	18	4
PG	Mtech,Electronics And Telecommunication Department,Electronics and Telecommunication Engineering	24	BTECH GATE	English	18	1
PG	MCA,Computer Science And Engineering,Computer Application	24	BTECH GATE	English	60	60

Doctoral (Ph.D)	PhD or DPhil ,Computer D epartment,Co mputer Engineering	36	MTECH	English	30	3
Doctoral (Ph.D)	PhD or DPhil ,Electronics And Telcom munication D epartment,El ectronics and Telecommun ication Engineering	36	MTECH	English	20	0
Doctoral (Ph.D)	PhD or DPhil ,Electronics And Telcom munication D epartment,El ectronics Engineering	36	MTECH	English	10	0
Doctoral (Ph.D)	PhD or DPhil ,Computer Science And Engineering, Computer Application	36	Any Graduation MAHMCA CET	English	10	1

Position Details of Faculty & Staff in the College

Teaching Faculty												
	Professor				Associate Professor				Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	12				19				52			
Recruited	4	1	0	5	9	5	0	14	16	23	0	39
Yet to Recruit	7				5				13			
Sanctioned by the Management/Society or Other Authorized Bodies	1				0				21			
Recruited	1	0	0	1	0	0	0	0	11	9	0	20
Yet to Recruit	0				0				1			

Non-Teaching Staff				
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				23
Recruited	15	8	0	23
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				18
Recruited	11	7	0	18
Yet to Recruit				0

Technical Staff				
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				15
Recruited	15	0	0	15
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				5
Recruited	5	0	0	5
Yet to Recruit				0

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	5	1	0	6	5	0	6	3	0	26
M.Phil.	0	0	0	0	0	0	0	2	0	2
PG	0	0	0	3	0	0	10	18	0	31
UG	0	0	0	0	0	0	0	0	0	0

Temporary Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	1	0	0	0	0	0	5	0	0	6
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	11	9	0	20
UG	0	0	0	0	0	0	0	0	0	0

Part Time Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/LLD/DM/MCH	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 engaged with the college?	Male	Female	Others	Total
	11	8	0	19

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	375	0	0	0	375
	Female	105	0	0	0	105
	Others	0	0	0	0	0
PG	Male	48	6	0	0	54
	Female	9	2	0	0	11
	Others	0	0	0	0	0
Doctoral (Ph.D)	Male	0	0	0	0	0
	Female	4	0	0	0	4
	Others	0	0	0	0	0

Provide the Following Details of Students admitted to the College During the last four Academic Years					
Category		Year 1	Year 2	Year 3	Year 4
SC	Male	28	26	20	17
	Female	8	10	7	7
	Others	0	0	0	0
ST	Male	11	10	12	5
	Female	5	10	1	4
	Others	0	0	0	0
OBC	Male	33	38	29	28
	Female	14	19	10	8
	Others	0	0	0	0
General	Male	237	218	153	178
	Female	45	56	43	34
	Others	0	0	0	0
Others	Male	61	56	48	40
	Female	32	37	24	17
	Others	0	0	0	0
Total		474	480	347	338

2.3 EVALUATIVE REPORT OF THE DEPARTMENTS

Department Name	Upload Report
Computer Department	View Document
Computer Science And Engineering	View Document
Electronics And Telcommunication Department	View Document

Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:	Guided by the principles and teachings of Dr. K. M, Munshiji the great freedom fighter of India, the institute strives to provide holistic multidisciplinary education to empower learners with the required
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	<p>academic, vocational, and soft skills that are rooted in the philosophy of Bhartiya Vidya Bhavan's to incorporate Indian cultural values and meet the needs of the country as well as transform learners into responsible Global Citizens. The institute Vision/plan "To build a renowned institute which will produce graduate engineers with global competency and social sensitivity. Being an empowered autonomous institute affiliated to University of Mumbai, the institute uses the right of academic flexibility to tune the OBE based Interdisciplinary curriculum as per UGC, AICTE guidelines in consultation with BoS and AC. Nevertheless, in order to be prepared and fulfill the objectives of NEP, the institute has already prepared the roadmap for NEP and created the required infrastructure. The courses offered by the institute are Choice Based Credit System (CBCS) and designed in such a way that students get maximum flexibility to choose elective courses. The faculty of the institute are already using innovative pedagogy methods and techniques like Blended learning and Smartboards/eLearning to provide augmented multidisciplinary learning experiences to our students. NEP related seminars and workshops are also organized by the institute. Faculty members are also provided opportunities to attend similar training, and seminars organized by other institutes. Extra-Curricular activities including NSS, NCC, Yoga, sports, cultural activities, music and performing arts are brought into Curriculum. The institute has also submitted the curriculum incorporating the features of NEP 2020 to UoM. To integrate all the programmes of the institute, the open electives, interdepartmental projects, research internship, and activities at incubation Center of the institute (SP-TBI), Product Development Centre (PDC) and find solutions for most pressing socio-economic issues as well as environment challenges.</p>
2. Academic bank of credits (ABC):	<p>The institution has started the initiative to register students on the ABC portal and provide the required data to University of Mumbai. The examination cell of S.P.I.T. along with HoDs of each department encouraged as well as mentored students to register on the ABC portal through various means, including notifications, emails, and ABC posters, resulting in 100% student registration on ABC portal. Faculty of the institute were also sent for training organized by</p>

	<p>the University of Mumbai and other institutes on ABC and NEP. The institution is affiliated with the University of Mumbai for the implementation of ABC to enable our students to avail the benefit of multiple entries and exit during the chosen programme. ABC will also enable students to acquire credits through National eLearning portals, such as SWAYAM, NPTEL, and V-Lab. The institute has already started abiding the guidelines and the academic program structures prepared by the institute in this regard is in alignment to the guidelines of UoM. Nevertheless, since the idea is also to empower the youth, the institute at its own level, has started an initiative to encourage students to enroll for relevant courses on these National eLearning Portals, which will arm them with the required skills and help them contribute to their self-development as well as meet the needs of the country. The faculty are also trained on curricular design and pedagogical approaches, particularly for online teaching learning, academic videos, e-Content development, experiential learning, development of assignments and assessments etc.</p>
3. Skill development:	<p>The NEP 2020 emphasizes skill development to prepare students for success in the modern world. Aligned with the vision of AtmaNirbhar Bharat, India aims for robust growth in various sectors, integration into global supply chains, and adoption of cutting-edge technology to achieve economic prosperity. Since, the institute offers professional engineering programmes in hardware as well as software domain, the curriculum includes courses with relevance to the Local, National, Regional and Global Developmental needs, the courses in the curriculum are having focus on employability, entrepreneurship, skill development offered by the institution, similarly all the programmes of the institute have components of field projects, research projects, and internships. Moreover, after the award of autonomy in 2017, the initiatives of the departments in line of skill development are transformed into a unique certification programme as Skill Certification for Outcome-Based Professional Education (SCOPE) and is also a copyright of the institute. SCOPE is a tool to enhance career prospects and orient learners towards self learning. It is a Cafeteria model with features of collaborative learning, blended learning and project based learning (PBL). Learners have</p>

	<p>freedom of choice to design their own combination of studies to get domain proficiency and these courses are demanded in the industry. Under this initiative, for the last five years, more than 2000 students have successfully completed certification under various multidisciplinary courses like Cyber-Physical Systems, Banking and Finance, etc. Secondly, the institute also encourages students to enroll for value added courses, post graduate Diploma Programmes offered by the institutions and online courses of MOOCs, SWAYAM/e-PG Pathshala/ NPTEL and other recognized platforms. where the students of the institution have enrolled and successfully completed during the last five year The institute's dedication to skill development aims to graduate students who are not just academically proficient but also skilled, adaptable, and prepared to make positive contributions to society. Through its proactive stance on skill enhancement and ongoing enhancement efforts, the institute serves as a model for others, demonstrating the significant impact of incorporating hands-on learning opportunities into students' educational experiences.</p>
4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):	<p>The institute also strives to provide holistic multidisciplinary education to empower the learners with the skills rooted in Indian ethos and culture. The medium of instruction in the institute is English. Some of our faculty members are fluent in other vernacular languages, such as Punjabi, Tamil, Malayalam, Gujarati, Bhojpuri, etc. and can cater to students with diverse linguistic backgrounds. Institute also conducts an awareness programme to spread the message of Indian ethos, equality and cultural diversity. Information on Indian Knowledge System (IKS) is disseminated on various platforms like Induction Programme, Liberal Learning Courses (LLC), etc. For instance, the institute conducts sessions on Ved Vedant during Induction Programmes conducted for every batch of fresh undergraduates. Similarly, as a part of LLC, a session on Ayurveda is conducted under the “Basic Cooking Course”. Similarly, a course on Indian Traditional Knowledge was floated for first year students as part of the curriculum. In the revised curriculum in line with NEP, Indian Knowledge Systems is floated as a mandatory credit course. Various languages like Tamil, Telugu and Kannada as well as Sanskrit are</p>

	<p>also floated as part of Liberal Learning Courses. These courses are planned in online mode. Educational camps and many social activities are arranged by the institute under NSS and Social Club in order to spread awareness of social issues.</p>
5. Focus on Outcome based education (OBE):	<p>Institute has adopted OBE in its teaching-learning process from 2010. Vision and Mission of the Department are framed inline with the Institute's Vision and Mission. Program Educational Objectives (PEOs) and Program Specific Outcomes (PSOs) are also framed by every department to achieve it's vision and mission. Course Outcome (CO) statements are framed for every course and are mapped to 12 Program Outcomes/Graduate Attributes (POs/GAs) given by NBA. The institute is practicing the student centric approach of OBE. Accordingly each faculty prepares a customized lesson plan with a clear definition of COs, POs and PSOs. Students are made aware of the various COs, and PSOs through the curriculum and orientation program. Attainment of COs is analyzed and assessed at the end of each semester. Due to continuous involvement of the teachers in implementation of OBE, many of the faculty have imparted training to teachers across the nation in the domain of OBE by successfully conducting FDPs and workshops. The institute still encourages its faculty to participate in any adequate training programs on different pedagogical approaches including technology-enabled teaching/learning to enhance the skills required in implementation of OBE. The Department Advisory Progress Committee (DAPC) checks the effectiveness of the teaching-learning process, attainment of POs and takes necessary actions for further improvement. The Internal Quality Assurance Cell of the institute also conducts Internal, External and Examination audits on a regular basis to check the effectiveness of OBE implementation and takes necessary actions for further improvement. The efforts of the institute in these regards are appreciated by accreditation authorities. Various programs of the institute were accredited consecutively by the National Board of Accreditation (NBA), New Delhi, during the years; 2013, 2017, 2020 and 2021.</p>
6. Distance education/online education:	<p>The institute is using innovative pedagogy methods and techniques like Blended learning and Smartboards/eLearning to provide augmented</p>

multidisciplinary learning experiences to students. All classrooms have projectors and Smartboards are installed in several classrooms. Through platforms like Google Classroom, the institution has seamlessly transitioned to a digital environment, creating a dynamic and interactive virtual classroom. The institute has also established a Digital Studio to develop e-content. During the Covid-19 Pandemic classes as well as assessments were conducted online by all the teachers across the institute. Each faculty of the institute was provided with a Laptop, teaching aids along with a G-suite to empower him/her for online teaching. The e-content developed by the teachers are now available online and are used as prerequisite for teaching as well as to enhance the laboratory experiences of the students. The institute has used a Proctor tool integrated with Moodle for online assessment during End Semester Examination. Both teachers and students were given training to use online teaching platforms. The institute has all the required infrastructure and resources to offer distance education and online education. Robust internet connectivity ensures uninterrupted access to online resources, enabling students to participate in virtual classes and engage in independent research. The institute has facilitated extensive digital resources as evident through vast array of e-books, research papers, journals, and other online academic materials, fostering self-directed learning and exploration beyond the traditional classroom. In view of the constraints imposed by paucity of time and resources to expose the students to all the facets of a well rounded individual, Massive Open Online Courses (MOOC) courses offer the best solution in terms of accessibility, flexibility, affordability, and sheer variety, and offer a plethora of benefits for students. They empower students to develop valuable skills, advance their careers, and engage in lifelong learning. The institute is encouraging the students to opt MOOC courses as a part of curriculum. Accordingly, several students have undergone MOOC courses like courses on Humanities and Social Sciences under Open Electives, as well as for students who are on 6-months long industry internship. This initiative of the institute is recognized by SWAYM-NPTEL and the institute is declared as a valuable Local Chapter with a rating AA for the academic year 2022 and 2023. The

institute is also exploring the possibilities to start distance education with institutes like Yashwantrao Chavan Maharashtra Open University, IGNOU etc.

Institutional Initiatives for Electoral Literacy

1. Whether Electoral Literacy Club (ELC) has been set up in the College?	According to the guidelines of Election Commission of India, Systematic Voter Education and Electoral Participation (SVEEP) programme has been started. The motto behind SVEEP is to introduce students to the election process, to encourage them to register their names in the voter list, to encourage students to participate in the voting process and make them aware about democracy. For this, the institute has formed the Electoral Literacy Club (ELC). This club was constituted on 31st Aug 2021. The constitution of the ELC consists of Prof. Sheetal Chaudhari as the Nodal Officer/Guide along a total a group of 13 students catering across all the UG Departments and Classes of the institute and assigned different roles and responsibilities as Co-ordinator, President and Vice-President and Students Representatives. One of the primary objectives of the club is to sensitize the student as well as community around about democratic rights which includes casting votes in elections.
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. The students' coordinator and coordinating faculty members were appointed by the College: The ELC is functioning with the following objectives: ? To create awareness and interest among faculties and students through awareness activities and camps. ? To educate the targeted populations about voter registration, electoral process and related matters. ? To familiarize the targeted populations with EVM and to educate them about robustness of EVM and integrity of the electoral process using EVMs. ? To help the targeted unaware people understand the value of their vote to ensure that they exercise their suffrage right in a confident, comfortable and ethical manner. ? To facilitate voter registration for its eligible members who are not yet registered. ? To develop a culture of electoral participation and maximize the informed and ethical voting and follow the principle 'Every Vote Counts' and 'No Voter to be Left Behind'. ? To motivate the students to

	participate in the ELC activities.
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.	<p>From the inception of this club in the previous 2 academic year 2021-22 and 2022-23, the club has taken various initiatives which primarily include creating the awareness among the students of the institute including voter awareness campaigns, promotion of ethical voting. Secondly, under this club has also collected information about student's Voter ID card status, timely informed students to enroll their name in the voter list as well. The club has conducted various activities under this club which are listed as below in the table given. The institute has conducted these activities along with the S.P.I.T. IIC enhancing its reach. The club has also celebrated the events like enhancing participation of the under privileged sections of society especially residing at remote locations like villages in the district of Palghar district, Kokan, Maharashtra. This activity is better managed by ELC in association with a group of students who undergo NSS camps of 2-3 days long duration at such places as a part the credit course under Liberal Learning Courses. These group of students are also accompanied by Faculty coordinators and staff of the Institute. During these camps, apart from their other activities aligned NSS course, students interact with the village people, analyze the data related to number of males, female voters and specially 18 years age youngsters. They are cultured to be the registered voter by the way of such awareness camps followed by pledge to vote. Finally, the students also convey the report of such interaction to the administrative officer at village level like Gramsevak, Sarpanch or member of Grampanchyat to convey any difficulties of the villagers to cast their votes.</p>
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.	<p>Being a technical institute, the faculty and students have always tried best to address the issues in the various domains emphasizing social sensitivity. Therefore, in the previous few years institute has conducted surveys and identified scope to enhance the features of the existing voting system. Students have majorly focused on using the cutting-edge tools and technology to provide the solutions. The outcome of these efforts is presented in the form research based Mini and Major Projects and these are presented in the form of a publications during Technical Paper Presentations at the institute level.</p>

	The research papers are also in the process of submission to conference or Journal in the relevant domain. Following as the list of the same.
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.	The students above 18 years age are cultured to be the registered voter by way of awareness camps and pledge. The Head of the institute encourages students to enroll through various means, including notifications, and emails to register eligible students as voters. The notice regarding this is conveyed as an office order. Please refer the following link for the details of Electoral Literacy Club (ELC): https://www.spit.ac.in/electoral-literacy-club/

Extended Profile

1 Students

1.1

Number of students on rolls year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
1641	1524	1371	1323	1313
File Description		Document		
Institutional data in the prescribed format (data		View Document		

1.2

Number of final year outgoing students year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
372	338	375	359	367
File Description		Document		
Institutional data in the prescribed format (data		View Document		

2 Teachers

2.1

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

2022-23	2021-22	2020-21	2019-20	2018-19
68	65	64	76	86
File Description		Document		
Provide Links for any other relevant document		View Document		
Institutional data in the prescribed format		View Document		
Certified list of full time teachers		View Document		

2.2

Total number of full time teachers worked/working in the institution (without repeat count) during last

five years:

Response: 98

File Description	Document
Provide Links for any other relevant document	View Document
Institutional data in the prescribed format	View Document

3 Institution

3.1

Total expenditure excluding salary year wise during the last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
819.09	584.98	396.41	503.95	614.78

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curriculum Design and Development

1.1.1

Curricula developed and implemented have relevance to the local, regional, national, and global developmental needs, which is reflected in the Programme outcomes (POs) and Course Outcomes(COs) of the Programmes offered by the institution

Response:

Sardar Patel Institute of Technology, considering the need to enhance the quality of technical education to enable graduates to successfully meet the challenges of the 21st century, aims at designing a curriculum scheme that is relevant to society and is qualitative in contemporary terms. It follows a holistic approach to education, ensures a strong science and mathematics foundation, develops expertise in domain verticals through the sequel of electives, and ensures significant exposure to additional disciplines through “**Minor**” certification programs.

Curriculum design aims to develop engineering graduates with competencies, intellectual skills, and knowledge to address challenges like rapid technological advancements and social/environmental concerns. The curriculum aims at **holistic development** of the learners as envisaged by the **NEP-2020**. It has sequel of courses from humanities, open elective courses offering interdisciplinary courses and inclusion of **liberal learning courses (LLC)** under the baskets of **SEVA/SATVA** courses. These courses are related to Sports, Culture, Education, Social connect, Physical development, Mind development, Philosophy, Literature etc. Every Semester more than **25 LLC** Courses are offered to the students.

Thus, the curriculum at SPIT aims at producing all rounded graduates with deep domain expertise, awareness about Industrial needs and having added expertize in the other domains in the form of minor certification. The curriculum makes sincere attempts in developing emotional quotient, physical quotient and spiritual quotient besides developing intellectual quotient.

The scheme is developed in accordance with AICTE and UGC guidelines, and it also fulfils the Program-Specific criteria for curriculum development stipulated by **IEEE, ACM, and CSI**. Along with an emphasis on the core domain, the scheme also offers a wide range of electives. There is a provision for research (6th semester) / industry internship of 6-month duration (8th semester), for interested students. The curriculum scheme is prepared after detailed deliberations, associating senior experts from leading academic institutions in the country, and engaging various stakeholders. It is expected that this scheme will evolve and significantly improve in the years to come. Particularly increasing the number of elective courses offered under **Life, Literature, and Culture (LLC)** as a part of credit courses, which are in line with the **National Education Policy 2020**.

The curriculum focuses on preparing students for graduate attributes defined by the National Board of Accreditation. The approach to curriculum of UG programs at S.P.I.T. call for the objectives like Preparation, Core Competence, Breadth, Professionalism and Academic Bank of Credit (ABC).

The curriculum design process involves stakeholder feedback, including student, alumni, and industry feedback, to ensure the department's vision and mission are achieved. It focuses on career development, employability, and entrepreneurship. The courses are identified, and the draft syllabus is presented at the departmental level. The draft is then put before the **BOS, Academic Council, and Governing Body** and finalised upon approval. The attainment of outcomes is audited by **IQAC**. The revision or enrichment of the curriculum is carried out based on the attainment of CO, PO, and PSO. It also ensures the fulfilment of norms set by AICTE and different professional bodies over time.

File Description	Document
Upload Additional information	View Document

1.1.2

The programmes offered by the institution focus on employability/ entrepreneurship/ skill development and their course syllabi are adequately revised to incorporate contemporary requirements

Response:

The focus of curriculum design at S.P.I.T. is on making the students ready to work in the **industry**, as per the requirements of the industry. The institute has started many such initiatives by making provision of such courses in the curriculum. Although many courses are included as mandatory (but choice based), few are optional (over and above the credit requirements). In the 2017 iteration of the curriculum, the institute started with **SCOPE** (Skill based Certification in Outcome based Professional Education). These sequel courses were conducted in collaboration with industries so as to train the students from an industry perspective. One such effort was to offer a **Semester long industry internship** in the 8th semester. In the 2019-iteration **research internship** of 6 months (in the 6th semester) is added to it. Both the internships are credit based. Interested students can opt for it in lieu of the credit courses. The institute regularly arranges seminars/talks from industry experts to build awareness of work culture in corporate life.

To impart the skills, the institute has introduced skill base courses such as "Activity based liberal learning, Courses (LLC). Students choose 6 courses (1 credit each) from the basket of 25+ courses under LLC. Apart from technical skills, other skills are developed through a series of courses from **Humanities and Social Sciences and Management** disciplines such as Law, Psychology, Finance, Languages (German, French), etc. Students are trained to acquire leadership and communication skills through various cultural/technical activities. Students are motivated to run the startups by offering technical/financial support. Students are mentored towards entrepreneurship by the **SPTBI (Sardar Patel Technological Business Incubation)** centre. SPTBI has been started by SPIT through the funding received from **DST**.

While ensuring the focus of study on employability/ entrepreneurship/ skill development, the curriculum design committee keenly observes the credits assigned to such courses in their syllabi. In the present

curriculum, 68% (107) credits are assigned to the courses useful for employability. Apart from mandatory credits, there are 12 optional credits through minor certificate programmes that are useful towards employability. Learners are encouraged towards entrepreneurship by reserving almost 8% (12) of the mandatory credits (through choice based elective courses). Imparting the skills to the learners is done by means of 10% (15) credits to skill-based courses, which are choice-based courses.

File Description	Document
Upload Additional information	View Document

1.2 Academic Flexibility

1.2.1

Percentage of new courses introduced out of the total number of courses across all programmes offered during the last five years

Response: 27.48

1.2.1.1 Number of new courses introduced during the last five years:

Response: 233

1.2.1.2 Consolidated number of courses offered by the institution across all Programmes (without repeat count) during the last five years :

Response: 848

File Description	Document
Subsequent Academic Council meeting extracts endorsing the decision of BOS	View Document
Minutes of Board of Studies meeting clearly specifying the syllabus approval of new courses	View Document
Institutional data in the prescribed format (data template)	View Document

1.3 Curriculum Enrichment

1.3.1

Institution integrates cross-cutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability and other value framework enshrined in Sustainable Development Goals and National Education Policy – 2020 into the Curriculum

Response:**Human Values:**

The institute introduced a series of Humanities and Social Sciences (HSS) courses as choice-based credit courses. It consists of law, psychology, languages, and finance courses. Any student who wants to take courses other than these can take the courses from **NPTEL in the HSS** or Management discipline. The institute also regularly conducts seminars on human values and ethics topics.

The institute runs several skill-based courses under the "Life Literature and Culture (LLC)" category. LLC consists of more than 25 courses conducted every semester, and students earn six credits by taking a total of six courses from within these activity-based courses, to name a few: Yoga Vidya, Physical Fitness, Self-Defence, Music Composition, Kathak Dance, Fire Safety, etc.

Professional Ethics:

The institute is committed to cultivating professional ethics through various courses. The courses below describe professionally accepted personal and business behavior standards, values, and guiding principles often needed to perform job functions in professional organisations with sound and consistent ethical principles.

? Technical Paper Writing

? Jeevan Vidya

? Indian Knowledge System

? IPR and Patents Drafting

? Organisational Behaviour

? Project Management

Environment and Sustainability:

The institute values environmental, ethical, cross-cultural, and historical contexts, fostering an understanding of the connections between human and natural systems. This approach helps students explore ecosystems and other environmental factors. It operates an online course center in collaboration with the Indian Institute of Remote Sensing, ISRO Dehradun, and has initiated a chapter on fire and safety, ensuring all necessary approvals are obtained. The institute encourages students to enroll in various **NPTEL** courses focused on environment and sustainability, such as "Climate and Earth Science" and "Biology for Engineers." The new curriculum, following the NEP-2020 recommendations, includes a first-year course on Environmental Science.

Gender Equality:

The institute addresses the global issue of gender equality by accommodating discussions regarding the same in various subjects oriented towards human values. As an outcome of the same, gender equality

becomes evident by the number of female students as well as faculty members in various committees. Many female students are class representatives, hence ensuring equal representation in the student council. As a step towards gender equality, many women faculty are in administrative posts. Almost every committee, such as the Governing Body, Academic Council, etc., has female representation. The placement record of female students is encouraging. The Women's Development Cell ensures women's safety on campus. At present 50% Heads of Departments are women, 25% Deans and Women, Registrar is women, 50% faculty members are men and more than 50% women faculty members are Ph.D. or pursuing Ph.D. Institute has an encouraging policy for woman faculty pursuing Ph.D. program.

Since gaining autonomous status in AY 2017-18, the institute has consistently crafted its curriculum and activities to include key issues like professional ethics, gender, human values, and environmental sustainability, aligning with the goals outlined in NEP-2020. The institute has also developed a new curriculum draft in accordance with the NEP-2020 policy and is awaiting approval from the University of Mumbai.

File Description	Document
Upload Additional information	View Document

1.3.2

Number of certificate/value added courses/Diploma Programmes offered by the institutions and online courses of MOOCs, SWAYAM/e-PG Pathshala/ NPTEL and other recognized platforms (without repeat count) where the students of the institution have enrolled and successfully completed during the last five years.

Response: 339

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 (data template)	View Document
Evidence of course completion, like course completion certificate etc	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

1.3.3

Percentage of programmes that have components of field projects / research projects / internships during the last five years.

Response: 100

1.3.3.1 Total Number of programmes that have components of field projects / research projects / internships (without repeat count) during the last five years

Response: 5

1.3.3.2 Total Number of programmes offered (without repeat count) during the last five years

Response: 5

File Description	Document
Sample Internship completion letter provided by host institutions	View Document
Sample Evaluated project report/field work report submitted by the students	View Document
Provide the relevant information in institutional website as part of public disclosure	View Document
Program and course contents having element of field projects / research projects / internships as approved by BOS	View Document
Institutional data in the prescribed format (data template)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

1.4 Feedback System

1.4.1

Structured feedback for curriculum and its transaction is regularly obtained from stakeholders like Students, Teachers, Employers, Alumni, Academic peers etc., and Feedback processes of the institution may be classified as follows:

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
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: 100

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
420	420	300	300	300

2.1.1.2 Number of sanctioned seats year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
420	420	300	300	300

File Description

Document

Provide the relevant information in institutional website as part of public disclosure

[View Document](#)

Institutional data in the prescribed format (data template)

[View Document](#)

Final admission list as published by the HEI and endorsed by the competent authority

[View Document](#)

Document relating to sanction of intake as approved by competent authority

[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: 86.83

2.1.2.1 Number of actual students admitted from the reserved categories in the first year of the programme year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
99	113	79	69	62

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
117	117	84	84	84

File Description	Document
Provide the relevant information in institutional website as part of public disclosure	View Document
Institutional data in the prescribed format (data template)	View Document
Final admission list indicating the category as published by the HEI and endorsed by the competent authority.	View Document
Copy of the letter issued by the 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

2.2 Catering to Student Diversity

2.2.1

The institution assesses the learning levels of the students and organises special Programmes to cater to differential learning needs of the student

Response:

The institution thoroughly assesses the learning levels of students throughout their course and organises special programs/sessions for advanced learners and slow learners.

Process to encourage advanced learners:

1. Advanced learners are identified from their previous results, class tests, class interactions,

internal/mid/end-semester examinations, and laboratory work. Their participation in other co-curricular activities is also considered for the overall evaluation of their performance.

2. They are encouraged to participate in technical competitions and pursue internships. They can also avail Book bank facility.

Measures adopted for advanced learners:

1. Students are encouraged for internships during vacations in industries like Barclays, Credit Suisse, etc.
2. Students also pursue research internships at IIT Bombay, IIT Patna etc.
3. They are encouraged to perform and participate in more than the mandatory number of experiments in the laboratory.
4. They are given the opportunity to mentor slow learners helping them to take teaching assistantships when they go for higher studies.
5. Students are encouraged to come forward to plan and execute various activities, and participate in national-level contests to meet program outcomes.
6. They are encouraged to participate in
7. Advanced learners are encouraged to go through the self -study topics and “Honor” path.

Process for improving slow learners:

In every class 10 to 15 percent of students are usually found to be slow learners. The Institute strongly believes in the identification, encouragement and improvement of slow learners, The entire process is conducted regularly via various policies like:

1. Slow learners are identified from their previous results, class tests, class interactions, internal/mid and end-semester examinations, and laboratory work. Their participation in other co-curricular activities is also considered for overall evaluation of their performance.
2. Slow learners are assigned Senior bright students to have one-to-one learning so that they can avail some personal attention.
3. Faculty members also conduct remedial coaching and additional labs for them.
4. If any of them faces psychological problems in concentrating/understanding the course, they are advised to meet the college counsellor.

Measures adopted for slow learners:

1. Special attention is paid to slow learners by every teacher in the department. They are regularly mentored by teachers during laboratory sessions and mentor-mentee meetings.

2. Faculty members along with bright students from the third year and final year mentor weak students in their regular studies.

3. Faculty members organise remedial lectures for all slow learners in every subject. Remedial lectures are organised to clarify doubts and to improve performance. Poor performance due to frequent absenteeism is dealt with by sending mail to the parents. Appropriate counselling with additional teaching, eventually helps students to attend classes regularly.

4. If required, parents are informed/called to discuss the progress of the students. If required, a meeting between concerned students and the professional counsellor of the institute is also being arranged.

Laboratory:

Each class is divided into four batches of 18-20 students for each laboratory session allowing the faculty to give personal attention and cater to differential learning needs of the students.

File Description	Document
Upload Any additional information	View Document

2.2.2

Student - Full time teacher ratio (Data for the latest completed academic year)

Response: 24.13

File Description	Document
List showing the number of students in each of the programs for the latest completed academic year across all semesters	View Document
Certified list of full time teachers along with the departmental affiliation in the latest completed academic year.	View Document

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 experience and teachers use ICT- enabled tools including online resources for effective teaching and learning process

Response:

We believe in the adoption of student-centric methods to enhance their involvement as a part of Experiential learning, participative learning and problem-solving methodology. We organise role plays, , laboratory experimental learning, mini-projects, and case studies to improve participative learning practices.

Experiential Learning:

Stand-alone laboratory courses are added from the first year onwards. A redesigned assessment strategy is implemented for conducting experiments such as scientific observation, report writing, instructional material, assessment Rubrics, Hardware and software-based cutting-edge tools, and virtual and remote laboratories. To grow Interpersonal skills, soft skills, social awareness and emotional intelligence in all aspects of personality, many Seva/Satva courses are induced in the autonomous Curriculum. Institute has included learning through MOOC as a credit course for its M.Tech. Programs and B.Tech. Programmes.

Participative Learning:

Lectures are conducted more in the participative learning environment, where students come up with points for discussion on their own that are related to the topic. The IPR Cell at campus is formed to provide guidance, support, and resources to facilitate protection and deployment of intellectual property.

Problem Solving Methodology:

Project-based learning motivates students to learn actively, so it is implemented in some of the courses. Activities like Mini-projects, troubleshooting competitions, etc. are arranged frequently. Financial support is also provided to UG and PG students to benchmark their final year project work at various IEEE, Springer-based conferences.

ICT enabled tools:

Teachers at S.P.I.T. use ICT-enabled technologies to facilitate successful teaching and learning processes, in addition to conventional classroom teaching.

- Faculty uses many interactive methods for effective teaching such as PPT with animations, small Video clips, etc. To provide knowledge upgradation online, MOOC courses from NPTEL and Coursera are taken by students and faculty. Interactive smart board projectors are installed in every classroom and lab, and the campus has a high-speed Wi-Fi and wired internet facility. For information dissemination and assessment: YouTube links, Simulation tools, Virtual labs, online assessment tools like Mentimeter, conducting quizzes and laboratory submissions on Moodle, Google Forms etc. are followed. Research journals and eBooks are available online to our faculty and students.
- During lockdown, teaching was fully shifted to online mode. Faculty members used Google meet to deliver lectures and have used a variety of online technologies, such as the whiteboard in Microsoft Teams, the Jamboard in Google Meet, etc. to teach problem-solving subjects. Submission and grading of the laboratory activities were taken in open-source software like Google Classroom, Moodle etc. Activities such as Project presentations, Debates, Group discussions, Various initiatives like online guest lectures by the alumni, arranging games to break the boredom, to engage in experiential learning i.e. senior and junior students, along with teacher

shared their views on a topic, webinars, workshops. Faculty recorded lectures shared through YouTube or Google Drive.

- Institute strongly promotes learning from open learning platforms such as NPTEL/SWAYAM. Institute stands in the top 10 to 40 bracket of Institution with regards to successful completion of the NPTEL courses. Every semester there are more than 700.

File Description	Document
Upload any additional information	View Document

2.3.2

The institution adopts effective Mentor-Mentee Schemes to address academics and student-psychological issues

Response:

With the goal of supporting students' professional and personal development, the college stresses on frequent mentor-mentee meetings. Mentoring is a two-way relationship between an experienced, well-respected, and empathic individual (the mentor) and a less experienced individual (the mentee).

The main objectives of the Mentor-Mentee system are:

- ? To mentor students on academic and other related topics
- ? To see that there is an overall development of the students.
- ? To establish close contact with students
- ? To build students' confidence
- ? To monitor each student's progress thus providing career support and advice
- ? To make aware students of the various learning resources available locally

Mentoring is an effective way to bridge the gap between students and faculties. The allotment of students to the mentor is done at the beginning of every academic year for first-semester and third-semester students. The Mentor once allocated remains the Mentor till the student has passed out from the institute.

A form is floated to Mentees at the beginning of the semester where they will fill in all the details about them, including their academic performance in each semester to their participation in extracurricular activities. The institute encourages mentor-mentee meetings twice a semester. The attendance, agenda, and minutes of the meeting are documented. After the meeting, common issues are discussed and resolved with the help of the Head of the department. Mentors and mentees have healthy discussions

about the issues mentees face. Mentees reveal their difficulties to mentors regarding the stress they face, and then the mentor guides or counsels them. The institute has a professional Counsellor, if stress levels are higher and the issue cannot be handled by the Mentor then Mentee is advised to meet the Counselor. For personal issues, students approach the Mentor in person. The Mentorship Program is reviewed in the academic audit.

The mentor's role is not only to educate the student but to encourage the student to understand and learn by giving them the opportunity to ask questions. Each student has different learning abilities and unique learning opportunities, the institute strives to provide students with a social, educational, fun, and stress-free environment. The institute extends all possible help and assistance to improve the performance of the students.

A very special initiative wherein the senior bright student provides the mentorship to slow learners is planned and executed. The third-year bright students are assigned first year weaker students, whereas final year bright students are assigned with a group of second year academically weak students. All mentors are monitored by a faculty adviser who observes the mentors and their contributions and grade those mentors accordingly.

File Description	Document
Upload any additional information	View Document
List of Active mentors	View Document

2.3.3

Preparation and adherence of Academic Calendar and Teaching plans by the institution

Describe the Preparation and adherence to Academic Calendar and Teaching plans by the institution.

Response:

One faculty from each department has been selected as a member of the academic calendar committee. Schedule for classes, project evaluation dates, technical/cultural festival dates, conference dates (optional), sports day dates, annual day date, Mid-semester examination dates, mid-semester open-house dates, end-semester examination and open house dates, Parents' Day, alumni day, makeup examination and open-house dates, convocation date, etc. are taken into consideration while preparing the academic calendar. While this calendar is being planned, special care is taken to ensure a minimum of 14 weeks of TL (Teaching Learning). To compensate for public holidays, in the event of shortage, equivalent Saturdays are being used so that it adheres to the AICTE norm of 180 days in an Academic Year. Cultural festival dates are carefully decided by the Dean of Student Affairs with the student council members.

A separate academic calendar for the first-year students is planned as it must encompass the schedule declared by State CET which is varying in nature. This calendar is then approved by the Dean of

Academics.

Adherence:

All faculty members are required to make daily and weekly lecture plans at the beginning of every semester. All the attendance and lecture data are documented and preserved so that the faculty members can plan their lectures and practicals in advance in order to adhere to the academic calendar made at the beginning of every academic year.

Verification of the Academic Course Plan and its adherence in every semester are audited in various ways such as Internal audit through Dean Q&A and external audit through academic experts. The monitoring of adherence is done at the department level through H.O.D. At the department level, DAPC (Department Academic Program Committee) has been constituted to monitor the adherence to the academic calendar in totality.

File Description	Document
Upload any additional information	View Document

2.4 Teacher Profile and Quality

2.4.1

Average percentage of full time teachers appointed against the number of sanctioned posts year wise during the last five years

Response: 85

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
83	83	83	83	83

File Description	Document
Sanction letters indicating number of posts sanctioned by the competent authority (including Management sanctioned posts).	View Document
Provide the relevant information in institutional website as part of public disclosure	View Document
Institutional data in the prescribed format (data template merged with 2.4.3 and 2.4.4)	View Document

2.4.2

Percentage of full time teachers with Ph.D./D.Sc. / D.Litt./ L.L.D during the last five years

Response: 36.73

2.4.2.1 Number of full time teachers with *Ph.D./D.Sc. / D.Litt./ L.L.D* during the last five years

Response: 36

File Description	Document
List of faculty having Ph.D./D.Sc. / D.Litt./ L.L.D along with particulars of the degree awarding university, subject and the year of award per academic year.	View Document
Institutional data in the prescribed format (data template merged with 3.2.3 and 3.4.2)	View Document
Copies of Ph.D./D.Sc. / D.Litt./ L.L.D awarded by UGC recognized universities	View Document

2.4.3

Average teaching experience of full time teachers (Data to be provided only for the latest completed academic year, in number of years)

Response: 17.34

2.4.3.1 Total teaching experience of full-time teachers as of latest completed academic year

Response: 1179

File Description	Document
Institutional data in the prescribed format (data template merged with 2.4.1 and 2.4.4)	View Document

2.4.4**Percentage of full time teachers working in the institution throughout during the last five years****Response:** 69.77**2.4.4.1 Number of full time teachers worked in the institution throughout during the last five years:**

Response: 60

File Description	Document
Institutional data in the prescribed format (data template merged with 2.4.1 and 2.4.3)	View Document

2.5 Evaluation Process and Reforms**2.5.1****Average number of days from the date of last semester-end/ year- end examination till the last date of declaration of results during the last five years****Response:** 18.6**2.5.1.1 Number of days from the date of last semester-end/ year- end examination till the declaration of results year-wise during the last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
11	19	21	32	10

File Description	Document
Result Sheet with date of publication	View Document
Policy document on Declaration of results (if any)	View Document
Institutional data in the prescribed format (data template)	View Document
Exam timetable released by the Controller of Examination	View Document

2.5.2

Percentage of student complaints/grievances about evaluation against total number appeared in the examinations during the last five years**Response:** 0.11**2.5.2.1 Number of complaints/grievances about evaluation year wise during last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
2	0	6	0	0

2.5.2.2 Number of students appeared in the examination conducted by the institution year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
1635	1530	1406	1362	1360

File Description	Document
List of students who have applied for re-valuation/re-totaling program wise certified by the Controller of Examinations year-wise for the assessment period.	View Document

2.5.3

IT integration and reforms in the examination procedures and processes including Continuous Internal Assessment (CIA)/Formative Assessment have brought in considerable improvement in Examination Management System (EMS) of the Institution

Describe the examination reforms with reference to the following within a minimum of 500 words

- **Examination procedures**
- **Processes integrating IT**
- **Continuous internal assessment system**

Response:

The institute has a well-defined policy for e-governance in the areas of academic administration as well as Examination. The institute has an Examination Committee that takes the updates on examinations. The Internal Quality Assurance Cell has always suggested several reforms in the examination procedures and processes and conducts Examination audit once in an academic year.

1. The institute has adopted a hybrid grading policy from the academic year 2020-21, which is a combination of absolute and relative grading systems. It is relatively bounded but absolutely bracketed. The Department Academic Program Committee (DAPC) studies the marks obtained by the entire class and decides the score. AB grade will be awarded to that score. Let this score be SA. SA will not be more than the top score of the class. It can be equal to or lower than the top score. All the students who have scored more than SA will receive the AA (Top Grade).
2. SPIT conducted an online test using MOODLE (moodle.spit.ac.in) open-source platform for End-Semester Examination and the combined performance of In-semester evaluation and on-line test, in the proportion of (50:50) was used to grade the students in 2019-20.
3. The proctored online pen paper-based examination was conducted using MOODLE (moodle.spit.ac.in) open-source platform in 2020-21.
4. Along with the existing End Semester (Regular) examination, and Re-examination, Special Examination at the end of the academic year was introduced from the Academic Year 2022-23 which was approved in the 8th meeting of the academic council which took place on 3rd February 2023.
5. End semester examination (ESE) is a separate passing head. Students need to score a minimum passing mark of median/2 in ESE as well as minimum passing marks of median/2 out of 100 in the total marks of the respective course including theory ISE, Theory ESE, Laboratory ISE and Laboratory ESE.
6. Specially abled students are given grace marks up to 5% of the total marks in a semester across all courses in the semester. Earlier the University norms of 3% were being followed by the institute.
7. Research internship was introduced in semester VI from 2022-23.
8. JUNO software and VIVA software was used in the management of Examination System and declaration of results till May 2021. JUNO software was discontinued due to non-satisfactory performance of the software. Microsoft EXCEL is presently used to compile and declare results.
9. Since March 2020 onwards, a facility to pay Examination fees online has been initiated.
10. DSPACE, open-source software, maintained by SPIT library is the Institution Repository on the intranet on which notifications and results are shared with students and parents.
11. Faculty uses resources such as Google Classroom, and MOODLE for Continuous Internal Assessment.
12. At present, the ESE component is 60%. The In-semester evaluation has two components Mid-Sem-Exam and CE of 20% each. While ESE and MSE are centrally coordinated, teachers have freedom to select any combination of CE components such as attendance, assignment, group assignment presentations, capstone project, survey, literature survey, field studies, industrial visits etc.

File Description	Document
Upload any additional information	View Document

2.6 Student Performance and Learning Outcomes

2.6.1

The institution has stated learning outcomes (programme and course outcome)/graduate attributes which are integrated into the assessment process and widely publicized through the website and other documents and the attainment of the same are evaluated by the institution

Response:

The Vision and Mission of the department and the PEOs of the program are established in view of the societal requirements, ever-growing technical requirements of the programme, and most importantly by considering the Vision and Mission of the institute through a consultative process involving various stakeholders. Programme Outcomes (POs)/graduate attributes of each department are as suggested by AICTE/NBA and are discussed with all the stakeholders, whereas Programme Specific Outcomes (PSOs) are framed in discussion with all the stakeholders. Domain Expert along with the Syllabus Setter Panel frames the Course Outcomes (COs) based on which contents of the syllabus to be delivered or executed under each of the courses in the curriculum is designed. The syllabus along with COs, POs and PSOs is then discussed in the Board of Study (BOS) and Academic Council (AC) meeting.

The Dean of Academics uploads the Vision and Mission of the department, PEOs, and curriculum with COs on the institute website after the approval process as described earlier. The syllabus of all programs offered by the institute is also uploaded on the website of the central library of the institute in the form of a syllabus book which includes POs, PSOs, and COs of various courses of the curriculum. The course teacher of the respective course/courses explains the COs to the students in his/her first lecture. Whenever a faculty provides course handouts it includes Vision-Mission, PEOs, POs, PSOs of the Program offered by the department and COs of the course. All POs, PSOs and COs of specific lab courses are printed on lab manuals and a soft copy is issued to all students at the beginning of every semester. All the faculty members prepare a course file for each semester that lists the POs, PSOs and COs.

There are two types of assessment methods used by the course teachers to gather the evidence of students' learnings; direct method and indirect method in order to evaluate COs, POs, and PSOs. The Assessment model followed is a bottom-up approach starting from mapping of COs to POs/PSOs, then the attainment of COs, followed by the attainment of POs and PSOs. Rubrics-based evaluation is also extensively used by faculty members and communicated to students well in time, rather rubrics are prepared for all the experiments in a laboratory course. Teachers also take care of introducing the COs while framing the question papers of the Mid Semester Examination (MSE), End Semester Examination (ESE) and Internal Semester Evaluation (ISE) components. Apart from Direct Assessment Tools such as course and project evaluations, many Indirect Assessment Tools such as Programme Exit Surveys, Course Exit Surveys, Alumni Surveys, Employer Surveys, Co-curricular activities and Extra-curricular activities and Parents' Feedback are also used to measure POs and PSOs attainment. After the

computation of attainment of POs/PSOs, a thorough analysis of these attainment levels is done by the department which includes finding the weak areas towards the attainment of POs/PSOs and a detailed plan of action which would help in the further attainment of the POs/PSOs.

File Description	Document
Upload POs and COs for all courses (exemplars from Glossary)	View Document

2.6.2

Pass percentage of students (excluding backlog students) (Data for the latest completed academic year)

Response: 100

2.6.2.1 Total number of final year students who passed the examination conducted by Institution during the latest completed academic year:

Response: 372

File Description	Document
Institutional data in the prescribed format (data template)	View Document
Certified report from the COE indicating the pass percentage of students of the final year (final semester) eligible for the degree program-wise / 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:

Criterion 3 - Research, Innovations and Extension

3.1 Promotion of Research and Facilities

3.1.1

The institution's research facilities are frequently updated and there are well defined policy for promotion of research which is uploaded on the institutional website and implemented

Response:

Bharatiya Vidya Bhavan's S.P.I.T. emphasises research as a vital component of academic pursuits, urging undergraduates to engage in innovative research in the emerging fields. The institution offers Postgraduate and Ph.D. programs dedicated to fostering a research-centric culture. The Research and Development (R&D) Cell oversees these initiatives, coordinating various research projects and consultancy efforts across different departments. The scope of research activities spans academic and funded projects, along with patents in the Faculty of Engineering and Technology. **The R&D Cell invites experts from various reputed industries/organizations on a regular basis to conduct workshops and talks, addressing aspects like paper writing and patent drafting.** These activities aim to enhance the research environment, facilitating opportunities for publishing papers, articles, and drafting patents. Annually, the top-performing S.P.I.T. students receive accolades for their achievements in academics, innovative projects and original ideas. The R&D Cell further promotes research aptitude through events such as Technical Paper Presentation and Project Exhibition competitions, thus evaluating the research and presentation skills of undergraduates using specialized rubrics.

The R&D Cell has devised and implemented diverse schemes, as also allocated funds to promote research. These schemes include the Promotion for Research and Innovation for undergraduate students (up to Rs. 25,000) and IPR support (up to Rs. 10,000). Additionally, the R&D Cell advocates an Industrial Research and Consultancy Policy, incorporating income-sharing clauses. To incentivize scholarly output, it offers reimbursement up to Rs. 5,000 per published research paper by students. S.P.I.T. actively encourages student participation in research-oriented events, such as hackathons, exposing them to real-world challenges. **Annually, 15-20 teams consistently participate in prestigious competitions like Texas Instruments, E-Yantra, and Smart India Hackathon.** Qualified teams are given financial support for accommodation and travel expenses.

The Institute also supports its faculty members by funding (Rs.25,000/- per year) for participation in national conferences, workshops, FDP/STTP, professional membership of technical societies, registering patent/copyright/IPR, etc. Moreover, for paper publication in international conferences, the faculty receives funds of Rs. 55,000/- to Rs. 1,00,00/-. Several faculties have taken advantage of the QIP scheme to pursue research and have acquired Ph.D. qualification.

The Product Development Centre (SP-PDC) has been newly established on campus to support the industries to grow and develop their businesses through innovative products and services. SP-PDC provides a good working space, enabled with high-speed computers and other software's required for the purpose. **It has projects from the industry worth Rs. 50 Lakhs.**

Apart from this, there are different forums to encourage research, innovation, entrepreneurship, community orientation, incubation, etc. in the students and the faculty. **Innovation and**

Entrepreneurship Development Cell (IEDC) creates entrepreneurial culture, including programmes for women and weaker sections of the society to cultivate patent publication environments. As a result of all these initiatives, our students and faculty have not only won several prizes but also worked on funded projects and collaborative industry consultancy.

File Description	Document
Upload any additional information	View Document

3.1.2

The institution provides seed money to its teachers for research

Response: 25.25

3.1.2.1 Amount of seed money provided by institution to its teachers for research year wise during last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
15.25	0	10	0	0

File Description	Document
Sanction letters of seed money to the teachers is mandatory	View Document
List of faculty who have been provided with seed money for research along with the title of the project, duration and amount year-wise	View Document
Institutional data in the prescribed format (data template)	View Document
Audited Income-Expenditure statement highlighting the expenditure towards seed money endorsed by the Finance Officer	View Document

3.1.3

Percentage of teachers receiving national/ international fellowship/financial support by various agencies for advanced studies/ research during the last five years

Response: 3.06

3.1.3.1 Number of teachers who received national/international fellowship /financial support by various agencies, for advanced studies / research; year-wise during the last five years

Response: 3

File Description	Document
List of teachers who have received the awards along with nature of award, the awarding agency etc.	View Document
Institutional data in the prescribed format (data template)	View Document
E-copies of the award letters of the teachers	View Document

3.2 Resource Mobilization for Research**3.2.1**

Total Grants research funding received by the institution and its faculties through Government and non-government sources such as industry, corporate houses, international bodies for research project, endowment research chairs during the last five years (INR in Lakhs)

Response: 105.5376

File Description	Document
List of Extramural funding received for research, Endowment Research Chairs received during the last five years along with the nature of award, the awarding agency and the amount	View Document
Institutional data in the prescribed format (data template is merged with 3.2.2)	View Document
Copies of the letters of award for research, endowments, Chairs sponsored by non-government sources	View Document

3.2.2

Number of research projects per teacher funded by government, non-government , industry, corporate houses, international bodies during the last five years

Response: 0.28

3.2.2.1 Number of research projects funded by government and non-government agencies during the last five years.

Response: 27

File Description	Document
List of project titles with details of Principal Investigator, amount sanctioned and sanctioning agency etc	View Document
Institutional data in the prescribed format (data template merged with 3.2.1)	View Document
Copies of the grant award letters for research projects sponsored by government agencies	View Document

3.2.3**Percentage of teachers recognised as research guides as in the latest completed academic year****Response:** 23.53**3.2.3.1 Number of teachers recognised as research guides as in the latest completed academic year:**

Response: 16

File Description	Document
Upload copies of the letter of the university recognizing faculty as research guides	View Document
Institutional data in the prescribed format (data template merged with 2.4.2 and 3.4.2)	View Document

3.3 Innovation Ecosystem**3.3.1**

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:

Bharatiya Vidya Bhavan's S.P.I.T. has created an ecosystem for innovation, creation and transfer of knowledge in the form of **an incubation centre named Sardar Patel Technology Incubation Cell (SP-TBI), and Product Development Centre (PDC)**. It has also enriched the curriculum by introducing courses on the Indian Knowledge System.

SP-TBI is supported by the DST, Government of India to promote innovation and entrepreneurship in the Science and Technology domain. It was registered as a trust, a not-for-profit organisation, in 2015 and

has supported 160+ startups/innovators till date. **SP-TBI provides funding, state-of-art infrastructure, R&D labs, mentoring, training, business advisory, investor connections, network & talent-pool access, etc. to help innovators/startups succeed in their entrepreneurial journeys.** SP-TBI has received sanctions of Rs. 20 Crore from different Government of India departments, namely the National Initiative for Developing and Harnessing Innovations-Seed Support System (NIDHI-SSS), NIDHI-Prayas (Promoting and Accelerating Young and Aspiring Technology Entrepreneurs) and Startup India Seed Fund Scheme (SISFS) to support startups financially. S.P.I.T. students and faculty are acquainted with utilisation of the facilities provided by the SP-TBI through the Policy for Faculty Startup Programme, and Student Startup Programme under the National Innovation Startup Policy. It comprises a teacher representative from each department and a student committee. Through this scheme, three faculty of S.P.I.T. have received funds.

The institute has also developed a PDC through Alumni funding that facilitates students to undertake various projects and come up with product development as an outcome. At the institute level, student clubs like E-Cell, Enactus and NISP Council actively encourage students to develop their social entrepreneurship skills, employability skills, awareness about environmental issues, etc. Seminars and events are regularly organised for students to motivate and familiarise them with the latest trends and best practices in the field of entrepreneurship and innovation. **IIC SPIT and NISP SPIT also aim to create a conducive environment for students to develop their entrepreneurial skills and launch successful startups.** In the UG curriculum, a course on entrepreneurship is included which is driven by the faculty of the institute. Various workshops and training programmes on IPR and Patent drafting are frequently conducted by S.P.I.T. in association with SP-TBI.

These efforts collectively have created a platform for students to undertake internships as well as helped them work on industry projects based on real-life problems. The faculty and students of the institute are actively engaged in IPR and patent drafting. Many students have also become successful entrepreneurs. **S.P.I.T. is proud to receive prestigious National-level Entrepreneurship Challenge Awards won by the E-Cell.** IIC S.P.I.T. is also ranked highly for prompting innovation, startups and entrepreneurship ecosystem in the campus of S.P.I.T. as per the activities prescribed by the Innovation Cell, Ministry of Education, Government of India under NIRF, and AIIRA.

File Description	Document
Upload any additional information	View Document

3.4 Research Publications and Awards

3.4.1

The Institution ensures implementation of its stated Code of Ethics for research.

The institution has a stated Code of Ethics for research and the implementation of which is ensured through the following:

- 1. Inclusion of research ethics in the research methodology course work**
- 2. Presence of institutional Ethics committee (Animal, Chemical, Bio-ethics etc.)**

3.Plagiarism check through software**4.Research Advisory Committee****Response:** A. All of the above

File Description	Document
Copy of the syllabus of the research methodology course work to indicate if research ethics is included	View Document
Constitution of the ethics committee and its proceedings as approved by the appropriate body	View Document
Constitution of research advisory committee and its proceedings as approved by the appropriate body.	View Document
Bills of purchase of licensed plagiarism check software in the name of the HEI	View Document

3.4.2**Number of candidates registered for Ph.D per teacher during the last five years****Response:** 2.69**3.4.2.1 Number of candidates registered for Ph.D during the last 5 years:**

Response: 43

File Description	Document
Ph.D. registration letters/Joining reports of candidates.	View Document
Letter from the university indicating name of the Ph.D. student with title of the doctoral study and the name of the guide.	View Document
Institutional data in the prescribed format (data template merged with 2.4.2 and 3.2.3)	View Document

3.4.3**Number of research papers published per teacher in the Journals as notified on UGC CARE list during the last five years****Response:** 1.11**3.4.3.1 Number of research papers in the Journals notified on UGC CARE list year wise during the**

last five years

Response: 109

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

3.4.4**Number of books and chapters in edited volumes published per teacher during the last five years**

Response: 5.7

3.4.4.1 Total Number of books and chapters in edited volumes published during the last five years

Response: 559

File Description	Document
List of chapter/book along with the links redirecting to the source website	View Document
Institutional data in the prescribed format (data template)	View Document
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

3.4.5**Bibliometrics of the publications during the last five years based on average Citation index in Scopus/ Web of Science**

Response: 0

File Description	Document
Bibliometrics of the publications during the last five years	View Document
Any additional information	View Document

3.4.6

Bibliometrics of the publications during the last five years based on Scopus/ Web of Science – h-index of the Institution

Response: 0

File Description	Document
Any additional information	View Document

3.5 Consultancy**3.5.1**

Revenue generated from consultancy and corporate training during the last five years

Response: 81.81

3.5.1.1 Total Amount generated from consultancy and corporate training year wise during last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
72.2	4.5	0	1.26	3.85

File Description	Document
Letter from the corporate to whom training was imparted along with the fee paid.	View Document
Letter from the beneficiary of the consultancy along with details of the consultancy fee	View Document
Institutional data in the prescribed format (data template)	View Document
CA certified copy of statement of accounts as attested by head of the institution	View Document
Audited statements of accounts indicating the revenue generated through corporate training/consultancy.	View Document

3.6 Extension Activities

3.6.1

Outcomes of extension activities in the neighbourhood community in terms of impact and sensitizing the students to social issues and holistic development, and awards received if any during the last five years (Showcase at least four case studies to the peer team)

Describe the impact of extension activities in sensitising students to social issues and holistic development with four case studies within a maximum of 500 words

Response:

Under the canopy of Bhartiya Vidya Bhavan, S.P.I.T has focused not only on providing high quality education in Engineering and Technology but also promoting Indian Values and Ethos among students. This will prepare the learners to lead lives of personal integrity and civic responsibility in a global society along with achieving their goals. **Several extension activities are carried out in the neighbourhood community, sensitising students to social issues, thus ensuring their holistic development and leaving a lasting impression on them during the last five years.** The efforts of the institute include planning and reframing the curriculum with inclusion of several subjects in academics throughout the completion of graduation course to forming various student forums which carry out different activities planned throughout the academic year.

In the undergraduate curriculum, S.P.I.T. has framed its **'First-of-its-kind-in-education' blend to the Engineering Curriculum, that is, "ABLL@LLC" (Activity Based Liberal Learning about Life, Literature and Culture) in all EIGHT semesters**, ensuring all dimensional holistic growth of the learner. These eight activity based mini courses are offered as two sequels namely, "SEVA" (Social Empowerment through Various Activities", and "SATVA" (Self accomplishment through various Activities). Along with the core programs, several courses are offered under the Humanities and Social Sciences category. The curriculum provides a diversity of subjects ranging from Self Défense for Women to Basics of Fire Safety; Social Psychology to Mentoring of School Children at SPIT (Abhyudaya) in

SEVA, to name a few.

Apart from this, **S.P.I.T. has several forums at the institute level like IIC, E-CELL, WIE, CSI, Rotaract Club; and forums at the department level like FACE, ITSA, EETS, ESA that carry out activities from blood donation drive to fire safety workshops; arranging workshops for women safety to promoting entrepreneurship skills.** Through technical and cultural programs like Oculus, S.P.I.T. also plans some activities that enables the overall growth of the learners. Efforts of these activities have fetched several awards in the name of institute and left an impact on the society. Please refer the supporting documents for the overview of these activities and its impact.

File Description	Document
Upload any additional information	View Document
Upload any additional information	View Document

3.6.2

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

Response: 22

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

2022-23	2021-22	2020-21	2019-20	2018-19
2	3	1	14	2

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 (data template)	View Document
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

3.7 Collaboration

3.7.1

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: 28

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 activity-wise and year-wise	View Document
Institutional data in the prescribed format (data template)	View Document

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1

The Institution has adequate infrastructure and other facilities for

- 1. teaching – learning, viz., classrooms, laboratories, computing equipment etc**
- 2. ICT – enabled facilities such as smart class, LMS etc.**
- 3. Facilities for Cultural and sports activities, yoga centre, games (indoor and outdoor), Gymnasium, auditorium etc.**

Response:

The institution is situated in the midst of a holy **campus spread over 47 acres of land** and it strives to provide infrastructure and facilities with a conducive learning environment. The infrastructure facilities are further classified under administration, academics and amenities/support facilities summarized as in Table 1 and Table 2.

Facilities include administration areas, ICT enabled classrooms, laboratories for teaching-learning and facilities for extra-curricular activities. The support facilities are like cafeterias, auditoriums, seminar halls, etc. and utilities like safe drinking water, washroom/restrooms, fire extinguisher, etc.

All the classrooms are ICT-enabled with facilities such as overhead projector, internet and multimedia enabled smart boards.

The Institute has specialized equipment and software. The institute has subscribed for Moodle LMS. Faculty and students use this platform extensively since Moodle is a secure open source LMS which can be customized for any course or teaching method chosen. The department and central library are **equipped with e-content from NPTEL/SWAYAM** etc. Membership of National Digital Library. The library has subscribed to DELNET membership.

The number of computers, printers, legal system software and legal application software available are 210 , 28 , 3 , 4 of the Computer Engineering Department. The total Internet Bandwidth available is 900 MBPS. Also, there are 6 secured Wi-Fi connectivity access points in the Computer Engineering Department. The number of computers, printers, legal system software and legal application software available are 2230, 450, 8 and 90 against the university requirement of 833, 166, 3 and 20. The total Internet Bandwidth available is 900 MBPS. Also, there are **60 secured Wi-Fi connectivity access points**.

Fire extinguishers are already available at various places in the institute. Moreover, installation of Fire Alarm and Fighting Systems is done at the Institute. During COVID lockdowns, the institute further strengthened its online learning infrastructure.

The support facilities like safe drinking water, washroom/restrooms, are spreaded across the various

floors of the institute building. In all there are 3 RO water units installed, washrooms/restrooms that are maintained on a regular basis. There is one common room for boys and girls each. Within the campus of the institute, a canteen is available. The students of the institute can also use the facility at 2 other cafeterias (S.P.C.E. Mess and S. P. Jain Mess) available within the campus.

Sports is an integral part of the curriculum in the institution that **aims at creating holistic individuals and believes in “a healthy mind is a healthy body”**. students are encouraged to take part in sports activities. The college also supports in providing the facilities to create interest in sports among the student's. There is a Gymkhana/Gymnasium that is 25 meters, for indoor games like Carrom, Table tennis, Chess etc. The campus gymnasium is utilized for the fitness and agility of the students. There are two playgrounds within the institute where a well maintained volleyball court, football court and cricket pitch is available for outdoor games. The college has appointed coaches for respective games like Football, basketball, Volleyball etc. under the banner of Spoorthi.

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

4.1.2

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

Response: 47.15

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
406.05	266.22	194.05	236.03	274.09

File Description	Document
Institutional data in the prescribed format (data template is merged with 4.2.2 and 4.4.1)	View Document
Audited income and expenditure statement of the institution to be signed by CA and counter signed by the competent authority (relevant expenditure claimed for infrastructure augmentation should be clearly highlighted)	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:

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

The Central library of SPIT is the learning resource of the institution and is automated through **SLIM21 software developed by Algorithms**, Pune. The software manages all in-house operations of the library. The SLIM21 software consists of modules such as acquisition, cataloging, circulation, serials and OPAC (Online Public Access Catalog). SLIM21 is a fully featured, scalable library management system software. **The current version of the software is 3.9.**

Modules of the Software:

1. **Acquisition:** This module handles functions like Proposals management, Requests, Bills, Budgets, Order Processing, etc.
2. **Cataloging:** Cataloging module facilitates the process of newly acquired library resources.
3. **Circulation:** This module takes care of membership management, maintenance and status of library items, barcoding, issue, return, overdue charges, etc.
4. **OPAC (On-line Public Access Catalog):** This is mainly used for information retrieval. It facilitates simple and advanced search for the details of library materials and status of the library materials.
5. **Serial Control:** This module keeps track of the periodicals subscribed by the library effectively and efficiently.

Subscription of E-resources, Journals

To support the academic and research work at the Institute, the Library has been subscribing to e-resources as shown in table 3

Institution Repository on intranet with open source software: **DSpace** having Institution events, reports, institutional magazines, faculty publication, question papers, syllabus etc. Library is wi-fi enabled and has an Internet Center having **10 PCs to access** the subscribed e-resources and freely available resources like **NPTEL, ShodhGanga**, etc.

In addition, the central library of S.P.I.T. has scanning facilities as well. The scanner available

with the library scans 20 pages per minute. Question papers are regularly scanned and uploaded in DSpace.

Optimal use of the library by the faculty and students:

SPIT central library is a knowledge resource center, which has an invaluable resource for the students and faculty members in Engineering and Technology. Library has a collection of more than **24000+ books and 8000+ e-books and is subscribed to National and International periodicals**. Periodicals, Magazines and Newspapers are arranged alphabetically on a periodicals rack.

Library provides a safe space for faculty and students to focus on their learnings as well as information from the resources available in the library with a **seating capacity** of around **150**. For faculty, one separate section has been allocated within the library. Library materials and student's ID cards are barcoded for fastest circulation. Library provides **Book-Bank facility to students**.

Library arranges events like **Book Exhibition, Marathi Bhasha Din, Yoga Day, etc**

File Description	Document
Upload any additional information	View Document

4.2.2

Percentage of expenditure for purchase of books/ e-books and subscription to journals/e-journals year wise during the last five years

Response: 2.36

4.2.2.1 Expenditure for purchase of books / e-books and subscription to journals/e-journals year wise during last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
18.16	18.95	10.58	11.47	9.77

File Description	Document
Institutional data in the prescribed format (data template merged with 4.1.2 and 4.4.1)	View Document
Audited income and expenditure statement of the institution to be signed by CA and counter signed by the competent authority (relevant expenditure claimed for purchase of books/ e-books and subscription to journals/e-journals should be clearly highlighted)	View Document
Provide Links for any other relevant document to support the claim (if any)	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:

Recent computing infrastructure upgrades have left a lasting impact on the educational experience of over 1500 students and more than 120 faculty and staff members. The comprehensive upgrades span across hardware, network infrastructure, security measures, server capabilities, software development, learning management systems, and more, creating a reliable and user-friendly computer environment.

One of the pivotal areas of improvement lies in hardware upgrades. The computing facility now boasts **756+ desktop** computers with i3/i5 generation processors, **16 GB RAM and 1 TB HDD** for students. Teaching staff, on the other hand, benefit from 100 laptops with **i3/i5/i7 processors**, 8 GB RAM, and 512 GB SSD disks. These enhancements significantly boost computing power and performance, ensuring that students and staff have access to cutting-edge technology.

The network infrastructure has been revolutionized with a 3-layer design incorporating advanced switches from **HP Aruba and D'Link**, along with a robust wireless network featuring **5 HP-Aruba 515 and 2 Allied Telesis Wireless APs**.

Internet security has been fortified through the implementation of a **DELL Sonicwall NSA 4600 firewall**, while internet bandwidth has been upgraded to **850 Mbps** through strategic ISP connections.

On the server side, the institution has invested in **Dell PowerEdge servers** with substantial RAM and disk space, facilitating the hosting of over 130 LXC containers for various websites. Proxmox virtualization ensures efficient management and utilization of server resources.

The software development environment has been refined with the establishment of a Continuous Integration and Continuous Deployment (CI/CD) pipeline, streamlining the development process. Learning management is facilitated through the long-standing **Moodle server**, while network and server monitoring are conducted **24x7x365** using **LibreNMS and DaloRadius**.

Email services, co-hosted with G Suite, have been seamlessly integrated, providing convenient email access for all stakeholders. G Suite services, including Google Colab, have played a pivotal role in academic activities, especially during the pandemic. The procurement of more than 80 Google Meet Education Plus licenses has further enabled remote collaboration and online learning.

Infrastructure expansion extends beyond the digital realm, with the creation of a new internet facility for Idealab and the establishment of a **276 sq ft data center** equipped with state-of-the-art dual-cabinet racks. Routine maintenance activities and robust procurement procedures ensure the reliability and longevity of the computing infrastructure.

In addition to these upgrades, software licenses for **Turnitin Enterprise, Matlab Campus Wide Suite, Eval Board Software, and Microsoft Windows 10 Professional OEM** have been procured, contributing to a more comprehensive software environment. The addition of printers such as HP Laserjet Pro P1108 and advanced audiovisual resources like projectors and TVs further enrich the computing environment, enhancing the overall learning experience.

These improvements not only cater to the current needs of the institution but also lay the foundation for future growth and technological innovation.

File Description	Document
Upload any additional information	View Document

4.3.2**Student - Computer ratio (Data for the latest completed academic year)****Response:** 2.17**4.3.2.1 Number of computers available for students' usage during the latest completed academic year:**

Response: 756

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

4.3.3**Institution has dedicated audio visual centre, mixing equipment, editing facility, media studio, lecture capturing system(LCS) and related hardware and software for e-content development****Response:**

The Institute has Digital Studio with the cutting edge facilities for e-content Development which are broadly classified as below:

- **Media Centre**
- **Audio Visual Centre**
- **Lecture Capturing System (LCS)**
- **Mixing Equipment and Software for Editing**

E-content is one of the ways of Digitalization, Configuration of the same is given in table 5. E-content generation and adaptation procedure is proposed for effective teaching and learning of different subjects. Multimedia is changing the way of communication with each other, making effective teaching a learning method. **Digital content is the future as realized specially after COVID 19.** Varieties of products and services are going digital. The education industry has also seen an incremental jump in covid times. Thus, hardware and software facilities at the digital studio can be used meaningfully to produce high quality visual and audio content. **A digital studio** at S.P.I.T. encourages faculty members to drive innovation in teaching and learning methods. A digital studio also helps in increasing their efficiency,

reduced cost, bringing transparency, ease team work and solving many bottlenecks in creating content.

Table 5 : Following are the equipment available at Digital Studio

Sr. No.	Name	Brand
1	Live Streaming Monitor 50"	LG
2	Full HD Camera	Sony
3	Video Mixer Set 4*4	Sony
4	Integrated Zone Amplifier	Bose
5	75" Interactive Board TV	Cybermatrix
6	Wireless Handheld & Lapel Microphone Set	Shrue
7	Streaming PC with Black Magic Capture Card	Blackmagic/ Evermedia
8	Light arrangement for perfect Chroma key	Standard
9	Switcher 4 in 4 HDMI Matrix	Milestone
10	Headset	Sennheiser

File Description	Document
Upload any additional information	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

Response: 46.27

4.4.1.1 Expenditure incurred on maintenance of physical facilities and academic support facilities of DDE and total expenditure excluding salary, year - wise, over the last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
387.20	197.33	188.15	248.26	329.80

File Description	Document
Institutional data in the prescribed format (data template merged with 4.1.2 and 4.2.2)	View Document
Audited income and expenditure statement of the institution to be signed by CA and counter signed by the competent authority (relevant expenditure claimed for maintenance of physical facilities and academic support facilities should be clearly highlighted)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

4.4.2

There are established systems and procedures for maintaining and utilizing physical and academic support facilities – laboratory, library, sports complex, computers, classrooms etc.

Describe policy details of systems and procedures for maintaining and utilizing physical, academic and support facilities within a maximum of 500 words

Response:

The physical, academic and support facilities are spread over the various levels of the buildings. These include several Laboratories, Classrooms, Computers, Seminar Halls, Gymkhana, Library, from the first floor till the eighth floor of the building.

To utilize any physical, academic and support facilities available, the institute has a well defined process. These facilities are utilized in optimum way by all the stakeholders in the campus.

Head of the institute HoDs, Class Teachers, Gymkhana Faculty Incharge, Student Council members, Class representatives, are given the login credentials. One of the important highlights of the policy for availing the physical, academic and support facilities is that access to these facilities is available 24x7.

Books are acquired based on recommendations from faculty members. Once approval is obtained from the **Head of Department and the Dean of Administration**, the ordering, billing, and technical processing procedures are carried out.

Reprography and scanning facilities are available in the library. The library staff assists users in locating library resources, answering inquiries, and guiding them in making effective use of the library's resources. Additionally, the library provides a 20 % Book Bank Scheme available to students to assure that the utilization of the books is done optimally.

During the pandemic, SPIT focused on essential maintenance tasks to ensure the safety and functionality of facilities. This could include tasks like repairing critical infrastructure, addressing safety hazards, and ensuring that essential utilities such as water, electricity, and HVAC systems were

functioning properly.

Cleanliness of infrastructure on a regular basis is also very important to maintain pleasant ambience of the campus as well as preventive maintenance of critical facilities like Lift/Air Conditioners (ACs), and Fire and Alarm system, etc.

There is also a process for maintenance of the infrastructure. There are two housekeeping teams which take care of cleanliness of the entire Institution on hourly basis and are regularly supervised.

Any civil work or repair work is required to be done then concerned faculty, any technical, non-technical staff can report it in the register kept in the office. **The Store Manager and Dean Administrator** take the necessary action depending upon the urgency of the work with the permission of the Principal.

Every year the lab assistants check for the non-working/repairable equipment and report to their respective HODs.

Similarly, as per the policy for maintenance of Lab Equipment, furniture, Networking, and electrical appliance, User/Lab Assistant/Lab In-Charge/Faculty has to write in the maintenance register available in office), then maintenance In-charge verifies and approves the complaint. If repairable then the maintenance is done, and bill is processed through registrar/HoD/Principal.

Furniture decision on Inspection is done and maintenance decision is finalized. If repairable then the maintenance is done, and the bill is processed through registrar/Principal. If not repairable then new procurement is suggested on immediate basis.

The procurement for Gymkhana is done by the **Gymkhana Incharge in consultation with the Principal** and as per the request of students from the Sports Budget.

File Description	Document
Upload any additional information	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: 45.55

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

2022-23	2021-22	2020-21	2019-20	2018-19
655	957	602	567	486

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.

[View Document](#)

Institutional data in the prescribed format (data template)

[View Document](#)

5.1.2

Efforts taken by the institution to provide career counselling including e-counselling and guidance for competitive examinations during the last five years

Response:

One of the key areas of focus for S.P.I.T. is to facilitate students to acquire great employment opportunities. The college has a dedicated faculty of professionals who teach students and work with them to identify their strengths, interests, and career goals. They provide valuable guidance on various career paths and help students prepare for competitive examinations such as GATE, CAT, and GRE. Students also learn a lot about Communication Skills, which is part of our syllabus. This helps them

tremendously with corporate communication and personality development.

The Institute has established a Training and Placement Office (TPO), which has a dedicated **Training and Placement Officer from Industry**, faculty in-charges, and student coordinators from each department, that together constitutes the Placement Team. In addition to this, the institute has established strong associations with leading companies in various industries. The TPO works proactively to prepare students for interviews, provides them training on technical skills and soft skills, as well as connects them with the potential employers.

The TPO conducts additional training sessions for students, which focuses on current trends and tools in the industry, to help them develop necessary skills to succeed in their careers. The Institute's alumni and experts from the industry participate in these training sessions, share their experiences and provide guidance to students. Moreover, the TPO conducts aptitude tests helping students from their second year itself to identify areas for improvement and work on them.

S.P.I.T. promotes job creation and entrepreneurial drive in its students, by encouraging them to think innovatively and solve complex world problems through modern engineering. **Sardar Patel Technology Business Incubator (SP-TBI) and the Product Development Centre (PDC)** provide financial support to students and encourage them to start their own ventures and bring their groundbreaking ideas to life.

In conclusion, S.P.I.T. is an institution that is committed to provide the best possible education and career opportunities to its students. The Institute's efforts to provide career counseling and guidance, along with its strong partnerships with leading companies and support for entrepreneurship, have helped its students achieve remarkable success in their academic and professional lives. S.P.I.T. continues to be a beacon of academic excellence in technical education and a place where students come to discover their potentials and achieve new heights.

File Description	Document
Upload any additional information	View Document

5.1.3

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, self-employment and entrepreneurial skills)
4. Awareness of trends in technology

Response: A. All of the above

File Description	Document
Report with photographs on programmes conducted for awareness of trends in technology	View Document
Report with photographs on programmes/activities conducted to enhance soft skills, Language & communication skills, and Life skills (Yoga, physical fitness, health and hygiene, self-employment and entrepreneurial skills)	View Document
Institutional data in the prescribed format (data template)	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

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 monitoring the activities and number of grievances	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: 89.73**5.2.1.1 Number of outgoing students placed and progressed to higher education during the last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
358	311	343	314	299

File Description	Document
Institutional data in the prescribed format (data template)	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 out of the graduated students during the last five years**

(eg: NET/SLET/ Civil Services/State government examinations etc.)

Response: 14.96**5.2.2.1 Number of students qualifying in state/ national/ international level examinations (eg: NET/SLET/Civil Services/State government examinations etc.) year wise during last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
40	74	45	47	65

File Description	Document
List of students qualified year wise with details of examination and links to Qualifying Certificates of the students taking the examination	View Document
Institutional data in the prescribed format (data template)	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 events during the last five years**Response:** 96**5.3.1.1 Number of awards/medals for outstanding performance in sports/cultural activities at University / state / national / international level events (award for a team event should be counted as one) year wise during last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
15	17	16	28	20

File Description	Document
list and links to e-copies of award letters and certificates	View Document
Institutional data in the prescribed format (data template)	View Document

5.3.2**Presence of an active Student Council & representation of students on academic & administrative bodies/committees of the institution.****Describe the Student Council activity and students' role in academic & administrative bodies within a maximum of 500 words****Response:**

In order to increase involvement and representation of students in each and every activity of the Institute, various committees are formed. This includes committees at the institute level like the Student Council, IQAC, ICC and that at the department level like BoS, Student Clubs, etc. The selection of the student committee members, the objectives, roles & responsibilities of these committees are well defined by the Student Welfare Committee composed of the Head of the Institute, Deans, HoDs and the respective faculty coordinators. Student representatives are invited during meetings and students are encouraged to discuss various academic and administrative issues.

For the welfare of the students, two committees are formed, that is, the Student Welfare Committee (SWC) that comprises faculty members, and the Students' Council (SC) that comprises student members.

I. Student Welfare Committee (SWC) and the Students' Council (SC)

The SWC acts as an interface between the Institute's administration and students to sort out matters concerning student welfare. The SC is a very active body which organizes and promotes popular events

like Techno-cultural festival: Oculus, Sports festival: Agility & SPOorthi, Technical events: Hackathon, Tech-Race & MUN and Open Mike for students to show their literary, technical and musical talents.

II. Board of Studies (BoS)

In academic context, two student representatives from final year B.Tech are included as members in the BoS of their department.

III. Internal Quality Assurance Cell (IQAC)

Two student representatives actively contribute to the body of IQAC. The committee looks into matters concerning the quality of various parameters like planning, guiding and monitoring quality assurance and quality enhancement activities of the institute.

IV. Internal Complaints Committee (ICC)

Another important committee that finds representation of female students is the ICC which is responsible to look into any complaint made by a female student or a staff related to sexual harassment.

V. Institute Innovation Cell (IIC) & Industry Relation Cell (IRC)

The IIC is a platform to ideate, innovate and promote multiple innovations in HEIs acting as a link between the college and MHRD, reporting all the student and faculty activities to the MHRD. The IRC helps and improves the institute-industry connection and increases the employability of the students.

VII. Entrepreneurship Cell (E-Cell)

The E-Cell regularly conducts activities to educate and upskill the self-sustainability, business mindset and entrepreneurial capabilities of the Institute's student bodies.

STUDENTS CLUBS AND CHAPTERS:

Apart from the Institute level committees, every department has its own active and vibrant student associations like FETS, ITSA, CSI, ESA, FACE, ACE and IETE. The main objective is to arrange seminars and workshops for students.

VIII. Rotaract Club

This chapter organizes various events for social causes for e.g. Marathons, Blood donation drive, Clothes donation drive, etc.

IX. English Literary Association (ELA)

This club conducts activities and competitions in English language like debates, GDs, Presentations, etc. to enhance students' communication skills.

X. SPark

This club is an editorial board which publishes the College Annual Magazine.

File Description	Document
Upload any additional information	View Document

5.3.3

The institution conducts / organizes following activities:

1. Sports competitions/events
2. Cultural competitions/events
3. Technical fest/Academic fest
4. Any other events through Active clubs and forums

Response: A. All four of the above

File Description	Document
Report on Sports, Cultural competitions/events, Technical/academic fests, Any other events through active clubs and forums along with photographs appropriately dated and captioned (whichever is applicable)	View Document
List of students participated in different events year wise signed by the head of the Institution	View Document
Institutional data in the prescribed format (data template)	View Document
Copy of circular/brochure indicating such kind of activities.	View Document

5.4 Alumni Engagement

5.4.1

Total Amount of alumni contribution during the last five years (INR in lakhs) to the institution through registered Alumni association:

Response: 2650000

5.4.1.1 Total Amount of alumni contribution during the last five years (INR in lakhs) to the institution year wise through registered Alumni association:

2022-23	2021-22	2020-21	2019-20	2018-19
696000	468000	612000	464000	410000

File Description	Document
List of alumnus/alumni with the amount contributed year-wise	View Document
Annual audited statements of accounts of the HEI highlighting the Alumni contribution duly certified by the Chartered Accountant/Finance Officer	View Document

5.4.2

Alumni contributes and engages significantly to the development of institution through academic and other support system

Describe the alumni contributions and engagements within a maximum of 500 words

Response:

S.P.I.T. boasts of a very strong Alumni Network of over 5000 people, most of them occupying coveted positions in various educational, industrial, research organizations in India and abroad. The **S.P.I.T. Alumni Network** (SPITan) was established and registered under the Societies Registration Act 21 of 1860, with an aim to build an actively engaged alumni network. This association connects with alumni through a diverse set of events/services. Alumni are registered online and connected on the online portal- <https://alumni.spit.ac.in>.

The Institution believes in Outcome Based Education (OBE). The autonomous status has conferred the power to offer quality education by proper **design of curriculum** with due participation of alumni who are mostly from the Industry and Reputed Institutes. Alumni are also an integral part of the Board of Studies (BOS), the Academic Council, IQAC, Alumni Executive Committee, etc.

Teaching Learning and Evaluation (TLE) is the foundation of quality education. Guest lectures by alumni and their involvement in evaluation stages like Project Competitions and Research Internship Evaluation, pave the way to further improve the TLE Process. The institute is also able to fetch research and consultancy work from the Industry where these alumni are serving. The SP-TBI actively promotes startups established by our alumni and encourages students to undergo internships.

The Alumni Network ensures active alumni participation in various institutional initiatives in the form of conferences, workshops and competitions. Alumni are involved in training students with Industry Specific Skills and counseling them to acquire admissions in reputed universities/institutes. Alumni working in companies like JPMC and Morgan Stanley are playing a significant role in arranging campus hiring from their respective companies. Thus, they are enthusiastically involved in the successful conduction of various academic and administrative activities. They also take part in various surveys and

their feedback has helped in the effective implementation of the OBE Process.

Additionally, many alumni are keen contributors to their Alma Mater and extend all possible support. One such successful initiative is the sponsorship of the **Product Development Centre (PDC)** by SPITan with a sum of Rs. 14 Lakhs in the year 2018-19. The PDC is a zone for developing innovative products and for internship opportunities.

During Covid, alumni serving in reputed industries and at places like Silicon Valley conducted **webinars on latest topics** and frontiers of research in various domains. Efforts are being made to strengthen this association and suggestions/feedback are being solicited from alumni. Therefore, since the formation of SPTI, alumni are invited to address gatherings during the most **prestigious events** of the Institute like the Annual Day and Degree Distribution Ceremony. Every year, one **alumni meet** is organized at the campus in offline mode or virtual mode. In these meets, after the formal program, department-level meetings are held to brainstorm and identify ways and means of taking objectives of the association forward.

File Description	Document
Upload any 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:

The institute's vision is to provide high-quality education promoting Indian values and ethos with global competency lies in the philosophy of Bhartiya Vidya Bhavans and founder Dr. K. M. Munshiji's statement, "Education would fail ignominiously in its objective if it manufactures only a robot and calls him an economic man stressing the adjective economic and forgetting the substantive man.....". This drives the institute to focus on four key areas: providing high-quality education in engineering and technology, emphasizing applied research for next-generation technologies, fostering career opportunities through Industry-Institute interaction, and nurturing entrepreneurial mindsets to cultivate job creators.

The Governing Board (GB) has been formed according to established norms to oversee the institute's operations. The Principal, Head of the Institute, in collaboration with the GB and Management, delineates essential features and components of the prospective plan. The GB meets regularly to evaluate the institution's endeavours. The Institute observes a decentralised approach in academic matters, decision-making and budget articulation & procurement. While making major decisions open faculty meetings are conveyed or suggestions are invited from all faculty through E-mails/Views/Inputs from all faculty members are considered while finalizing the policy. The major policy decisions are informed to the faculty and staff. The institute demonstrates 100% transparency in policy decisions and deployment. The institute makes sincere efforts to promote the participation of faculty and staff in policy-making and decision-making. Every department enjoys freedom in academics within the institutional framework. The Principal is empowered up to Rs. 5,00,000/-. The Chairman, Governing Body is empowered up to Rs. 1,00,000,00/-. The institute has well-written functional decentralizations. Procurement is independently handled by Procurement Committees. Every HOD is empowered to pay any expenditure up to Rs. 50,000/- Every HOD/Dean has an advance of Rs. 10,000/-.

The institute fosters participatory management from each stakeholder, responsibilities and charter of duties for all positions are declared to all stakeholders, decentralising the institutional governance optimally aiming at its key areas of vision-mission, resulting in verticals like Deans, HoDs, Academic Council, Board of Studies, Research Advisory Committee and IQAC. The Research Advisory Committee comprises eminent academicians, industry experts, faculty, and students, ensuring compliance with institutional norms while consulting with Management and the Principal. The IQAC being the central body within the institute reviews the institutional practices by the regularly conducting different types of audits.

A long-term strategic plan has facilitated sustainable institutional growth across four key areas: expanding undergraduate programs starting postgraduate and PhD programmes, and creating industry-aligned value-added courses for academic quality. Faculty and student skill development emphasizes

faculty expertise, research encouragement, and PhD registrations. Placement and Higher Studies initiatives aim to enhance median CTC, increase placements in Dream companies, and foster alumni connections for mentoring students. A research and entrepreneurial culture is fostered by encouraging high-quality publications, securing research projects, establishing incubation cells, and introducing entrepreneurial courses.

The institute has incorporated essential elements of the NEP-2020, by including courses like constitutional values, personality development, courses on IKS integrated as SEVA/SATVA courses, and elective courses like sciences, social sciences, arts, humanities, and sports.

File Description	Document
Upload any 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 are effective and efficient as visible from policies, administrative setup, appointment, service rules, and procedures, etc

Response:

The institute aims to excel in education and technology, driving the Nation's socio-economic advancement. Following university/government guidelines, its leadership includes the Governing Body, Principal, Deans, HoDs, and the IQAC Cell, fostering participative management. A perspective plan outlines academic goals, financial budgets, and faculty skill enhancement through higher education sponsorship and training programs. Strengthening outreach via alumni connections, collaborative research, and consultancy projects is prioritised, alongside enhancing student placement and higher studies opportunities. Initiatives like establishing an incubation cell and integrating entrepreneurial courses into the curriculum are delegated to respective deans and HoDs, with assured support. Successful deployment of strategic plans from 2018-2023 underscores the institution's sustainable growth trajectory. Ongoing assessment, adaptation, and alignment with emerging challenges and opportunities are pivotal for continued progress.

The Department Academic Program Committee (DAPC), in conjunction with advisory committees like BoS, and AC is instrumental in shaping the academic landscape of each department and, in turn, the institution, ensuring that its programs remain relevant, effective, and of high quality with interdisciplinary and research collaborations. Under the supervision of the Dean of Academics and Research, HoDs take care of the academic engagement distribution, and management of all departmental operations, including staff and student concerns.

Each student is assigned a mentor. Student feedback on institutional governance regarding academic and

non-academic matters is gathered and analysed. Concerns analysed are communicated through mentors. The committee consisting of the Principal, Dean, IQAC and Dean of Students Affairs oversees both processes. It also guides the Training and Placement Office to promote internships, entrepreneurial activities and placements enhancing the quality of teaching-learning and outreach.

The Finance Committee is one of the crucial committees, overseeing financial matters, reviewing annual accounts, approving yearly budgets, and suggesting updated projections to the Management to ensure fiscal health. It is also involved in budget planning constrained by student fees approved by the FRA admitted through CAP rounds and Management quota. It formulates financial policies, allocates resources, makes decisions regarding investments, conducts long-term financial planning (assuring that this does not increase student fees) and attracts talents across the state for FE admissions. However, this committee has always been instrumental in suggesting and approving the Faculty's promotional policies for raising funds by conducting training programmes and consultancy projects.

The institute adheres rigorously to the service rules and regulations by AICTE/UGC/University of Mumbai (UoM). As per the recruitment process, a committee consisting of a UoM representative, Management representative, Principal, and external subject experts evaluates candidates based on their performance in the interview, considering parameters specified by UoM. All the staff members receive PF, Gratuity, and other applicable benefits as per norms. The institution previously utilised transparent promotional policies through appraisal forms and now uses new Academic Performance Indicators (API).

A grievance redressal committee, comprising the Principal and representatives from Deans, HoDs, and Faculty, is established to address issues concerning the grievances of both staff and students. Further, the institute has established all mandatory committees, including the Anti-Ragging Committee and Internal Complaint Committee, to assist students and staff.

File Description	Document
Upload any additional information	View Document
Institutional perspective Plan and deployment documents on the website	View Document
Provide the link for additional information	View Document

6.2.2

Institution implements e-governance in its operations. e-governance is implemented covering the following areas of operations:

- 1. Administration including complaint management**
- 2. Finance and Accounts**
- 3. Student Admission and Support**
- 4. Examinations**

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

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:

The institute has a policy for welfare measures for teaching and non-teaching staff members.

- A medical insurance policy of 1.5 Lakhs is given to all the staff members (Teaching and Non-Teaching), their family members are also covered in this medical policy.
- A book allowance of Rs 2,500/- is given to all the permanent teachers every year. From the academic year 2022-23, it is increased to Rs. 5000/-.
- LTC is given to all the staff members (Teaching and Non-Teaching), to visit their hometown with their family.
- Skill upgradation is encouraged in the institute. An amount of Rs 5,000/- per year is reimbursed for the staff members.
- CEP for quality improvement: Faculty members are sent to IIT Bombay to register and complete an M. Tech. level course. These courses are identified as per the area of interest of the teachers who are seeking academic/professional upgradation. Registered teachers get half-day leave twice a week for the entire semester and a 20% load reduction in workload to enable them to attend the course at IIT. The course fee is reimbursed at the end of the successful completion of the course.
- To encourage the research culture in the institute, the faculty is allowed to avail Rs. 55,000/- in the span of two years (28,000 per year) for travelling and registration of research papers in the

National/International Conference.

- For FDP/STTP/ workshops/seminars, each faculty gets up to Rs. 5,000 as reimbursement of the registration fee. The same amount can also be used for Skill Development courses.
- Faculty can avail study leave of six months during their M.E. / PhD period subject to signing of the bond prescribed for the same.
- Faculty members are encouraged to conduct value-added training programs within the institute or at the client's site after college hours, on an income-sharing basis.
- Festival advance is given to non-teaching staff once a year.
- Uniforms are provided to all class IV employees of the institute.
- Allowance is given for all Deans and H.O.Ds.
- All teaching faculty members are part of the Staff Club which organises annual staff picnics and lunch/get-togethers.
- On the annual day, the Best Teacher award is given to the nominated faculty.
- Institute level sports competitions are organised for teaching and non-teaching faculty members every year.
- On-campus accommodation is offered to the Principal and Vice-Principal of the institute.
- Health check-up camps are conducted every year.
- Every year during Navratri, the college sponsors a Festival lunch.
- During the pandemic, the college gave Laptops to all teaching and non-teaching faculty. The college also reimbursed the amount of Rs. 7,000/- on the purchase of educational tools for online teaching.
- For online lectures and practicals, the college purchased a G-suit for more than 100 logins.

File Description	Document
Upload any 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: 78.27**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
60	43	43	77	58

File Description	Document
Policy document on providing financial support to teachers	View Document
Institutional data in the prescribed format (data template)	View Document
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/workshops and towards membership fee for professional bodies	View Document

6.3.3**Percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDPs)/ Management Development Programmes (MDPs) during the last five years****Response:** 89.42**6.3.3.1 Total number of teachers who have undergone online/ face-to-face Faculty Development Programmes (FDP)/ Management Development Programs (MDP) during the last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
45	51	140	66	19

File Description	Document
Refresher course/Faculty Orientation or other programmes as per UGC/AICTE stipulated periods, as participated by teachers year-wise.	View Document
Institutional data in the prescribed format (data template)	View Document
Copy of the certificates of the program attended by teachers.	View Document
Annual reports highlighting the programmes undertaken by the teachers	View Document

6.4 Financial Management and Resource Mobilization

6.4.1

Institutional strategies for mobilisation of funds other than salary and fees and the optimal utilisation of resources

Describe the resource mobilisation policy and procedures of the Institution within a maximum of 500 words

Response:

Institutional strategies for mobilisation of funds and the optimal utilisation of resources.

The Institute has a well-set process for mobilisation of funds and resource utilisation. Budget helps in planning, implementation and maintaining control over our finances. It aids in sharpening our understanding of our goals, gives the real picture i.e. facilitates discussion of the financial realities of the organisation and helps in avoiding surprises and maintaining fiscal control.

Heads of the department, accounts and concerned personnel are involved in planning for the dissemination of funds for setting goals and developmental activities.

The budget is approved by the Finance Committee and the Governing Body of the institute with an objective to ensure proper and maximal utilisation of funds. The budget is prepared in such a manner so as to accommodate the expenses within the projected income.

The financial resources of the Institute are

- Admission Fees
- Revenue from grants
- Consultancy Income

The funds available are mobilised for Operational/Recurring Expenses and Capital Expenses.

1.Institute Maintenance expenses

- Building repairs and maintenance
- Maintenance of furniture
- Maintenance of equipment
- Maintenance of garden and campus

2.Laboratory Maintenance

- Maintenance of laboratory equipment
- Repairing of equipment
- Stock verification

3.Student empowerment

- Funds are allocated for purchasing gymkhana items
- Support for participating in sports competitions
- Support for the conduct of Cultural and Technical Activities
- Encouragement for research activities and publications

4.Faculty Empowerment

- Financial support for attending courses, FDPs, and conferences.
- Research activities are funded
- Professional membership is reimbursed
- Publication of papers in renowned journals is encouraged.

5.Library Maintenance

- Purchase of Books

- Subscription of journals
- Subscription of e-books
- Stock verification

6. Utility Expenses

- Electricity and Water Charges
- Internet Expenses

7. Capital Expenses

- Purchase of Equipment and Software
- Purchase of Furniture & Fixtures

A set process for sanctioning expenses within the budget is followed. Annual audit is conducted by external auditors appointed by the management. The auditors check if processes, norms and rules are followed. The correctness of the financial data is ascertained and audited statements are issued by the auditors.

File Description	Document
Upload any additional information	View Document

6.4.2

Funds / Grants received from government bodies, non-government bodies, and philanthropists during the last five years (not covered in Criterion III and V)

Response: 967.19

6.4.2.1 Total Grants received from government/non-government bodies, philanthropists year wise during last five years (*not covered in Criterion III and V*) (INR in Lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
608.73433	310.24	0.93	44.288	3

File Description	Document
Institutional data in the prescribed format (data template)	View Document
Copy of the sanction letters received from government/ non government bodies and philanthropists	View Document
Annual audited statements of accounts highlighting the grants received	View Document

6.4.3

Institution regularly conducts internal and external financial audits regularly

Enumerate the various internal and external financial audits carried out during the last five years with the mechanism for settling audit objections within a maximum of 500 words

Response:

Institution conducts internal and external financial audits regularly.

A statutory auditor is appointed by the trust (head office) at the start of the financial year for auditing the books of accounts of the college. A financial audit is conducted to check whether the following is adhered to:

- Whether the accounts are maintained regularly and in accordance with the provisions of the Act and the rules.
- Whether receipts and disbursement are properly and correctly shown in the accounts.
- Whether all deeds, books, accounts, vouchers and other documents or records are maintained correctly.
- Whether a register of movable or immovable properties is properly maintained, the changes therein are communicated from time to time to the Head office, and the defects and inaccuracies mentioned in the previous audit report have been duly complied with.
- Whether tenders are invited for heavy expenses like repairs or construction, purchase of equipment and approved by the local/equipment committee.
- Whether the budget has been prepared and passed by the Finance Committee.
- Whether the minute book of proceedings of the meeting is maintained.
- Whether the irregularities pointed out by the auditor in the accounts of the previous years have been duly complied with during the period of audit.

- The auditors examine the books of accounts and certify the details based on the information and explanation provided. The audit is carried out twice a year and the statement of accounts like Income Expenditure and Balance Sheet are finalised on 31st March every year.
- BVB's rigorous financial audit is done every year. All audit statements are available on public domain.

File Description	Document
Upload any additional information	View Document

6.5 Internal Quality Assurance System

6.5.1

Internal Quality Assurance Cell (IQAC)/ Internal Quality Assurance System (IQAS) has contributed significantly for institutionalizing the quality assurance strategies and processes, by constantly reviewing the teaching-learning process, structures & methodologies of operations and learning outcomes, at periodic intervals

Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes visible in terms of –

- **Incremental improvements made for the preceding five years with regard to quality (in case of first cycle)**
- **Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives (second and subsequent cycles)**

Describe two practices institutionalized as a result of IQAC initiatives within a maximum of 500 words

Response:

The S.P.I.T. Internal Quality Assurance Cell (IQAC) was established with the aim of streamlining the institution's quality initiatives. The IQAC is vibrant and comprises representatives from all the departments, including all faculty. It is committed to imparting quality initiatives at institute level through its innovative, comprehensive, and flexible approach in line with accreditation, and ranking norms specified by NAAC, NBA, NIRF, etc. Apart from preparing Academic Process Manual, and conducting various audits, S.P.I.T. IQAC primarily focuses on several key areas as follows:

Formulation, Revision, and Dissemination of Institute and Departments Vision Mission Statement: IQAC is involved in the process of Formulation, Revision, and Dissemination of Institute and Departments Vision Mission Statements. To execute this process smoothly, IQAC not only conducts

meetings but also arrange workshops/seminars whenever required.

Enhancing Stakeholder Involvement: IQAC assures timely, efficient, and progressive performance improvement in the areas of academic, administrative, financial, and quality of placement by involving all stakeholders in regular meetings as well through online survey.

Enhancing Research Culture: IQAC motivates and guides faculty members for higher studies as well as undertake research and consultancy. It organizes workshops/seminars relevant to these topics which has resulted into many faculty members with Ph.D. degrees in recent years, and the number of reputed publications in transactions, journals, and conferences.

Evaluation and Appraisal: Evaluation and appraisal of faculty, department and institute are key to an autonomous any institute's success. It helps faculty, departments as well as institute to set goals and drive towards professional growth. A committee of IQAC members has proposed and framed Faculty Annual Performance Appraisal, Department Annual Performance Appraisal, and Institute Annual Performance Appraisal which is based on a 5-dimensional evaluation including Academic, Research, Administration, Outreach, and Perception.

Major Initiatives: Over the past five years, several major initiatives have been undertaken, including the automation of admission processes, overall implementation of e-governance, signing of MoUs with prestigious institutes, universities, and government agencies, framing the policy for green campus initiatives, waste management, arranging workshops/seminars on topics like soft skills for 21st-century jobs, chatbot creation, Robotic Process Automation, Continuous Quality Improvement, and guest lectures on topics like Enterprise Resource Planning, Mind Resilience, Positivity, and Productivity in Life.

Overall, IQAC at S.P.I.T not only plays a crucial role in ensuring education, research, and administrative processes but also through its various initiative contribute to the institute's overall quality enhancement, recognition from various external agencies like NBA, NIRF, AIIRA, IIC etc. and finally driving it to excellence at par with institute's reputation.

Preparing and Submitting Annual Quality Assurance Report: The IQAC prepares and submits the Annual Quality Assurance Report in accordance with the guidelines and parameters of NAAC, NBA, and creates awareness among teaching and non-teaching staff about the benefits and necessity of accreditation and ranking by various external bodies.

File Description	Document
Upload any additional information	View Document

6.5.2

The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms

Describe any two examples of institutional reviews and implementation of teaching learning reforms facilitated by the IQAC within a maximum of 500 words each.

Response:

The Internal Quality Assurance Cell (IQAC) has played a significant role in institutionalizing quality assurance strategies and processes, structures & methodologies of operations and learning outcomes of the students as per OBE standards. It achieves this by regularly reviewing the Teaching-Learning and Evaluation (TLE) process, and learning outcomes. Reforms in the TLE process and Audits for Quality Improvements are the two examples signifying the role of IQAC.

Evaluation:

In-semester Evaluation (ISE): Each course coordinator defines the methodology for In-semester Evaluation in the course plan. The Department Academic Program Committee (DAPC) evaluates the pedagogy for each course and approves it based on the overall courses in a semester.

Mid Semester and End Semester Evaluation (MSE & ESE): The question papers are set by each course coordinator and should cover 40-50% of the syllabus for MSE and 100 % syllabus for ESE. Each question paper provides a breakdown of marks and corresponding Course Outcomes (CO).

Conduction of the Examination: The institute provides seating facilities for 40 students in a classroom during examinations, with 10 students from each branch. Care is taken to ensure that no student has a fellow from the same branch seated next to them during the examination.

Open House: The question papers, synoptic solutions, and results are uploaded on the intranet-based repository (D-space). The result is prepared according to the hybrid grading scheme proposed by IQAC after the grievances of the students are recorded and resolved during In the open house is held after MSE and ESE.

Attainment of each CO is recorded by course co-coordinator according to marks for each evaluation. The HoD in subsequent DAPC meeting reviews this and provides suggestions.

Audits for Quality Improvements:

Internal Audit: IQAC conducts internal audits across departments. Each internal auditor verifies all files as per the IQAC template. Auditors submit the audit review to IQAC, which then hands it over to the respective Head of Department (HOD). The HOD conducts a meeting with all faculty members to work on weaknesses, improvements, and submits an Action Taken form to IQAC.

External Audit: IQAC conducts external audits for all courses every year. Subject experts from various colleges verify the course files and provide suggestions as per the college audit templates. Faculty members are required to incorporate these suggestions in the next academic year.

Exam Survey: IQAC conducts exam surveys randomly after any paper, focusing on the depth of questions, time management, clarity in questions, and overall learning experience of the course.

ESE Question Paper Audit: All ESE question papers are sent to auditors from different institutes. A

template focusing on the types of questions, depth of the question paper, attainment of Bloom's taxonomy, and the creativity of paper setters is shared with all auditors. Each auditor reviews the papers as Agree, Strongly Agree, or Neutral. IQAC then hands over these reviews to all faculty members and encourages them to improve the quality of the question papers. To motivate faculties, IQAC gives the Best Paper Award to the faculty members.

File Description	Document
Upload any additional information	View Document

6.5.3

Institution has adopted the following for Quality assurance:

- 1. Academic and Administrative Audit (AAA) and follow up action taken**
- 2. Conferences, Seminars, Workshops on quality conducted**
- 3. Collaborative quality initiatives with other institution(s)**
- 4. Orientation programme on quality issues for teachers and students**
- 5. Participation in NIRF and other recognized ranking like Shanghai Ranking, QS Ranking Times Ranking etc**
- 6. Any other quality audit recognized by state, national or international agencies**

Response: A. Any 5 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
Link to Minute of IQAC meetings, hosted on HEI website	View Document
Provide Links for any other relevant document to support the claim (if any)	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 Institute believes in equality, irrespective of gender, all the staff and students are treated equally. All processes followed in the Institute make sure that there is no bias behaviour with the women/men in the Institute. The key highlights of include:

- Balanced representation of students and staff at various committees at institute level
- Safety measures for girl and boy students
- Organising various self defense. prevention of sexual harassment and personality development training programmes
- Establishment of Anti-ragging Committee, Internal Complaints Committee (ICC), Women Development Cell (WDC) and its activities
- Gender Audit by IQAC

1. Internal Complaints committee - The ICC is headed by a senior female faculty of the institute and the student counsellor who attends to student's issues, personal and social with peers that are brought to her notice. The counsellor is easily approachable for the students in the counsellor room.

2. Representation in various key positions - There is women representation at all levels in the institute, including key positions like Registrar, Controller of Examination, Deans, Heads of Department, regular and ad hoc teaching faculty, Student counsellor, non-teaching staff, office, housekeeping and so on. The Students Council has a special position for Ladies Representative and the Student Welfare Committee also has a healthy female presence. At present 50% HODs, 25% Deans, Registrar, COE, and Librarian are women. 50% of other functionary positions are occupied by the Woman. Thus the Institute observes good gender balance.

All branches of engineering in the institute have good female presence and there is no bias against female participation in technical, cultural, sports and other extra-curricular and co-curricular activities.

3. Women Development Cell & Women in Engineering Committees - There is 100% women representation in WDC and WIE and significant representation in key external bodies like Governing Council, Academic Council, BoS etc.

4. Gender Ratio - The admission ratio of boys to girls is 3:1.

5. Various facilities and programs for women - All institute committees are adequately represented by women. A girl's common room and boys' common room have been made available to students. There is a biometric supported ladies' restroom for staff as well. Programs are regularly conducted for women's safety, health and wellbeing. Gender sensitization sessions are conducted during the first-year induction program itself. These include Women's Day celebration, Healthcare for women, security, and legal options available for women, sporting events conducted exclusively for women, events on art and culture conducted for women and so on.

6. Gender Audit - In addition, Gender Audit is conducted by the Internal Quality Assurance Cell (IQAC) of S.P.I.T. The audit process involves collection of data, analysing appropriateness of policies, conducted programmes and available data to identify whether the policies of the institute are suitable for all genders and implemented properly and to find out the extent of Gender Equality and imbalances, if any.

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

7.1.2

The Institution has facilities for alternate sources of energy and energy conservation measures

1. Solar energy
2. Biogas plant
3. Wheeling to the Grid
4. Sensor-based energy conservation
5. Use of LED bulbs/ power efficient equipment
6. Wind mill or any other clean green energy

Response: B. Any 3 of the above

File Description	Document
Permission document for connecting to the grid from the Government/ Electricity authority	View Document
Geo-tagged photographs of the facilities.	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

Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 500 words)

- Solid waste management
- Liquid waste management
- Biomedical waste management
- e-Waste management
- Waste recycling system
- Hazardous chemicals and radioactive waste management

Response:

1. **E-Waste Management** - To meet the various aspects of environment management and improvement, the institute is procuring dry and wet waste bins, E- waste bins, composting machines, waste management tools and disposal of obsolete machines. Awareness drives on segregation of wet and dry waste is conducted regularly. In addition, the facilities available on campus for segregated waste management are audited regularly. Apart from this faculty and students are involved in developing solutions for E waste management. **One such sponsored research project was successfully completed in the academic year 2020-21.** E- waste awareness campaign is conducted regularly.

2. **Segregation of dry and wet waste** - Dry and An E- waste collection bin has been placed on the campus and the collected E -waste is regularly handed over to recyclers. **Obsolete machines are collected from all the departments and quotes are invited for selling the E-waste from the institute.** Wet waste is collected from all the campuses and all the canteens, shacks etc. Both the wastes are segregated and collected separately. The separated waste is handed over to the BMC waste collection person. **There is a composting machine available on campus to recycle the biodegradable waste and the manure is used for maintaining the greenery in the campus.**

File Description	Document
Relevant documents like agreements/MoUs with Government and other approved agencies	View Document
Geo-tagged photographs of the facilities	View Document
Any other relevant information	View Document

7.1.4**Water conservation facilities available in the Institution:**

- 1. Rain water harvesting**
- 2. Borewell /Open well recharge**
- 3. Construction of tanks and bunds**
- 4. Waste water recycling**
- 5. Maintenance of water bodies and distribution system in the campus**

Response: A. Any 4 or more of the above

File Description	Document
Green audit reports on water conservation by recognised bodies	View Document
Geo-tagged photographs of the facilities	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

7.1.5**Green campus initiatives include**

Describe the Green campus initiative of the institution including Restricted entry of automobiles, Use of Bicycles/ Battery powered vehicles , Pedestrian Friendly pathways , Ban on use of Plastic, landscaping with trees and plants etc in 500 words

Response:

Bharatiya Vidya Bhavans' Sardar Patel Institute of Technology is located in **47 acres of green campus** at Andheri (W), and has maintained a lush green campus with a variety of trees, plants and a wonderful landscape. The campus also accommodates a nursery and botanical garden.

In line with the green campus, S.P.I.T has also incorporated variety of green initiatives that include:

- Reduced consumption of paper,
- Tree plantation drives,
- Attempts at a plastic free campus,
- Restricted use of vehicles in the campus
- Waste recycling.
- Energy conservation

Green and Environments audits

i. Digitalisation on various fronts:

The institute encourages journals and notes in digital form as a measure to save paper. Most of our reference notes, submissions and assignments / tutorials are online through google Classroom and Moodle LMS and no hard copy is required to be submitted.

In autonomy, results/gazettes are displayed online on the website to reduce paper usage.

The institute has its mail server and all the teaching faculty, non-teaching faculty and students have the account. Most notices and instructions are sent via mail to reduce paper work.

Course files and other audit related documents are maintained in the cloud to reduce paper consumption.

ii. Restricted use of Vehicles

Public Transport is not allowed within the campus and access is manned at all entry points. Student vehicles are also not allowed in the campus and the use of public transport is encouraged.

iii. Awareness Campaigns

Regular awareness drives related to ban on single use plastics are carried out in the campus. Poster competitions, plantation drives and other activities are held with complete student involvement.

iv. Waste Recycling

There is support for recycling activities by regular disposal of laboratory manuals, laboratory submissions, answer papers, and used mineral water bottles collected during festivals and events to paper and plastic recyclers.

v. Energy conservation

The temperature of Air Conditioners (ACs) is always kept at 25 degree Celsius to support the environment. The timetable and remote of ACs are with security that takes care of switching off ACs on

time to restrict the use of electricity. Ten solar panels with a total power output of 3000KW have been installed in the campus and are at present being used in conjunction with solar submersible pumps used for pumping borewell water. Sensors in the overhead water tanks facilitate the switching on and off these pumps thereby saving power as well as water.

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
Provide Links for any other relevant document to support the claim (if any)	View Document

7.1.6

Quality audits on environment and energy are regularly undertaken by the institution

The institutional environment and energy initiatives are confirmed through the following

- 1.Green audit / Environmental audit**
- 2.Energy audit**
- 3.Clean and green campus recognitions/awards**
- 4.Beyond the campus environmental promotion and sustainability activities**

Response: A. All of the above

File Description	Document
Report on environmental promotion and sustainability 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

7.1.7

The Institution has Differently-abled (Divyangjan) friendly, barrier free environment

Write description covering the various components of barrier free environment in your institution in maximum of 500 words

- **Built environment with Ramps/lifts for easy access to classrooms**
- **Divyangjan friendly washrooms**
- **Signage including tactile path, lights, display boards and signposts**
- **Assistive technology and facilities for Divyangjan accessible website, screen-reading software, mechanized equipment**
- **Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading material, screen reading**

Response:

In keeping with the institute's vision of social sensitivity, S.P.I.T. has a well-defined policy of inclusion for differently abled students. The institute abides by the **norms laid down by Apex Bodies like AICTE, University of Mumbai, etc. for such students.** This policy includes disabled friendly infrastructure, Teaching Learning and Evaluation methods, examination process, mentoring, etc. A Divyangjan committee at institute level has been formed to take care of the needs of such students. These efforts are also reflected in the examination results of such students.

- **Disabled friendly infrastructure** - This includes ramps for access to the main building and to other areas within the building. Lifts with Braille symbols for floor numbers also provide easy access to classrooms. There are disabled friendly washrooms on the ground floor as well. A wheelchair is available at the entrance of the lift and is accompanied by housekeeping staff for the convenience of these students.
- **Efforts taken by Faculty members** - Faculty of the institute take special efforts to suitably modify the Teaching Learning Evaluation methods like notes and lessons through user friendly platforms, special efforts to read out questions during exams, tests and other assessments. Lab sessions for visually impaired and other physically handicapped students are conducted with care and empathy to avoid accidents and injuries. **A case study on a highly visually impaired students has been included in the details uploaded.** Faculty use alternative assessment tools for such students like practical viva-voce, oral exams and so on.
- **Examination Section** - The examination section of S.P.I.T also accommodates such students by providing extra time, special seating arrangements etc. during exams. Writers are allowed to support these students within the institute framework in special cases.
- **Support Staff** - The support staff are also involved in the care of such students. Since screen reading software is not available at the institute, visually impaired students are assisted by providing soft copies of the notes and a non-teaching staff to help avail this facility from outside

the campus. **The details have been included in the case study mentioned above**

- **Divyangjan Committee** - A committee named “Divyangjan Committee” has been formed under the leadership of the Dean of Administration consisting of a faculty member from each department which is currently looking into the government guidelines for such students and trying to bridge any gaps that may exist and also go beyond in an attempt to bring these students into the mainstream and make this campus a barrier free environment for such students.
- **Support extended to disability students** - In the A.Y.2022/23, a student with 75% visual impairment in Computer Engineering. With help of software ORCA, class notes of handpicked students were regularly scanned for the benefit of disabled students. During examinations, not just extra time was given to these students, but faculties also used to read out questions to help such students. **The details have been included in the case study mentioned above**

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

7.1.8

Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and such other diversities (within 500 words).

Response:

Vision of the founding Member - S.P.I.T is founded on Kulpati Dr K M Munshi’s vision of inclusion which states that “**a university cannot afford to ignore the cultural aspects of education whatever studies it specialises in**”. With a strong belief in Vasudhaiva Kutumbakam – **The whole universe is our family; extending its services in education to one and all without any discrimination on any grounds whatsoever.**

Governing Norms - Since our institute is affiliated to University of Mumbai and is governed by the rules and regulations of AICTE and Govt of Maharashtra, recruitment of teaching, non-teaching and contractual staff as well admissions of students include all religions and socioeconomic classes. Reservations for various categories are respected and adhered to as per government directives. As per government norms, there are specific committees like the SC-ST committee and Internal Complaints Committee to address any concerns of staff and students.

SEVA SATVA Courses - Institute also conducts an awareness programme to spread the message of Indian ethos, equality and cultural diversity. As part of the **Induction Programmes conducted for every batch of fresh undergraduates, sessions on diversity and inclusion are conducted.** As part of our Seva Satva courses we have floated a course titled ‘**Philosophy of religions**’ stressing the importance of

inclusion.

Celebration of different festivals and fests - Our academic calendar prepared at the beginning of every semester, takes into account holidays marking important festivals like **Ganesh Festival, Dussehra, Diwali, Eid, Muharram, Christmas, Good Friday, Guru Nanak Jayanti, Parsi New Year**. There is no restriction on attire according to religious beliefs and staff and students are supported during various religious parts of the year like during the holy month of Ramzan. In addition, certain days are earmarked for cultural activities like Traditional Day etc. Our **Annual Techno Cultural fest, Oculus is a melting pot of cultures** with a touch of vibrant art and diverse entertainment. Festivals like the **Ganesh Festival and Garba during Navratri** sees enthusiastic participation from students and staff belonging to diverse cultural and socioeconomic backgrounds extending over the entire duration of almost ten days. During celebration of festivals at the institute, religious sentiments of staff are respected in terms of diet, attire and prayers.

Food Challenge - A “Food Challenge” event organised by our E-cell, S.P.I.T sees the mixing of cultures from across the country by inviting participation from students to showcase diverse foods from various parts of the country which are served to students and staff alike.

Teaching Faculty Fund - There is a fund privately created by teaching staff to support students from economically weaker sections. The institute being governed by State Government norms, students benefit from scholarships offered by the government. It also does **not differentiate students based on socioeconomic backgrounds**.

File Description	Document
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	View Document

7.1.9

Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens

Describe the various activities in the Institution for inculcating values for being responsible citizens as reflected in the Constitution of India within 500 words.

Response:

Bharatiya Vidya Bhavan's S.P.I.T. has a set of institutional values which includes **integrity, excellence, social sensitivity, and globalization**. Every stakeholder of the institution practices these values by incorporating them in every aspect of its functioning including academics, research, and administration.

Academic practices include **courses under the category of SEVA and SATVA like Religions of India, Leaders of India, Books in literature, through which students are encouraged to learn about India's rich cultural heritage and traditions** and become aware about some of the major problems of

India. **Courses like Constitution of India, Law for Engineers and Environmental Studies are also being conducted at the institute or taken by students as MOOC credit courses to be taken by students.**

S.P.I.T. also believes in giving back to society and tries to instill the values of social service among its students and faculty members by being a **part of various social welfare schemes, and tie-ups with NGOs from time to time.** Students and faculty are also involved in social initiatives alongside NGOs, like education of underprivileged students under the **Abhyudaya scheme, beach cleaning under Afroze Shah Foundation and audit of fire safety measures in Ganesh Pandals under Fire Safety Association of India.** Through these courses, students are sensitized about their responsibilities and duties toward the country and environment as well as respect human values and ethics

The Malpractices Committee of the institute takes into cognizance, cases of students adopting unfair means during examinations and strict action is taken in such cases. Students and faculty are also expected to maintain professional ethics in research activities like projects and paper publications. This is enforced by making **plagiarism checks through a licensed tool: Turnitin prior to submission of any technical document.**

The administration at S.P.I.T also strives to inculcate these values by encouraging the involvement of faculty and students in celebrating days holding national importance like **birth anniversary of Savitribai Phule, Marathi Diwas, Women's Day, Shivaji Maharaj Jayanti, Constitution Day, Yoga day, Gandhi Jayanti, Teacher's Day, National Youth Day, Sardar Patel Jayanti, etc.** is celebrated with great enthusiasm by the institute to **celebrate the Marathi language.** The library section of the institute pays tribute to the Indian scientist by celebrating **Science Week with a “Books Exhibition”** spread over three days.

At the Institute, **awareness programmes are conducted by inviting Expert speakers to deliver lectures on a wide range of topics through the Induction Programme for new entrants and periodic training sessions.**

The facilities available at the campus, is used by the residents of nearby areas for morning and evening walks, conducting yoga sessions and for procuring plants and fertilizer from the nursery.

File Description	Document
Details of activities that inculcate values necessary to nurture students to become responsible citizens	View Document
Any other relevant information	View Document

7.1.10

The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard.

- 1. The institutional Code of Conduct principles are displayed on the website**
- 2. There is a committee to monitor adherence to the institutional Code of Conduct principles**
- 3. Institution organizes professional ethics programmes for students, teachers, administrators and other staff**
- 4. Annual awareness programmes on Code of Conduct are organized**

Response: A. All of the above

File Description	Document
Report on the student attributes facilitated by the Institution	View Document
Policy document on code of ethics.	View Document
Handbooks, manuals and brochures on human values and professional ethics	View Document
Document showing the Code of Conduct for students, teachers, governing body and administration as approved by the competent authority.	View Document
Constitution and proceedings of the monitoring committee.	View Document
Circulars and geo-tagged photographs with date and caption of the activities organized under this metric for teachers, students, administrators and other staff	View Document
Provide Links for any other relevant document to support the claim (if any)	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:

I. Title: Integration of Direct Second Year (DSE) lateral Entry Students with regular B.Tech. Program through a Mathematics bridge course and bonding measures with regular B.Tech. Students.

1. Objectives / Intended Outcomes

Bridge courses are a valuable resource for Diploma students to help them transition smoothly into more

challenging courses at a sedate pace. The integration process for DSE students aims to:

1. **Bridge knowledge or skill gaps.**
2. **Foster inclusion** in line with the values of **Vasudhaiva Kutumbakam**

2. Context

Mathematics is the language of engineering, and an essential ingredient in any engineering discipline to solve complex societal problems. Mathematical tools such as Fourier transforms, Laplace transforms, differential equations, linear programming etc are used in several important applications for societal benefits.

3. The Practice

S.P.I.T offers bridge course in Mathematics to DSE students since becoming autonomous in 2017-18 as a non-credit course in Semester III alongwith two regular four credit courses “Applied Mathematics I” in Semester III and “Applied Mathematics II” in semester IV.

Students were unable to cope with the three Maths courses and demands of other new courses coupled with a sense of separation from the mainstream.

Since 2020-21, two bridge courses in Mathematics, “Foundation of Mathematics I” and “Foundation of Mathematics II” are offered as three credit courses, (two lectures and one tutorial) during Semester III and Semester IV respectively.

The regular Mathematics course is floated separately during the **Summer Term** with a separate timetable circulated in advance both with students and faculty. A separate examination is also held prior to commencement of Semester V.

4. Evidence of Success:

This success of this strategy is endorsed by the strong academic performance of the DSE students who obtain grades comparable with regular B.Tech students . The DSE students are also putting up a strong performance on placements with comparable opportunities and median salaries as regular B.Tech counterparts.

Thus bridge courses are a highly effective and unique practice at S.P.I.T with measurable outcomes in academics and placements

1.5. Problems encountered , required resources

1. Delayed lateral entry admissions lead to difficulties in coping with the backlog
2. Due to summer term, there is no break from academics prior to starting Semester V.
3. The timetable needs advance planning to balance faculty workload with examinations, evaluation and declaration of results in a span of eight weeks.

II. Integration of SEVA-SATVA/Humanities courses, promotion of MOOC learning from

NPTEL/SWAYAM portal for 4Q development (IQ, EQ, PQ and SQ).**1. Objectives / Intended Outcomes**

The S.P.I.T curriculum follows a holistic approach and develops various aspects of the student's personality through Liberal Learning and Humanities sequels delivered through classroom and MOOC courses for a well-rounded personality. Due to time and resource constraints, MOOC courses offer the best solution in terms of accessibility, flexibility, affordability, and variety. The objectives of integrating liberal arts courses and promoting learning on MOOC platforms in the S.P.I.T curriculum are:

1. Integrating 4Q intelligences per **institute's vision of producing globally competent and socially sensitive engineers.**
2. MOOCs provide **additional resources and learning opportunities not available in formal academic settings** enhancing learner's resumes and fulfilling continuing education requirements.

2. Context

SEVA (Social Empowerment through Work Education and Action), SATVA (Student Training for Action in Vocational Areas) and Humanities & Social Science (HSS) courses play a crucial role in the implementation of the NEP's objectives. They recognize that not all students excel in traditional academic subjects and provide alternative pathways to success, promote inclusivity and offer students, optimum opportunities to develop their talents at the same time providing avenues to disengage from the rigors of academics.

3. The Practice

Students are expected to complete six credits under SEVA/SATVA through eight semesters by investing 30-35 hours in each course of one credit. Nearly 15-20 courses are floated every semester and a faculty coordinator is appointed for each course to ensure smooth conduction, evaluation and compilation of results. In few cases, external instructors are appointed.

A course is allocated to each student based on choice and logistics and it is included in the weekly timetable. At term-end, the faculty coordinator conducts a performance evaluation with or without the instructor and students are graded based on their regularity and knowledge / skills developed. Grades are forwarded to the Examination Cell for inclusion in the CGPA calculation.

For MOOC Courses students are encouraged to register on the NPTEL platform for a course of 8-12 weeks as per their choice. They also register for the exam with the registration fee reimbursed on successfully clearing the exam. They are graded based on the marks obtained in the course. If a student fails, a separate exam at the institute is conducted and marks are submitted to the exam cell.

4. Evidence of Success: Please refer link : <https://naac.spit.ac.in/datalinkLink> for Best Practice_MOOC.pdf

S.P.I.T students have been involved in various societal activities since 2019-20 with their contribution being widely acknowledged in newspapers and social media platforms. The institute has also won a few

awards in this category.

The success of MOOC can be gauged from the fact that S.P.I.T is now one of the top two colleges receiving AA ranking based on student's performance in NPTEL. The Institute NPTEL enrolments have increased considerably as shown in fig, 5, fig 6, and fig 7 and it is placed in the top **1-40** band of colleges having the highest enrolments in the last three years.

5. Problems Encountered / Resources required

1. Some courses are graded subjectively affecting overall CGPA of the students and Institute is considering excluding SEVA/SATVA grade from CGPA calculation to address this concern.
2. Validating of the credentials is required with the need to conduct examinations and assessment for students who fail in the NPTEL exam

Please refer following link for extended summary of Best practices and other details:

<https://naac.spit.ac.in/Criteria%207/7.2.1/Best%20Practices.pdf>

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:

Placements

S.P.I.T is the numero uno technical institution in Maharashtra exceeding institutions like IIIT Pune, NIT Nagpur, College of Engineering, Pune etc. with a strong industry connect leading to the top position for placements. Among all the areas like Curriculum Design, TLE, R&D, Placement Cell, S.P. Technology Business Incubator (SP-TBI), in which S.P.I.T. has excelled in its attempt to create enthusiastic engineers. S.P.I.T discourages mass recruitment in a specific domain. The institute has a record of 100% placement of its eligible students. with an average CTC at par with those at new IITs and NITs.

I. About Training & Placement Cell

In order to achieve the highest standard of employability, the Training & Placement Officer (TPO) motivates and prepares students for the interviews and prospective workplace. Careful and systematic preparation is initiated and sustained for this purpose. It is a full-fledged department having its own infrastructure for successfully executing the placement process.

1. Constitution of Training & Placements Cell

The constitution of this cell is well planned and strategically formulated to include all relevant stakeholders. It has its own hierarchy to maintain transparency in the entire placement process. This consists of the Head of the Institute, Training & Placement Officer (TPO) and Training & Placement Coordinators (TPC) who are a group of students selected from every branch and the Point of Contact (POCs) who are the Class Representatives (CRs).

1. Placement Process

The Training & Placement Cell has its own well defined and unique process for providing placements to S.P.I.T. students only through campus interviews. This process is executed in phases namely :

Phase I: Planning & Training

The selection and training phase takes place at the beginning of every year. In this phase, the TPCs of the previous year, selects two or three students from the 6th Semester of each branch after a rigorous interview and trains them to understand the placement process. The list of eligible students for placement is declared by the TPO. Training is divided into two parts. For external training, demo sessions by various training institutes are arranged and based on students feedback, the agreed upon course is then scheduled across the 6th semester on weekends and training is conducted accordingly. For internal training, sessions are conducted by previously placed students and Alumni working with corporates who share their experiences and knowledge on select topics as requested by students.

Phase II: Providing Internship

S.P.I. T is the only engineering institution in Maharashtra to offer a semester-long industry or research internships in the sixth or eighth semester of the B.Tech program. M.C.A students must complete a 6-month internship as a part of their curriculum in the 6th semester. As Internship is a great way to provide industrial exposure to students, students are encouraged and advised to go for internship and required support is provided in this direction. The screening process is done via an online coding test or an aptitude test followed by an interview.

Phase III: Commencement of Placements

The Placement process begins with the framing of the placement policy in consultation with the Principal and considering the current market trends. A cell formed in the TPO specially concentrates on identifying the CORE companies and taking steps to invite them to campus. After formulating the placement calendar, the companies are asked to share their eligibility criteria and the desired skills for the role and this information is shared with students. If a TPC is unplaced, then this student is allowed to focus on his academics and his placement cell role is taken over by an already placed student. There is also a deferred placement policy wherein students are encouraged to begin start-ups and given a time frame of two years to make a success at entrepreneurship.

Phase IV: Compilation of Data

The data of selected students is compiled simultaneously during the process of placement. Students selected once by a dream company are not allowed to appear for another company while students selected by normal companies are permitted to participate in the dream company selection process. Closer to the end of the placement process a group is formed for the Unplaced students and openings

with various companies are communicated to them. Unplaced students are also informed of the various apprenticeships training available.

S.P.I.T 's legacy of such excellent placement records is not the result of a day, a month or a year's efforts, instead it is a continuously evolving process which is reviewed, deliberated upon and modified every year taking into consideration feedback from all the stakeholders (students, alumni and recruiters). There are extensive discussions prior to forming the placement policy and students are trained in a focused manner with the help of mock Group Discussions, mock interviews, and various other tools.

Even though the AICTE's model curriculum 2020 recommends industry internship, S.P.I.T in its first curriculum iteration after receiving autonomy, had already included internships in the 8th semester for students opting for placements. This was done after receiving extensive feedback from recruiters. S.P.I.T is now one of the few engineering institutions in Maharashtra which facilitates paid internships to students at reputed companies.

The Training & Placement Cell is also involved in e-governance for students aiming for foreign universities by developing an online system for providing Letters of Recommendations (LoRs). However, over a period of time this role has evolved into not only providing LoRs but also assisting such students to undertake 6 months long Research Internships during the VI Semester. These research internships have improved the quality of our B. Tech Projects and are also contributing to quality publications as well fetching recognition in national and international competitions.

In conclusion, the various thrust areas of the institute like Curriculum Design, TLE, R&D, Placement Cell, and S.P. Technology Business Incubator (SP-TBI) complement each other in ensuring that graduating students have a bright future and are helping the institute realise its vision and mission.

Please refer website for details :

File Description	Document
Any other relevant information	View Document
Appropriate webpage in the Institutional website	View Document

5. CONCLUSION

Additional Information :

The institution takes pride in running a **DST supported Technology Business Incubation**. It has received a total funding of **Rs. 20 Crores** and incubated more than 150+ start ups and actively participated in the Startup India Mission of the country. Institute is also mentor to 5 institutions for entrepreneurship related activities.

having introduced an **e-cell** very early since 2006, with a mission to inspire, and help people to not only be entrepreneurs but to be high growth entrepreneurs. It aims to do so by hosting various events for entrepreneurs and supporting them by seed funding, mentoring consultancy and networking. These efforts were noticed and the institute's proposal to establish an Innovation and Entrepreneurship Development Cell was sanctioned by the Department of Science and Technology (DST) with a grant of 44 lacs in 2010. Institute has nurtured the culture of Entrepreneurship since 2006. In 2009 it started an Incubation Centre which was registered as a trust, a not-for-profit organization supporting Alumni with their start-up initiatives. **The efforts were recognized by the Government of India and it got affiliated to DST for its Technology Business Incubator program in 2016 with a sanctioned grant of Rs. 450 lakhs for 5 years.** The Incubator thus established is named as Sardar Patel Technology Business Incubator named as SP-TBI. **SP-TBI has received sanctions of Rs. 20 Crore from two different Government of India departments namely NIDHI PRAYAS, NIDHI SSP and SISFS for supporting startups financially.** The institution also provides sponsorship to faculty members for higher studies, research work and financial support for attending conferences and publications.

All eligible UG programs of the institute are accredited by NBA, in year 2013, 2017, 2021.

Today, institute is only Empowered Autonomous Engineering Institution of Mumbai University.

Institute is constantly ranked between 10-40 tag by NPTEL for best performing local chapter in terms of number of registration, successful completion and receipt of elite certifications.

Concluding Remarks :

Inspired by the words of its founder, the S.P.I.T constantly **innovates in T-L-E** processes, Curriculum Design and Deployment, to fulfil its objectives and **march in the light of its mission**. It is **front runner** in the implementation of NEP-2020 and providing guidance to many autonomous institutions in the State of Maharashtra. It observes 100 % academic sincerity, demonstrates 100 % transparency, empowers its students and faculty, provides working flexibility, encourages higher learning, follows all regulations of AICTE/ Parent University / and Government of Maharashtra. **It is one of the very very few** self financed institutions of the country which fills management quota seats through open merit with out charging single rupee more than the Government sanctioned fees.

It has a close association with IIT Bombay and very strong industry association. It invites and involves industry expertise in all academic and research activities. **It is in top three institutions of Maharashtra as per the social ranking.** *Top-of-the class undergraduate students* has been the characteristics of the institute since its inception. From several years, it is observing 100 % admissions, nearly 100 % academic results and **spectacular** placements.

In terms of the average salary of the campus, mean salary offered to the graduating batch, academic results and PG enrolment in the best universities of the world, it is *second-to-the none* in the state of Maharashtra. It is declared as a *Empowered Autonomous Institution* by the parent university for 10 years. **All eligible undergraduate programs of the institute are NBA accredited, three times.**

It has set high quality standards for itself and it constantly pursues the excellence in all facets of the institution functioning. **It has received DST support of 20 crores for Technology incubation**, it is a regular receipt of **AA rank by NPTEL** and received a prestigious Technology Transfer project from DST worth Rs. 72 lakhs, are testimonies of the culture of the institute. It is always the first institute in the State to implement the revision of the pay scales. **It is now poised for fostering the research, and internationalization.**