



SELF STUDY REPORT

FOR

2nd CYCLE OF ACCREDITATION

XAVIER INSTITUTE OF ENGINEERING

XAVIER INSTITUTE OF ENGINEERING, MAHIM CAUSEWAY

MAHIM, MUMBAI-400016

400016

www.xavier.ac.in

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Xavier Institute of Engineering (XIE) was established in the year 2005 by the Society of Jesus (Jesuit fathers). It is approved by the All India Council of Technical Education (AICTE), New Delhi, recognized by the Directorate of Technical Education, Govt. of Maharashtra and affiliated to University of Mumbai.

Key Values Of XIE

Cura Personalis

Like most Latin phrases, it is very succinct. It points to the role of an educator, not to be concerned merely with cerebral development, but with every aspect of a student's life, ranging from the physical to everything else of the mind and spirit. The supervision involved is not parental, but what emanates from concern and friendship, and the reward of the effort is that the student feels self-fulfilled, respectful, responsible, and fully human.

Nishkama Karma:

It is a truism in all religions that the cause of all human problems is what each one cherishes, protects, and enhances: the ego. It is only when one is devoid of it, the greatest fallacy in human life, when one is "unselfed of the self," that one gains total liberation. Surprisingly, when one tries to do away with the ego, through asceticism and self-denial, the ego enters sort of by the back-door, and every spiritual striving then is ultimately self-regarding. It is only when one, called to do anything, does it for its own sake, the ego is forgotten; in "desire-less action" the purity of the action is maintained. The ideals and goals of Jesuit education are great, but they are not achieved by the Jesuits. If they are, in a big or small way, they are all due to the sheer grace of God.

XIE offers the following 4 year degree courses in Engineering Computer Engineering, Electronics and Telecommunication Engineering, Information Technolog, Computer Science and Engineering (Cyber Security, IOT and Blockchain Technology

Vision

To nurture the Joy of Excellence in a world of High Technology.

Mission

To strive to match global standards in Technical Education by Interaction with Industry, Continuous Staff training and Development of quality of life.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

1. The institution adheres to the core value of providing unbiased knowledge to all students.
2. The institute has highly qualified faculty with strong academic backgrounds who encourage the students to excel.
3. The promotion of digitalization has eliminated tedious paperwork, leading to systematic digital documentation.
4. The institute employs a combination of traditional teaching methods and ICT-based education, including flipped-classroom methods.
5. Xavier Institute of Engineering provides quality infrastructure and facilities, equipped with both basic and modern amenities for faculty and students.
6. Xavier Institute of Engineering is located in Mahim heart of the city of Mumbai. Easily reachable by public transport like train, bus and taxi. Walkable distance from Mahim (west) Western Railway Station.
7. The institute discusses students' academic progress with their parents or guardians to enhance their performance.
8. The institute's dynamic student council organizes events fostering leadership spirit from a young age.
9. Encouraging sports and other university-level activities has significantly contributed largely to the allround development of the students.

Institutional Weakness

1. The lack of hostel facilities by the institute is seen to be one of the primary concerns of both the students as well as their guardians. Since there are several students who hail from different parts of the state, they have to search for a separate living space for themselves.
2. Limited number of research publications in peer-reviewed journals and Limited research grants, consultancies and patents.

Institutional Opportunity

1. Organizing more seminars and expert talks so that the students get first hand knowledge of how industrialists flourish.
2. Starting the Postgraduate courses to enhance the imparting of education at the same institution so that students may have a continuity in their academic journey.
3. Increase in Industry Institute Interaction through MoU with reputed institutions and premier industries.

4. Have better connection with other institutions by organizing and attending more expert talks and exchange of faculty programs to increase communication amongst institutions.
5. Conducting more on-campus Faculty Development Programs (FDP) which will help the teachers and lab assistants upgrade their skills from time to time.
6. Create various educational, extracurricular, scientific, and sports-related clubs for students for better participation and hands-on experience with how things work.
7. Tie-ups with more industries to improve the placements for the students.

Institutional Challenge

1. Being a University affiliated Institution, there is limited flexibility in the academic schedule to attend Industrial training and undergo internships.
2. As the University curriculum is revised every four years, keeping up with rapidly evolving technologies, training the faculty, and implementing the advanced concepts in the laboratory is a challenge.
3. Fewer library hours due to exposure and dependency on digital content during and post-pandemic.
4. Dealing with the students having financial and emotional health issues post-pandemic.
5. Establishing and maintaining strong ties with industries to ensure curriculum relevance and facilitate research partnerships.
6. Ensuring graduates are well-prepared for the current job market and industry needs. 7. Students are from diverse regional, cultural, and economic backgrounds hence, training for communication skills and other soft skills is a challenge.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

Our Institute is affiliated to the University of Mumbai and follows the prescribed curriculum. Our teaching staff participates in the curriculum design workshops conducted by the university. The academic calendar is prepared at the Institute – level as well as at the Department – level before the commencement of the semester and it is shared with all the students, their parents and faculty. The pedagogical approach of our Teaching – Learning process involves amalgamation of traditional equipments along with the modern ICT tools. Our teaching techniques include lectures and practical sessions along with internal assessment tests, assignments, quizzes, flipped classrooms and course – exit surveys. Such blended learning models are encouraged to have outcome-based education and enable students to collaborate and network effectively among themselves and with the teachers. Our institute follows mentor – mentee system for all the students and mentee’s overall development is competently monitored. There is an effective mechanism of identifying slow learners and

advanced learners based on students' performance in the assessment tests. Remedial lectures are conducted for the slow learners and their progress is regularly monitored by the teachers. Teachers use ERP/ Google classrooms for sharing teaching plans, study material, monthly attendance reports, time – table, academic calendars and result analyses. Necessary actions are taken on those students who are having less than 75% attendance. Internal Assessment Test – I after 40% coverage and Internal assessment test – II after 70 % coverage of syllabus are conducted. End semester examination is conducted by the University. Our Institution emphasizes on Value Added and Skill – based courses. Curriculum includes mini and major projects, report writing and research paper

Teaching-learning and Evaluation

The improvement in the calibre of applicants for admission is seen in the rise in admissions with every year that goes by. The Institute follows recommended norms when offering academic and other forms of support to accepted students from a variety of backgrounds. Within the framework of the institute's mentoring programme, each faculty member is given approximately twenty students, and that allocated faculty member guides and encourages those students.

The process of teaching and learning is implemented through the execution of a carefully structured curriculum. Various methods, such as module assessments, internal evaluations, and laboratory sessions, project exhibitions serve to gauge the comprehension levels of the students. Additionally, the faculty administers a feedback form to each student upon completion of the course. Measures including remedial sessions are taken to support students who may require additional assistance. Moreover, specific tutorials are arranged for students entering the program at a later stage to ensure their alignment with their peers. Furthermore, high-achieving students are motivated to engage in activities like Hackathons and other competitions.

The institution adheres to a policy of appointing highly qualified and experienced faculty members in accordance with the standards set by AICTE, thus contributing to the enhancement of the Teaching-Learning process. The establishment ensures the maintenance of the necessary teacher-student ratio.

Faculty members are assigned courses based on their skills and areas of expertise. They develop detailed course plans, lesson plans, and educational materials as part of the academic timetable. The faculty utilizes innovative teaching and learning methods such as ICT tools and contemporary pedagogical approaches. In order to align the curriculum with industry demands, specialized technical training programs are organized. Additionally, efforts to enrich students' knowledge in their respective fields include guest lectures, workshops, and other events.

The assessment and evaluation procedures comply meticulously with the University standards. Each program defines a set of PEOs, POs, and PSOs based on the principles of outcome-based education. Course goals and outcomes are established for each subject according to the various levels of Bloom's taxonomy. Regular assessments of achievement levels are conducted to guide the implementation of necessary corrective actions.

Research, Innovations and Extension

As evidenced by several research, invention, and extension accomplishments, the Xavier Institute of Engineering (XIE) has demonstrated a commendable commitment to research and academic engagement. Several research projects and infrastructure improvements have been made possible by grants from

governmental and non-governmental agencies totaling 25 lakhs. XIE places a significant emphasis on the dissemination of knowledge. A strong emphasis is placed on faculty and student publication in top-tier academic journals and presentation of their work at conferences in order to contribute to the global pool of knowledge. A total of 43 research papers have been published by faculty members in journals and conferences, which has significantly contributed to academic discourse.

As part of its academic enrichment program, the institution has organized a total of 44 workshops, seminars, and conferences with a particular focus on Research Methodology, Intellectual Property Rights (IPR), and Entrepreneurship. Students and faculty are actively encouraged and supported in the process of patenting their innovative ideas at the Institution. The institute has established a GAIT Lab for carrying out a physical examination of a person with walking disabilities. This lab uses state-of-the-art computer technology to capture a 3-D image of a person's walk that can help the team identify specific ways to help improve the person's ability to walk, step, and run. The students and staff utilized this lab to conduct research-based activities. Through this initiative, many of our students have successfully published a research paper.

The institution has also demonstrated a strong commitment to community service by implementing 43 extension and outreach programs, facilitated through organized forums such as the National Service Scheme (NSS). A robust network of internships, on-the-job training, project work, and faculty exchange has been established by the institution in order to foster collaborative relationships. These agreements include 22 functional Memoranda of Understanding (MoUs) and 34 linkages with various institutions and industries. This achievement illustrates the institution's commitment to providing a holistic education, an excellent research environment, and an active community engagement program.

Infrastructure and Learning Resources

The campus spans 3 acres with 8399 sq.m. of buildings, including 10 classrooms, laboratories meeting AICTE norms, computer center, seminar hall, drawing hall, conference room etc. Solar power panels and nearby medical assistance from SL Raheja hospital enhance the institute's amenities. First aid, fire extinguishers, and water purifiers are provided, along with internet access for staff and students. Annual infrastructure updates are based on suggestions from stakeholders.

The institution accommodates disabilities with lifts, ramps, and restrooms, and offers common rooms. A canteen serves healthy food, and CCTV surveillance ensures security. Sports facilities include outdoor grounds and indoor games to foster teamwork and leadership. Yoga sessions and cultural events like Spandan and TedX promote holistic development. Intercollegiate and intra-college events enrich student life, including cultural celebrations and academic occasions like Teacher's Day and Engineers Day. Xavier Institute of Engineering, provides a comprehensive environment for academic, extracurricular, and personal growth.

XIE Library, situated on the first floor of the building, covers over 400 sqm. It offers open access on working days with a vast collection of 13,416 books and 4857 titles, including reference books, project reports, and question papers. Subscriptions to IEEE Xplore and DELNET enhance digital resources. The library is automated using SLIM 21 software, facilitating access to print and electronic materials. Various services like reference assistance, printing, and content listing are provided.

The institute boasts ICT-enabled classrooms, well-equipped labs, sports facilities, and eco-friendly

infrastructure across campus. With spacious, well-furnished classrooms, it ensures proper visibility and audibility. A high-speed campus-wide network connects all departments with 690 systems and two leased lines of 150 Mbps each. XIE offers 744 computers, 18 Smart Boards, and Wi-Fi access points. IT facilities are regularly updated to meet AICTE norms and student needs regularly.

The college website provides all the essential information for the stakeholders. In an Emergency situation, the class notes assignments are uploaded in Google classrooms. Institute has ERP for teaching, learning ,and monitoring purposes.

Student Support and Progression

The institute has a healthy environment and supportive resources for student progression and well-being. The institute offers scholarships in spite of government scholarships. The institute organizes several capability enhancement schemes, such as guidance for competitive examinations, career counseling, bridge courses for recent technology awareness, and personal counseling. The training and placement cell provides pre-placement guidance to the students for placement activities. The cell coordinates internships, placement activities, and guidance for higher education. The students enthusiastically participate in sports tournaments and cultural competitions organized by the institute and outside.

The college has an active student council. Student representatives are present on some of the college committees, such as IQAC, the College Annual Magazine Committee, etc. Departments organize alumni meetings periodically. having a grievance redressal committee to resolve complaints, if any. The Institute consistently arranges programmes for skill improvement and capacity building, which give students useful real-world experience and improve their employability. The school's proactive approach to skill development supports students' overall growth and successful progress in their academic and professional endeavors. Students have also greatly benefited from the institution's career counseling and competitive exam help. In order to prepare for several state, national, and international level exams such as GATE, CAT, GRE, TOFEL, and IELTS, students receive help and guidance. Pupils who performed well in this area were accepted into famous universities all around the world. In order to demonstrate the college's commitment to a safe environment. The institution's Training and Placement Cell works with many firms annually to provide students with the best chance to launch their careers. The Institute promotes students' overall development by encouraging involvement in sports and cultural events. Excellent coaching in all areas and a strong infrastructure have enabled students to achieve outstanding achievements in extracurricular activities and sports. This all-encompassing strategy fulfilled NAAC requirements for supporting a thriving campus community.

Governance, Leadership and Management

The Institute vision and mission clearly defines that it works towards the student's excellence with joy by matching global standards in technical education. To foster and to realize fruitfully the vision and mission of the Institute, it is desirable to have a well-knit organizational structure; XIE has a strong organizational structure which includes chairman of GC, director, principal, administrator, HoDs, deans, TPO, librarian, registrar, faculty members (assistant professors, associate professors and professors).

Various committees at the college and departmental level assure decentralization of governance and are depicted by delegation of roles and responsibilities to various coordinators appointed at institute/department

level.

The rules, procedures and policies regarding recruitment, promotion and services of all faculty and staff are well defined by the norms of AICTE.

The Institute has its own well-defined proforma to evaluate faculty members through evaluation of their teaching-learning process, research and other activities. The staff welfare schemes are in place and implemented by the Trust to take care of the welfare of the staff.

The primary fund required for the development of the institute along with the day to day expenditures comes from tuition fees and development fees paid by the students. The college has a well-formulated financial policy which ensures effective mobilization and optimal utilization of finances for academic, administrative and other developmental purposes.

The IQAC has made significant contributions for framing and implementation of the quality assurance strategies and processes. The IQAC and its constituent cell undertakes various quality assurance initiatives

Institutional Values and Best Practices

Gender awareness is promoted via workshops, seminars, guest lectures, street plays, poster displays, counseling, and other activities. In accordance with grievance committee regulations, the institution established anti-ragging, student disciplinary, women empowerment, SC/ST student welfare, and mentoring committees. CCTV cameras and 24-hour campus security keep students and faculty safe. XIE's mentoring programs assist students in their academic, emotional, social, and cognitive development. Individualized counseling is provided to students. The restrooms for girls are separately available. For student's health protection, restrooms are frequently cleaned by Housekeeping Staff. Various gender sensitization programs are organized via the Women's development cell. The institute also observes days of national importance regularly.

The Institution has facilities and initiatives for

1. Alternate sources of energy and energy conservation measures with the use of solar panels, LED bulbs, and by promoting EV technology on campus.

2. Water conservation is done through water harvesting, water purifiers and conscious storage of water.

4. Green campus initiatives include promoting the paperless ERP administration system, EV chargers, use of bicycles and electric vehicles, LED bulbs, and solar panels.

5. Disabled-friendly, barrier free environment

The institutional environment and energy initiatives are confirmed through the following

1. Green audit / Environment audit

2. Energy audit

3. Clean and green campus initiatives- tree plantation, EV chargers.

4. Beyond the campus environmental promotion activities- Tree plantation and Cleanliness drives under the National Service Scheme (NSS) unit of XIE.

The college emphasizes various initiatives such as celebrating the days of eminent personalities, national festivals, NSS activities, and more, which foster an inclusive environment by bringing together students and teachers from diverse backgrounds. These events promote tolerance and harmony across cultures, languages, religions, and socioeconomic diversities. Environmental Management and Professional Ethics courses are available to all undergraduate students. Republic Day and Independence Day are celebrated annually, involving all staff and students. The college values cultural diversity and tolerance, with a student and staff body representing various regions and religions. Recruitment policies prioritize diversity, resulting in a multifaceted cultural identity among employees. The institution promotes cultural inclusiveness to enhance mutual understanding and trust, focusing on holistic student development regardless of cultural backgrounds.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	XAVIER INSTITUTE OF ENGINEERING
Address	XAVIER INSTITUTE OF ENGINEERING, MAHIM CAUSEWAY Mahim,Mumbai-400016
City	Mumbai
State	Maharashtra
Pin	400016
Website	www.xavier.ac.in

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	Y.D.VENKA TESH	022-24451961	9820198029	-	office@xavier.ac.in
IQAC / CIQA coordinator	S.BEATRICE	022-24460359	9967566467	-	xie- iqac@xavier.ac.in

Status of the Institution	
Institution Status	Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minority institution	Yes Minority Approval Govt of India.pdf
If Yes, Specify minority status	
Religious	Christian
Linguistic	English
Any Other	

Establishment Details				
State	University name	Document		
Maharashtra	University of Mumbai	View Document		
Details of UGC recognition				
Under Section	Date	View Document		
2f of UGC				
12B of UGC				
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	15-05-2023	12	
AICTE	View Document	15-05-2023	12	
AICTE	View Document	15-05-2023	12	
AICTE	View Document	15-05-2023	12	
AICTE	View Document	15-05-2023	12	
AICTE	View Document	15-05-2023	12	

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	XAVIER INSTITUTE OF ENGINEERING, MAHIM CAUSEWAY Mahim,Mumbai-400016	Urban	3.52	6533

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	BE,Computer Engineering,	48	HSC, CET, JEE	English	64	62
UG	BE,Electronics And Telecommunication Engineering,	48	HSC, CET, JEE	English	64	47
UG	BE,Information Technology,	48	HSC, CET, JEE	English	64	63
UG	BE,Computer Science And Engineering,Internet of Things and Cyber Security Including Blockchain Technology	48	HSC, CET, JEE	English	64	62

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	1				0				28			
Recruited	1	0	0	1	0	0	0	0	6	22	0	28
Yet to Recruit	0				0				0			
Sanctioned by the Management/Society or Other Authorized Bodies	2				6				15			
Recruited	1	1	0	2	2	2	0	4	9	6	0	15
Yet to Recruit	0				2				0			

Non-Teaching Staff						
	Male		Female		Others	Total
Sanctioned by the UGC /University State Government						0
Recruited	0		0		0	0
Yet to Recruit						0
Sanctioned by the Management/Society or Other Authorized Bodies						18
Recruited	10		8		0	18
Yet to Recruit						0

Technical Staff				
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				17
Recruited	13	4	0	17
Yet to Recruit				0

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	2	1	0	2	2	0	3	1	0	11
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	9	27	0	36
UG	0	0	0	0	0	0	0	0	0	0

Temporary Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
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	2	0	0	2
UG	0	0	0	0	0	0	0	0	0	0

Part Time Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
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	0	0	0	0
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		Total
	3	2	0		5

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	617	9	0	0	626
	Female	193	2	0	0	195
	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	9	3	1	3
	Female	1	4	0	2
	Others	0	0	0	0
ST	Male	0	0	1	0
	Female	0	0	0	1
	Others	0	0	0	0
OBC	Male	19	23	15	10
	Female	7	4	2	8
	Others	0	0	0	0
General	Male	121	74	80	72
	Female	28	22	25	26
	Others	0	0	0	0
Others	Male	51	29	24	32
	Female	11	6	14	11
	Others	0	0	0	0
Total		247	165	162	165

Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:	National Education Policy, (NEP) envisions the extensive transformation in education through our education system by providing high-quality education to all, thereby making India a global knowledge
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	<p>superpower. The NEP 2020 was founded on the five guiding pillars of Access, Equity, Quality, Affordability, and Accountability. It tends to prepare our youth to meet the diverse national and global challenges of the present and the future. NEP provides the base for multidisciplinary/interdisciplinary courses in various domains of STEM, to be part of the teaching learning process. Xavier Institute of Engineering was started with the aim of inculcating strong educational ethics in young minds and offering multidisciplinary engineering programmes. Our Institutional practices precisely gel well with the ideas and codes of conduct prescribed in the New Education Policy that aims to take education beyond the conventional classroom-based boundaries. The Institute assimilates and sinks with the vision of National Education Policy to provide high quality education to nurture the joy of excellence. The curriculum involves subjects of humanities and basic sciences in the first year to build a strong foundation of STEM. 'Environmental studies' is also offered as an elective in the final year. The faculty update themselves by attending Faculty Development Programs (FDP). They also upgrade their existing knowledge and explore the newer horizons of the subject through research. The knowledge acquired through these methods is further enhanced by taking the students to the Industrial Visits where the teachers provide the students with the live experience of how things work. This helps them in developing holistic and analysis-based practical learning and application. The Institute is also proactively working towards the implementation of the suggestions given in the NEP-2020.</p>
2. Academic bank of credits (ABC):	<p>As per National Education Policy 2020, the Academic Bank of Credits (ABC) has been envisaged to facilitate the academic mobility of students with the freedom to study across the Higher Education Institutions in the country with an appropriate "credit transfer" mechanism from one programme to another, leading to attain a Degree/ Diploma/PG-diploma, etc., Xavier Institute of Engineering, being affiliated to Mumbai University shall continuously work towards implementation of the Academic bank of credits from time to time as per guidelines issued by University of Mumbai from the Academic year 22-23. The students in the institute have registered on</p>

	<p>ABC portal and the information of the same is updated to the University of Mumbai. The students are continuously guided about the process of registration and the importance of keeping the ABC account updated.</p>
3. Skill development:	<p>The institute offers various value-added courses and workshop with hands-on experience to promote the technical skill development among all students. Value-based education is encouraged by conducting lectures on ‘Universal Human Values’ as promoted by AICTE. Inclusion of the course of ‘Professional and business Communication skills and Ethics’ in Semester II and V enable the students to hone their individual communication skills as well as other interpersonal skills as required for team-interactions.</p>
4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):	<p>The institute although follows English as the primary medium of instruction, it also allows scope for regional languages like Hindi and Marathi to be incorporated for a relatable intellectual exchange. It also makes an attempt to preserve the Indian culture and promote it by organizing various cultural events like the ‘Garba celebration’ and other festivals. The institute’s cultural event, Spandan, offers a platform to display Indian culture through the mediums of dance and singing. The students get to showcase their talents such as folkdance, music, art of different states of India and also promote different time periods to bring forth their significance on the contemporary society.</p>
5. Focus on Outcome based education (OBE):	<p>The specific objective of practicing and achieving outcome-based education is to ensure that the curriculum is designed to achieve the specific knowledge or skills that the student should acquire. They form the Program Outcomes (POs) that reflect the skills, knowledge and abilities of graduates regardless of the field of study. In outcome-based education, a “design down” process is employed which moves from POs to Course Outcomes (COs) and outcomes for individual learning experiences. Each course outcome must be detailed and focused on the specific performance to be expected. The faculty must be able to measure each Course Outcome by using the appropriate verb mentioned in Bloom’s taxonomy. Each course outcome must be such that the students must be able to achieve those with a reasonable amount of effort and application of</p>

	<p>the knowledge gained by them. The course outcomes are mapped to program outcomes. Data is collected from different assessment tools to evaluate the Course outcome: Internal assessment, assignments, projects, lab experiments, etc. The quality of the assessment tools is checked by the course coordinator to ensure CO coverage and the difficulty level of the question paper. The targets of attaining course and program outcomes are set in advance by the course instructor based on the previous year's performance. The CO and PO attainment calculation process starts with CO attainment calculation and the CO attainment values that are used for PO calculation. These attainment levels of program outcomes are analyzed to find gaps if any at the program level and the appropriate action is planned. This whole process ensures the graduate outcomes that are measured, and Xavier Institute of Engineering effectively achieved these during the four years of engineering education. The POs, COs, PSOs are all tracked and as soon as the module is taught the tests are conducted to check the development of the students. Extra focus is given to those students whose progress in a slower manner as compared to others.</p>
6. Distance education/online education:	<p>Xavier Institute of Engineering has been carrying out activities related to academics with curriculum delivery through various teaching strategies, assessment and examinations using offline/online education mode. The faculty members use offline/online platforms and create the learning resources by recording videos. The Practical sessions are conducted using labs, simulation tools. G Suite are also used for various teaching-learning activities of academic and administrative purposes. So, the institute is well prepared to implement distance education/online education too. Faculties are encouraged to enroll and attend online webinars, workshops, STTP, FDP etc. The subject teachers prepare their teaching lesson plans well in advance and post it in the Google Classroom/Moodle server, where it is open to view by every student. The class precedes with a prerequisite test where sample questions from the subject are posed to the students who attempt the test and the teachers come to know the capability of the class. This test along with active classroom observation are the basis of carrying on the lesson plans in the semester period.</p>

Institutional Initiatives for Electoral Literacy

1. Whether Electoral Literacy Club (ELC) has been set up in the College?	The electoral literacy club has been formed at the Xavier Institute of Engineering .The Electoral Literacy Club was established in 2023–24 with the objective of engaging students with the national electoral system. The club functions by creating awareness among students to contribute to the concept of nation building by exercising their voting rights and electoral participation.
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 student's coordinator and co-ordinating faculty members are appointed by the college. The ELC is functional, and awareness sessions are conducted . The student coordinator for the academic year are: Maneckji Arzish Third Year (COMP), Jaiswal Harsh Second Year (EXTC) Coordinating Faculty is Mr. Suhas Lawand, Assistant Professor, Computer Science Engineering
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.	Awareness programmes are conducted for the newly admitted students. Voter registration camps for eligible students are conducted. ELC has plans to undertake a drive with the NGOs to enhance the participation of the underprivileged sections of society, especially transgender people, disabled persons, senior citizens, etc., in the electoral process.
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.	ELC conducted an awareness drive in the slum areas of Dharavi on April 1, 2024. A group of ELC volunteers created posters to create voting awareness among people living in Dharavi.
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.	A voter registration drive is proposed to be conducted at the institute for students above 18 years of age every year.

Extended Profile

1 Students

1.1

Number of students year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
869	801	822	793	864

File Description	Document
Upload Supporting Document	View Document
Institutional data in prescribed format	View Document

2 Teachers

2.1

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

Response: 56

File Description	Document
Upload Supporting Document	View Document
Institutional data in prescribed format	View Document

2.2

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

2022-23	2021-22	2020-21	2019-20	2018-19
46	43	45	44	46

3 Institution

3.1

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

2022-23	2021-22	2020-21	2019-20	2018-19
351.02	188.65	223.28	256.80	335.47

File Description	Document
Upload Supporting Document	View Document

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curricular Planning and Implementation

1.1.1

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

Response:

Xavier Institute of Engineering (XIE) is affiliated to University of Mumbai and the curriculum and syllabi are prescribed by the university that are to be strictly adhered to. The institution has a well-developed system for effective implementation of the scheme of the curriculum.

Teaching Learning Process is based on proper planning and effective delivery of Lecture / Practical / Tutorial as per the time table, following the academic calendar. In case of any shortcoming due to unavoidable circumstances, necessary changes are made in consultation with HODs. Learning process of students is monitored by the faculty members on the basis of continuous evaluation. Class teachers of each class monitor the academic development of students. Faculty Meetings are held online at least twice in a semester with the Director and Principal.

Academic calendar and time-table are prepared and displayed at least fifteen days before the commencement of the semester on the Institute website and notice boards. FE orientation programme is organized online to promote congenial and healthy atmosphere among FE students who are newly admitted to the college along with their parents. Teaching – Learning process in the institute is followed with a student-centric method of teaching. ICT is used extensively to ensure effective delivery of curriculum. Teachers can use zoom link, Google meet and other network systems to conduct the online webinars. Course material is uploaded on the ERP portal that enables students to see and prepare for the lectures that take place in the class.

Attendance and progress of the students are regularly monitored through ERP and informed to parents. Necessary actions are taken against those students who have less than 75% attendance. Internal Assessment Test I is conducted after 40% coverage of the syllabus. Internal assessment test II is conducted after 70% coverage of the syllabus. The end-of-semester examination is conducted by the university. Well defined programme outcomes and course outcomes aid in providing direction for teaching and other activities. Guest lectures, seminars, industrial visits, and training programmes are also supplements to the curricular inputs. Students are encouraged to carry out research work, present papers at seminars and conferences, and publish them in journals. Each teacher is allotted 20 students for monitoring, and in the time table, one slot is provided for mentoring. ERP serves as a platform to monitor all the administration and classroom activities.

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

1.2 Academic Flexibility

1.2.1

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

Response: 31

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

Other Upload Files

1

[View Document](#)

1.2.2

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

Response: 59.1

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

2022-23	2021-22	2020-21	2019-20	2018-19
568	603	660	401	220

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

1.3 Curriculum Enrichment

1.3.1

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

Response:

The following activities are covered under various categories:

Gender:

Our institute, XIE, truly respects all the students and encourages them to follow a code of conduct and maintain discipline on campus. Students participate in various curricular and extracurricular activities, irrespective of their gender. Some activities are led by girl students under the Women Development Cell. The purpose of this cell is to spread social awareness about the problems and, in particular, to address gender discrimination and nurture women's empowerment through various workshops and seminars. This ensures the execution of gender equality in our institution.

Environment and Sustainability:

XIE is conducting two courses for B. E. students as an Institutional level elective subject, such as Disaster Management & Mitigation Measures and Environmental Management. These courses help the students to spread awareness about the Environment protection and sustainable development in the society.

XIE has a dynamic team of students and faculties working under the NSS centre. Various awareness programs are conducted under NSS throughout the academic year. The centre takes an initiative for ensuring cleanliness in the surrounding and tree plantation drives are often conducted once in a year in the campus. The purpose of conducting these programmes is to inculcate a sense of responsibility towards the protection of Mother Nature from the hazardous pollutants and suggest corrective measures. Students understand the importance of the seventeen Sustainable Development Goals stated by the Government of India.

Solar Energy Harnessing Panels are implemented at the institute, which promotes the use of a clean and

renewable source of energy.

Human Values and Professional Ethics:

Curriculum courses like Business Communication and Ethics, Professional Communication and Ethics, Cyber Security and Laws, and Project Management play an important role in imparting values. Cybersecurity and laws emphasise the etiquette to be followed by citizens. While working on a collaborative project, students develop all three types of skills; cognitive, affective, and psychomotor. Every year, Republic Days, Independence Day, Teachers' Day, Engineers' Day, etc. are celebrated in the institute, and reports of the same are published in "XIE Samachar".

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

1.3.2

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

Response: 65.13

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

Response: 566

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

1.4 Feedback System

1.4.1

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

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

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

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1

Enrolment percentage

Response: 90.04

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
247	165	162	165	183

2.1.1.2 Number of sanctioned seats year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
256	192	192	192	192

File Description

Document

Institutional data in the prescribed format

[View Document](#)

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

[View Document](#)

Document related to sanction of intake from affiliating University/ Government/statutory body for first year's students only.

[View Document](#)

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

[View Document](#)

2.1.2

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

Response: 100

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

2022-23	2021-22	2020-21	2019-20	2018-19
36	34	19	24	6

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
36	34	19	24	6

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

2.2 Student Teacher Ratio

2.2.1

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

Response: 18.89

2.3 Teaching- Learning Process

2.3.1

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

Response:

Xavier Institute of Engineering, creates an environment that encourages student engagement in the co-creation of diverse learning modules. Implement additional lectures or courses facilitated by peers, fostering a student-centric approach that prioritizes experiential and participative learning. Emphasize problem-solving methodologies enhance student confidence levels.

1. Experiential learning

1) Experiments: State-the-art lab facilities and expert staff foster student engineering skills. Courses include web-based, AI/ML based experiments, and each lab task is assessed using rubrics that consider factors like timeliness, neatness, knowledge, and innovation.

2) Case study: We urge students to conduct case studies using recent publications from IEEE/Springer/ACM and present findings on cutting-edge tools and technologies. This enhances their grasp of the current research landscape in the course.

3) Audiovisual aids: Departments feature modern teaching tools such as projectors, smart boards, and encourage dynamic instruction methods. In addition to traditional chalk and board techniques, the use of visually engaging PowerPoint presentations is promoted.

4) Video lectures: Faculties have created videos for their respective subject content and made it available on platforms like YouTube, Moodle and classroom. This helps the students to revise the content taught in class any time.

5) Self learning courses: Students and faculties are encouraged to learn from NPTEL , Coursera & MOOC courses. Institute also provides access to NDLI ,Science Direct & IEEE Xplore.

6) Use of LMS: ERP, Moodle and Google classroom is used by the faculty as a learning Management system. Faculties upload notes, PPTs and anyother learning material.

7) Tech-fest: Every year an annual technical festival is conducted called 'Transmission'. Students get a platform to showcase their technical knowledge, skills and creativity.

8) Encouragement of bright students: We encourage students to participate in competitive examinations like GATE and TOFEL. We also encourage participation in state level/ national level competitions like Avishkar.

9) Method to support weaker students: The weaker students are identified based on their overall performance and their orientation towards academics based on the result of the internal assessments conducted. Remedial classes for SE, TE and BE are conducted and course materials are provided to them.

2. Participative learning

1) Collaborative learning: Students with certifications in various technologies engage in a series of

seminars to share knowledge and discuss topics with their peers in the department. This practice not only boosts their confidence but also cultivates positive attitudes and improves communication skills.

2) **Industry Internship:** Students are encouraged to enhance their skills by working on projects supported by industries and government agencies, offering them the chance to grasp advanced concepts within their domains and gain practical experience.

3. Problem Solving

1) **Project Based activity:** Students are encouraged and motivated to work on projects and mini projects to enhance their skills. Faculties guide the students throughout the project accomplishment. We organize a college level Hackathon competition to enhance the learning experience and implement the understanding, improving abilities of students to provide solutions to complex problems.

2) **Social activity:** Blood donation camp, vaccination camp. Swachh Bharat Abhiyan, teaching in slum activities are conducted under National Service Scheme (NSS)

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

2.4 Teacher Profile and Quality

2.4.1

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

Response: 97.39

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
46	46	46	46	46

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

2.4.2

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

Response: 22.32

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

2022-23	2021-22	2020-21	2019-20	2018-19
12	9	11	9	9

File Description	Document
List of faculties having Ph. D. / D.Sc. / D.Litt./ L.L.D along with particulars of degree awarding university, subject and the year of award per academic year.	View Document
Institution data in the prescribed format	View Document
Copies of Ph.D./D.Sc / D.Litt./ L.L.D awarded by UGC recognized universities	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.5 Evaluation Process and Reforms

2.5.1

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

Response:

Academic year starts as prescribed by Mumbai University. The university publishes in advance, the academic calendar containing plans for curricular and co-curricular activities based on the available working/teaching days as per university norms. Institution's academic calendar is prepared in concurrence with the University calendar. The academic calendar is made available to all faculties before the commencement of the semester. Lesson plans are prepared based on the academic calendar. The lesson plan comprises of content, learning aid and methodology, approach towards course outcomes.

The academic calendar of the Institute includes a schedule of Internal and External assessment dates. The institution adheres to the academic calendar and conducts Internal Evaluations. Internal Assessments are conducted twice in each semester. The adherence to conducting the Internal Examination is monitored by the Examination Committee of each Department in line with the subject requirements that are guided by the subject in-charges. Faculty adheres to the planned dates while conducting the Internal Assessment Tests and publication of results. Time table for the test is prepared well in advance and communicated to the students through notices.

The laboratory Schedule is prepared by the time-table committee and batch-wise details are specified in the laboratory schedule. Time-Table of regular lectures for the semester is prepared as well and displayed on the notice board and website. In case of poor performance by any student, his/her parents are called for a meeting and requested to monitor and build up student's confidence.

A centralized evaluation mechanism overseen by the university is used to evaluate every university (end-semester) exam.

Students view the response scripts for the internal assessment after they have been evaluated, allowing them to verify any inconsistency or uncertainty. When a student notices a discrepancy, they report it, and the involved faculty member fixes it. By accepting the requirements in accordance with the affiliated university's guidance, finish Internal evaluation exams are conducted in a transparent manner.

Students can apply for the Re-evaluation procedure to voice issues to the university. Within two weeks following the announcement of the results, students may request a reevaluation of their response script. The entire reevaluation procedure is conducted by university policies.

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

2.6 Student Performance and Learning Outcomes

2.6.1

Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the

institution are stated and displayed on website

Response:

Programme outcomes (POs), Programme specific outcomes (PSOs) and Program Educational Objectives (PEOs):

The processes for formulating, approving, and publishing Programme outcomes (POs), Program Specific Outcomes (PSOs) and Program Educational Objectives (PEOs) are discussed and adopted by the Internal Quality Assurance Cell (IQAC) in collaboration with multiple stakeholders. All of the institution's program objectives and outcomes are listed and visible on the college website <https://www.xavier.ac.in/>. Program Specific Outcome (PSO) statements for all programs, were drafted based on guidelines from SWOT analysis by DWC (Department Working Committee) and approved by DAB (Department Advisory Board). The DAB consists of representatives from all the stakeholders such as students, parents, alumni, industries, and academia. PSOs are disseminated to the stakeholders through the following channels.

1. Institute Website
2. Department Notice Board
3. Laboratory Notice board
4. HOD Cabin

Course outcomes:

The Board of Studies (BOS) at the University of Mumbai, which also defines each course's course outcomes, creates the curriculum that the Institute adheres to. The BOS participates in discussions on the anticipated course-specific outcomes and confirms that they are in line with the program outcomes with subject matter experts from academia and industry. Following finalization of the syllabus, the University arranges an orientation workshop wherein the syllabus and Course Outcomes (COs) are deliberated and subsequently sent to all connected Institutes. Course outcomes (COs) are stated for all courses in clear statements of what a student should be able to demonstrate upon completion of a course concerning knowledge and skills.

The institute arranges lectures by professionals from a range of fields who employ interactive techniques to spark potential that students might not recognize on their own in order to reach the full essence of course objectives. In addition to receiving professional advice, the students are exposed to the real-world operations of various businesses through the organization of Industrial Visits, which allow them to witness technology in action.

Six Course Outcomes (COs) for the theory and a minimum four LOs for the laboratory-related courses are framed in consultation with module coordinators. Guidelines to frame Course outcomes are given in the OBE booklet. Course outcomes are disseminated to the students in the following way

1. During the first lecture of every semester

2. Laboratory Notice Board

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

2.6.2

Attainment of POs and COs are evaluated.

Explain with evidence in a maximum of 500 words

Response:

Within the framework of Outcome Based Education (OBE), assessment is conducted by one or more departmental processes that locate, gather, and prepare data in order to assess the fulfillment of course objectives (COs). Many tools and techniques are used in the process to determine the attainment of the course outcomes. The course outcome attainment is broadly done in two parts namely Direct Assessment and Indirect Assessment. The weightage for Direct Assessment is more as compared to indirect Assessment.

COs and POs are correlated on a scale of 1 to 3, 1 being low, 2 being moderate, and 3 being high. Accordingly, module tests, teaching plans, assignments and internal assessments, quizzes are designed to meet the course outcomes subject wise. The pros and cons of each course are evaluated and analyzed and necessary actions are suggested.

Direct Assessment displays the student's knowledge and skills from their performance. Direct methods consist of students' performance in the class/assignment test, internal assessment tests, assignments, semester examinations, seminars, laboratory assignments/practicals, mini projects, etc. Direct Assessment consists of two parts i.e. Internal Assessment and External Assessment. Indirect Assessment includes a course exit survey which is taken upon completion of the course.

The Internal Assessments are done with a minimum of two tools which are selected from Continuous Internal Evaluations (CIE) such as internal assessment tests, assignments, quizzes, laboratory experiments, and mini-projects.

External Assessment: The external evaluations include End Semester Examination (ESE) conducted by the University.

Program Outcome (PO) and Program Specific Outcome (PSO) Attainment

Attainment of Program Outcomes and Program Specific Outcomes are mainly done by using Direct and Indirect Assessment methods. The weightage for Direct Assessment is more as compared to Indirect Assessment.

- **Direct Assessment is derived from CO attainment from all courses based on CO-PO mapping. CO-PO mapping is done by the Performance Indicator (PI).**
- **Indirect Assessment is carried out by using the Program Exit survey.**

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

2.6.3

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

Response: 95.54

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

2022-23	2021-22	2020-21	2019-20	2018-19
176	215	229	209	242

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

2022-23	2021-22	2020-21	2019-20	2018-19
214	216	229	209	253

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

2.7 Student Satisfaction Survey

2.7.1

Online student satisfaction survey regarding teaching learning process

Response: 3.74

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

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

3.1.1

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

Response: 0

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

2022-23	2021-22	2020-21	2019-20	2018-19
0	00	00	00	00

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

3.2 Innovation Ecosystem

3.2.1

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

Response:

In a rapidly evolving world driven by technological advancements, fostering innovation and facilitating the transfer of knowledge and technology are imperative for institutions to stay relevant and competitive. Recognizing this need, XIE has taken proactive steps by establishing various initiatives aimed at promoting innovation implementation and knowledge transfer. This write-up explores the initiatives undertaken by the institute.

Institution's Innovation Council (IIC):

XIE has established this cell tasked with identifying, evaluating, and implementing innovative ideas and solutions across various domains.

Entrepreneurship Cell:

The Entrepreneurship Cell at XIE provides a platform for nurturing entrepreneurial spirit among students and faculty. Through workshops, talks, and more such events, the cell empowers aspiring entrepreneurs to develop their ideas into viable startups.

CSX Chapter:

The XIE's Computer Society of Xavierites (CSX) allows students to exchange information and share ideas of current technology among themselves. This group boosts self-confidence of students by providing a platform for technical interaction both inside and outside the institute through different activities such as guest lectures, workshops, project exhibitions, competitions and many more

IETE Students' Forum (ISF):

The Institution of Electronics and Telecommunication Engineers (IETE), founded in 1953, is one of the leading Professional Society in India. IETE has contributed to the advancement of Science and Technology in the fields of Electronics, Communication Engineering, Computer Science, Information Technology and other related subjects. XIE's ISF is established with the following objectives.

Telecommunication Society for Xavierites (TSX):

Now, more than ever, the telecommunication industry is undergoing a profound transformation with far-reaching consequences. The TSX chapter of XIE serves as a platform for collaboration, knowledge exchange, and skill development among members. Through seminars and workshops, this chapter facilitates the dissemination of cutting-edge research and innovations, fostering a culture of continuous learning and growth.

The Institution of Engineering and Technology (IET) Chapter:

The IET is one of the world's largest engineering institutions with Over 167,000 members in 150 countries. It is also the most multidisciplinary – to reflect the increasingly diverse nature of engineering in the 21st century and facilitate problem-solving of issues. The XIE's IET chapter is working to engineer a better world by inspiring, informing, and influencing our students.

The initiatives undertaken by XIE underscore its commitment to fostering innovation and facilitating the transfer of knowledge and technology. Through the efforts of the different cells and chapters XIE has created a vibrant ecosystem conducive to creativity, collaboration, and continuous learning.

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

3.2.2

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

Response: 41

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

2022-23	2021-22	2020-21	2019-20	2018-19
15	12	12	02	00

File Description**Document**

Upload supporting document

[View Document](#)

Institutional data in the prescribed format

[View Document](#)

3.3 Research Publications and Awards**3.3.1**

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

Response: 0.16

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

2022-23	2021-22	2020-21	2019-20	2018-19
2	5	2	0	0

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

3.3.2

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

Response: 0.61

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

2022-23	2021-22	2020-21	2019-20	2018-19
9	6	8	7	4

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

3.4.1

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

Response:

The Xavier Institute of Engineering (XIE) carries out extension activities in the neighborhood community to sensitize students to social issues through its NSS Unit.

The XIE NSS unit started its activities in the academic year 2019-20 with the active participation of NSS volunteers and the Programme Officer. In the Academic year 2019-20, volunteers performed Saplings preparation and tree plantation at Manori Island, Mumbai. They also rendered their services towards the Flood relief donation drive for Kolhapur, Sangli. Volunteers extended their help in beach cleaning at Versova, Mumbai. These students conducted an awareness program on Plastic recycling and collection drives in neighborhood areas like Mahim Fisherman Colony and Nayanagar. To raise awareness about the importance of trees, students planted several trees in the college. The XIE NSS team in collaboration with J.J. Hospital conducted a rally in Mumbai to spread awareness on Organ donation. The XIE NSS team also assisted Mahim police with crowd management during the Anant Chaturdashi festival. As a part of Swachata Abhiyan, several cleaning activities like Mahim beach cleanup, Mahim railway station cleanup and painting, University of Mumbai-Kalina campus cleaning, and Mahim Koliwada cleanup activities were conducted.

In the Academic year 2020-21, entire Mumbai went through severe COVID-19 infections. During this pandemic time, the XIE NSS extended its services by making masks and distributing them, discussing diet with Dr. Sharayu Rajwade, sharing yoga asanas and pranayamas with Dr. Yogi Khush, and arranging Mandala art therapy sessions to facilitate stress relief. Blood donation drive at Churchgate Railway station as well as in XIE is carried out with the Motto of NSS i.e., "Not Me but You", which reflects on the essence of democratic living and upholds the need for selfless service by volunteers.

In the Academic year 2021-22, the NSS Unit XIE organized the following major activities; volunteering for blood donations camp at various railway stations, poster-making competition, breast cancer awareness session, tree plantation, feeding stray animals, gender equality, etc.

In the Academic year 2022-23, the XIE NSS team conducted a Blood donation camp for AZADI KA AMRUT MAHOTSAV at Dadar Railway Station and participated in the Tiranga Rally at the University of Mumbai, Kalina Campus. The XIE NSS team conducted a De-Addiction Rally from Azad Maidan to Gateway of India to spread awareness on de-addiction. In the neighborhood area of Mahim Colony, the XIE NSS team conducted a Neerathon to raise awareness about water conservation and its importance for living beings. The NSS cell of XIE also actively participates in the webinars and other activities organized by the NSS cell of Mumbai University.

The selfless service of our student volunteers at our institute has shown their capability to serve our society by working in the field practically. Working in the field enables them to understand Real World Learning, and indulge in the preparation of activities, Team building, and Planning.

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

3.4.2

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

Response:

In the realm of community engagement and extension activities, the volunteers of XIE-NSS have selflessly worked hard to serve society in every possible way and received recognition from government-recognized bodies. These accolades not only honor the dedication and innovation demonstrated in extending knowledge and services to the public but also inspire others to strive for excellence in similar endeavors. Here, we highlight some notable awards and recognitions received for extension activities:

Xavier Institute of Engineering, National Service Scheme was felicitated with a Memento of Appreciation on 13.04.2022 by Hon'ble Vice Chancellor, Prof. (Dr.) Suhas Pednekar, University of Mumbai for actively participating in Blood Donation drives held at different Railway stations during the COVID-19 pandemic period.

The University of Mumbai, National Service Scheme in association with MaitriBodh Parivaar - NGO felicitated the Xavier Institute of Engineering, National Service Scheme for promoting the cause of Voluntary blood donation by motivating the railway commuters to participate in 4 Blood Donation Drives and helping to collect 559 Blood Units at Railway Stations during the year 2022-2023.

Xavier Institute of Engineering, National Service Scheme was felicitated with a Memento of Appreciation by the University of Mumbai, National Service Scheme towards motivating Railway commuters for voluntary Blood Donation Drives organized on 02.08.2023 at Suburban Railway Station of Mumbai.

The Xavier Institute of Engineering, National Service Scheme was felicitated by Parmarth Seva Samiti, Mumbai at the University of Mumbai for securing 1st Place in the Blood Donation Camp held at various stations by different colleges.

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

3.4.3

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

Response: 39

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

2022-23	2021-22	2020-21	2019-20	2018-19
13	07	01	18	00

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

3.5 Collaboration**3.5.1**

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

Response: 13

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

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1

The Institution has adequate infrastructure and other facilities for,

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

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

Response:

The campus is spread over an area of 3 acres with a built up area of 8399 sq.m. comprising a building of high-standard, with 10 classrooms, 31 laboratories, and a computer center with 73 computers. Seminar hall with seating capacity of 300, language lab, drawing hall, conference room, Tutorial rooms, workshop, library, Administrative office, examination section, Director Office, TPO-Office, HOD–Cabins, Ombudsman office, & canteen. All the labs and offices are well connected through intercom. The above mentioned infrastructure befits the norms of AICTE.

The institute is powered with a solar system with a capacity of 104kW. SL Raheja hospital being in the vicinity is an added advantage to the institute as medical assistance can be obtained on an urgent basis.

There is a medical first aid facility available on campus for students and staff. There are fire extinguishers at appropriate places. Water purifiers are also available for drinking water on every floor.

The institute ensures that all the teaching faculty have a dedicated Laptop or desktop for their lecture and practical preparation. The teaching, non-teaching staff and students are provided with internet facility on campus.

At the beginning of every academic year requirements for replacements/up-gradation/addition of the existing infrastructure is carried out based on the suggestions obtained from Lab in charge, subject experts, Lab Assistant /Technician, System Administrator & the Heads of Departments, after reviewing course requirements. There is a collection of selective books in the departmental library of the respective departments. The College also organizes several seminars, talks, workshops, faculty development programmes related to emerging technologies to keep everyone in college updated in their respective fields.

To support disabled persons, the institution has facilities like lift, ramp, rest rooms, wheelchair within the institution premises. The facility for girls and boy's common rooms are also available on the premises for the students.

Institution has good canteen facility which provides healthy & hygienic food items. There is ample parking space in the campus. Institution is secured through CCTV surveillance.

The institution has spacious ground for outdoor sports and adequate facilities for indoor games. To encourage personality development, team spirit and leadership qualities among students, the institute encourages students to participate in various sports and games at different levels. Sports facilities have been provided to students to participate in various games such as Cricket, Football, Basketball, and Volleyball and ensure they participate in the extra-curricular activities. Yoga sessions are conducted in the seminar hall. Cultural Festival- Spandan is held every year to explore and nourish the hidden talents of the students. Every year the student council organizes various intercollegiate & intra-college events such as dance, fashion show, street play and so on. Students are encouraged to organize various cultural activities in the college so that the students efficiently conduct various events such as teacher's day, Engineers Day, cultural Day celebration Farewell, Fresher party, etc. Students organize a TedX event every year.

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

4.1.2

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

Response: 28.3

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
109.02	27.29	45.21	65.033	136.94

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

4.2 Library as a Learning Resource

4.2.1

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

Response:

The Library has a collection of more than 13416 books and 4857 titles. The library has 598 reference books, 469 Project reports, 356 bound volumes for reference. The Library has subscribed to IEEE xplore for e-journals. The library has taken membership of the DELNET database for e-books and e-journals.

The Library is computerized using SLIM 21 software. This is based on internationally accepted standards and is a comprehensive and user friendly library management software. It provides a wide range of features for library management. It is developed by Algorithms consultants pvt ltd, a leading Pune based software company in the field of library automation. It helps in accessing a wide range of materials, both in print and electronic format.

E-resources:

IEEE: (Institute of Electrical & Electronics Engineers) The Library has subscribed IEEE xplore for e-journals. Students can directly access it. It covers Electrical, Computer, EXTC Engineering. It has 198 international journals & Magazines. All of the journals are Scopus and web science indexed.

DELNET: Developing Library Network, New Delhi is a major resource sharing library Network in India connecting more than 7700 institutions in 33 states in India.

NDLI: The National Digital library of India is a virtual repository of learning resources which is not only just a repository with a search/browse facilities like books, journals, manuscript, video, Audio books, lectures etc. It is a project under Ministry of Education, Government of India , through its National Mission on Education through Information and Communication Technology (NMEICT).

E-books: The XIE Library has subscribed to various publishers e-books .

Library Digital Repository: The library has a digital repository on Moodle server. T

Library Services & Facilities:

Reference Service: The library has good collections of reference books including Competitive exam books, project report & bound volume for reference.

Xerox & Print facilities: The library provides Xerox & print facilities for students.

Content List service: The library provides a content page of new arrived journals in the library to students by mail.

Access to open e-resources: We have uploaded useful e-resources links on our website and the Moodle (Library repository) as well.

Syllabus and University Questions Paper: Students will get last five years university question papers and current syllabus for reference. We have also uploaded a soft copy of them on the Moodle.

Journals: The library has subscribed 24 scholarly journals for students reference.

New Arrival Service: The library sends an email to all users regarding newly arrived books and journals in the library and also keeps it on the display board, so users can know easily about the new books and journals.

Competitive Exam Books: The library has a good collection about aptitude test, general knowledge, GATE, GRE exams.

Digital Library & Internet facility: There are 10 PCs in the digital library for students. Students can use e-resources, search information and emails.

OPAC: Using OPAC students can search books, reserve books through OPAC and Students Can see their account status like due date, loaned of books, fine etc.

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

4.3 IT Infrastructure

4.3.1

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

connection

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

Response:

The Institute has ICT-enabled classrooms, well-equipped laboratories, sports facilities, and good infrastructure spread over 4.0 acres with Turf Ground, beautiful landscapes, aesthetic architecture, and an eco-friendly environment. The classrooms are well-furnished, spacious with good ventilation, and well illuminated. They are maintained as per norms for proper visibility and audibility.

The college has established a high-speed campus-wide network connecting all departments with 690 systems. Full access is provided to all staff to access online sources of services and information through two leased lines each of 150 Mbps. Broadband from TATA. A fully distributed computing environment based on clusters of workstations and PCs provides users with ready access to computing resources, services software, and applications. The environment is tailored to the specific teaching/learning needs of each department.

Computing resources

XIE has excellent IT facilities for students and faculty. 744 Computer systems and 18 Smart Boards are available in the campus with LAN and Wi-Fi connection. The highly configured system available is the i3 processor 10th Gen at 2.60GHz 2.59 GHz with 20 GB RAM, 250 GB SSD, and 1TB HDD.

There are 2 servers (Moodle and ERP) available in the server room to provide network connectivity in the campus.

Wi-fi Campus

Internet facility provided through Tata Net communication with a bandwidth of 100 Mbps. By estimating the volume of data transmission, the bandwidth will be further increased during an ad hoc situation. For essential services Net communication as a secondary backup with 50 Mbps is available. The computers in the different departments are interconnected with LAN through switches. The entire campus has various Wi-Fi access points to access educational resources.

E-Services

The college website provides all the essential information for the stakeholders. Updates in ERP and latest technology shared by faculty as blogs in the website in case of emergency, and Google classroom used for the teaching- learning process. In an Emergency situation, the class notes assignments are uploaded in Google classrooms. Webinar and Alumni talk series in a collaborative manner, Google meet license is purchased for Google rooms.

Updating the IT Facilities

Based on the gradual increase in the student's strength, the number of systems in all the

laboratories is updated. As per AICTE norms, the student to the computer ratio is maintained as 3.26:1. Based on the requirements, necessary software and hardware devices, computer systems and its peripheral devices are purchased. To carry out project activities, highly configured systems are provided in the laboratories in the campus.

CCTV surveillance

The XIE campus has a complete CCTV camera system. It helps in monitoring the activities of the students especially during the exam time and also a better security performance that will make it much easier to regularly monitor the daily activities of the students, staff, workers, and members of the public inside the campus.

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

4.3.2

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

Response: 1.47

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

Response: 591

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

4.4 Maintenance of Campus Infrastructure

4.4.1

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

Response: 32.24**4.4.1.1 Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component year wise during the last five years (INR in lakhs)**

2022-23	2021-22	2020-21	2019-20	2018-19
121.29	68.9216	94.06	71.25	81.38

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

Criterion 5 - Student Support and Progression

5.1 Student Support

5.1.1

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

Response: 41.21

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

2022-23	2021-22	2020-21	2019-20	2018-19
405	344	243	352	366

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

[View Document](#)

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

[View Document](#)

5.1.2

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

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

Response: B. 3 of the above

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

5.1.3

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

Response: 62.83

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

2022-23	2021-22	2020-21	2019-20	2018-19
643	636	450	570	308

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

5.1.4

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

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

Response: A. All of the above

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

5.2 Student Progression

5.2.1

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

Response: 70.59

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

2022-23	2021-22	2020-21	2019-20	2018-19
114	178	163	154	147

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

2022-23	2021-22	2020-21	2019-20	2018-19
176	215	229	209	242

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

5.2.2

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

Response: 27.3

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

2022-23	2021-22	2020-21	2019-20	2018-19
13	12	19	24	18

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

5.3 Student Participation and Activities

5.3.1

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

Response: 19

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

2022-23	2021-22	2020-21	2019-20	2018-19
03	04	00	06	06

File Description**Document**

Upload supporting document

[View Document](#)

list and links to e-copies of award letters and certificates

[View Document](#)

Institutional data in the prescribed format

[View Document](#)

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

[View Document](#)

5.3.2

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

Response: 18

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

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

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

5.4 Alumni Engagement

5.4.1

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

Response:

The institution has a registered alumni association and an active governing body on the panel. This association provides a forum for the students to maintain and keep up their links with the institute. It provides numerous services to current students and alumni alike. Membership in the Alumni Association can be obtained by registering at the institute.

The Alumni Association provides many opportunities in which the alumni can participate, such as promoting programs, assisting future students with difficulties, etc. We are looking for our ex-students to come forward and start the process of making this Alumni Association a strong one so that the bonds among the students get stronger and promote understanding between the students of the past and present.

Objectives of the Xavier Institute of Engineering Alumni Association (XIEAA):

- To render a vibrant forum that promotes interaction and networking among alumni of the institute.
- To recognize and identify the role of XIEAA as important stakeholders in the continuing quest to provide excellence by way of academic and technical collaboration
- To assist educational institutions like departments, schools, colleges, universities, training institutes, etc. in imparting knowledge and skills on subjects related to technology, social, population, and health sciences.
- To organize lectures, seminars, conventions, conferences, workshops, retreats, training programs, and such gatherings for the purpose of achieving the objectives for which the XIEAA is established.
- To promote the professional development of students of XIEAA and their members and assist young professionals in their career planning and development.

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

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1

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

Response:

Vision of the Institute:

To nurture the Joy of Excellence in a world of High Technology.

Mission of the Institute:

To strive to match global standards in Technical Education by Interaction with Industry, Continuous Staff training and Development of quality of life.

The Institute vision and mission clearly defines that it works towards the student's excellence with joy by matching global standards in technical education. To foster and to realize fruitfully the vision and mission of the Institute, it is desirable to have a well-knit organizational structure; XIE has a strong organizational structure which includes chairman of GC, director, principal, administrator, HoDs, deans, TPO, librarian, registrar, faculty members (assistant professors, associate professors and professors).

Nature of Governance and Leadership:

The Governing Council of the Institute is primarily responsible for policy decisions related to infrastructure, financial management, human resource planning and recruitment. The budgeting decisions are recommended by the College Development Committee (CDC). The Institute has also constituted an Internal Quality Assurance Cell (IQAC) for planning & execution of development activities & promotion of quality culture institution wide.

Participation of the teachers in the decision-making bodies:

The Institute has one staff nominee in the GC apart from the Principal. Six teaching staff have been elected in CDC apart from the Principal. The IQAC has 15 teaching staff members and 05 non-teaching staff members. Various committees at the college and departmental level assure decentralization of governance and are depicted by delegation of roles and responsibilities to various coordinators appointed at institute/department level. There are mainly four different Dean with well-defined functions that give academic and administrative leadership to the Institute Dean Academics, Dean R&D, Dean Staff & Students' welfare and Dean Finance.

Institutional Perspective Plan aligned with vision and mission:

XIE strives to establish itself as a leading engineering institute to produce employable graduates. The institute has started a new branch named Computer Science and Engineering (using Internet of Things and Cyber Security Including Blockchain Technology) in academic year 2022-23. The institute has planned to start new courses and increase the strength of existing courses in coming years. Strategic plans are prepared to become a part of Xavier University to deliver quality education. To upgrade the qualification of faculty members, the institute encourages the faculty members to do their Ph.D. program.

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

6.2 Strategy Development and Deployment

6.2.1

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

Response:

XIE was established in the year 2005 by the Society of Jesus (Jesuit fathers). The institute initiated its academic journey with three branches CE, IT and EXTC. The institute has started a new branch named CSE (using IoT and Cyber Security Including Blockchain Technology) in academic year 2022-23.

The rules, procedures and policies regarding recruitment, promotion and services of all faculty and staff are well defined by the norms of AICTE. XIE has a well-defined organizational structure to ensure efficient governance and management through effective decision making. As per the Constitution of the college GC has been formed as the supreme administrative body of the institution. College Development Committee is a statutory committee formulated as per the mandatory requirements of the University which monitors the academic administration. To foster and to realize fruitfully the vision and mission of the Institute, Chairman, Director, and Principal form the nucleus of the administration setup.

Chairman is the Chief Mentor, head of GC and final authority to provide final approval for all major policy matters on expansions, collaborations, financial outlays, budgetary allocations, and major admin-related decisions. The Director is the Chief patron to ensure that the vision, mission, and PEOs are constantly compiled and monitored. The Principal is the Head of the Institution and Member Secretary of GC. He looks after the overall functioning with his team of Departmental Heads, the IQAC Coordinator, Deans, and Administrator. IQAC is in place to provide prospective plans and work towards the realization of academic goals. All the goals and plans are then put up in front of GC and CDC for review and approval..

Institutional perspective plan:

1. To become a part of Xavier University to deliver quality education.
2. To get NBA accreditation with a high score for the remaining programmes, to get NAAC accreditation with higher grades and to get ranked in NIRF.
3. To increase the strength of Computer Engineering department for undergraduate degree from 60 intake to 180 intake
4. To start new courses like Computer Science and Engineering (Data Science), Computer Science and Engineering (Artificial Intelligence & Machine Learning), Computer Science and Engineering (Artificial Intelligence & Data Science) and Electronics and Computer Science.
5. To start postgraduate (M.E.) programmes for the Computer Engineering department.
6. To conduct an International Conference every year which allows people to come together from different backgrounds to present technical papers, learn from each other, resolve problems and share knowledge and innovation.
7. To start and run a XIE e-Journal (XJET) for technical paper publication.
8. To improve institute-industry interaction by collaboration, industry visit, expert lectures, industry sponsored labs
9. To create a research environment and motivate faculty for quality paper publication, patents, sponsored research and consultancy.
10. To implement National Education Policy and Academic Bank of Credits from time to time as per guidelines issued by University of Mumbai.
11. To construct a new hostel building for girl students in the campus.

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

6.2.2

Institution implements e-governance in its operations

1. Administration

2. Finance and Accounts

3.Student Admission and Support**4.Examination****Response:** A. All of the above

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

6.3 Faculty Empowerment Strategies**6.3.1**

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

Response:**Performance Appraisal System**

A faculty appraisal procedure has been implemented to evaluate the performance of the faculty.

Performance appraisal is a formal method of evaluation of the performance of the Faculty members. It decides whether their performance meets the desirable standards for the appointed post.

The Institute has its own well-defined proforma to evaluate faculty members through evaluation of their teaching-learning process, research and other activities. Performa consists the following particulars:

- Personal Detail: Personal details of the Faculty members, including their present post, date of

appointment to the present position, the current HOD and Principal are needed to be mentioned.

- Leave Details: The leave details for the academic year are mentioned, including the total number

of casual leave, earned leave, on duty, maternity leave, loss of pay and vacation leave individually taken.

- Training Details Faculty has undergone: The details of training a faculty has undergone during the prescribed period and how it has aided him/her in his/her career development.
- The contributions of the said Faculty towards the Department and to the Institution work like:
 1. Administrative responsibilities such as Head/ Chairperson /Dean/ Director/Coordinator
 2. Examination and evaluation duties assigned by the University
 3. Student related co-curricular, extension and field-based activities such as students' clubs, career counselling, study visits, students' seminars and other events, cultural, sports, NSS and community services.
 4. Organizing seminars/conferences/workshops, other University activities.
 5. Conducting minor or major research project
 6. Paper publication in peer-reviewed or UGC list of Journals.
- Work plan and output during the assessment period: Faculty members mention work plan and their outcome for the assessment period, including the achievements in every subject taught per semester are recorded.
- Short term and long-term goals: Faculty members mention their short term and long-term goals they feel necessary to increase their efficiency.

After the Faculty members submit their self-appraisal form, HOD examines the rating given by the Faculty and further evaluates it based on the following criterion and sends it to the Principal for further review.

- Work Completion
- Personal Attributes
- Efficiency

After considering the remarks given by HoD, the Principal evaluates and writes his comments and suggests the required action.

Welfare Measures:

The staff welfare schemes are in place and implemented by the Trust to take care of the welfare of the staff which includes following staff centric policies:

- Employee provident fund
- Sponsorship and fee reimbursement for workshops and conferences
- Soft loans to staffs
- Group insurance cum Gratuity
- Medical and maternity leave
- Technical skill upgradation training
- Earned leaves or vacation

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

6.3.2

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

Response: 50

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
45	16	7	28	16

File Description	Document
Policy document on providing financial support to teachers	View Document
Institutional data in the prescribed format	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 / workshop s and towards membership fee for professional bodies	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

6.3.3

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

Response: 79.53

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

2022-23	2021-22	2020-21	2019-20	2018-19
69	64	61	60	49

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

2022-23	2021-22	2020-21	2019-20	2018-19
35	30	30	31	31

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

6.4 Financial Management and Resource Mobilization

6.4.1

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

Response:

The college has a well-formulated financial policy which ensures effective mobilization and optimal utilization of finances for academic, administrative and other developmental purposes. Institute has made the necessary provision for efficient and effective use of available funds for each academic year.

The primary fund required for the development of the institute along with the day to day expenditures comes from tuition fees and development fees paid by the students. The Principal and the Head of Departments discuss the requirement and decide the priorities while allocating available financial resources for various purposes. The recommendations made by the head of the institute are normally approved by the Director and local managing committee, which is later submitted to the governing council for the final approval.

Mobilization of Funds:

The Institute is Unaided and dependent solely on student's fee collection. Fee to be charged to the students as approved by the Fee Regulating Authority. Trust is also getting OD limit from the Bank to meet the working capital requirements by mortgaging the personal assets of the Trustees. Capital expenditure is met by availing long term loans from the Bank ranging between 7 to 10 years. Few departments are getting a small amount of Consultancy charges which is also spent to meet the revenue expenses.

Optimal Utilization of Resources:

The effective and efficient use of available financial resources is made through budgetary allocations. Budget is prepared and placed before the Governing Council for its approval.

The institution conducts external financial audits yearly. The Institution has appointed a qualified practicing Chartered Accountant as external auditor who audits the accounts of the Institute. The team of external auditors visits the college and verifies all the receipts and payments along with vouchers and also verifies statutory compliances. The observations made by its team initially attended by the accounts team and discussed in the meeting of trustees with auditors.. The external auditors conduct a statutory audit at the end of the financial year.

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

6.5 Internal Quality Assurance System

6.5.1

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

Response:

IQAC is playing an apex role in every aspect of academic and accreditation. The IQAC has made significant contributions for framing and implementation of the quality assurance strategies and processes. The IQAC and its constituent cell undertakes various quality assurance initiatives

IQAC conducts academic and administrative audits (AAA) to assess the quality of various academic and administrative activities of the institution. Continuous improvement is achieved through periodic audits and satisfying statutory requirements. The recommendations and guidelines provided by the GC, CDC are implemented effectively in coordination with the IQAC. Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes response.

IQAC facilitates and creates a learner-centric environment conducive to quality education, conducting faculty development programs or workshops to adapt teaching and non-teaching faculties to the required current knowledge and technology for participatory teaching and learning process. In Xavier Institute of Engineering the teaching faculty implements many teaching learning reforms such as Mind Map, Collaborative Learning, Summary Video, Presentation on Technical Paper Review, Lab Assignments, Flipped Classroom, Quizzes, Mock Viva, Group Discussion or Activity, Brainstorming, Role Plays, Project based Learning, Case Study, Blended Learning using NPTEL During the last five years ICT enabled facilities have been strengthened with a total 27 numbers of smartboards.

The Institute always believes in continual improvement and strives to get a quality assessment by various agencies. IQAC prepares and assesses the institute for NAAC accreditation, NIRF & AISHE ranking. IQAC also prepares the programmes for assessment and accreditation by NBA. To testify this, two of our Institute programs BE in Information Technology and BE in Electronics & Telecommunications are accredited by NBA in 2022.

Feedback is taken continuously from the students and after the analysis of feedback, appropriate measures are taken to refine the quality of teaching and learning. The Parent Teachers' meetings conducted ensures that all stakeholders get an opportunity to participate in important decision making focussing on maintaining high standards in teaching learning.

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

6.5.2

Quality assurance initiatives of the institution include:

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

Response: A. Any 4 or more of the above

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

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1

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

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

Response:

Gender sensitization is a significant topic in all of the institute's programs. Safety and security are among the different gender sensitization efforts. Gender equality and awareness courses have been conducted at the institution with the help of Women's Development Cell. Gender awareness is promoted via workshops, seminars, guest lectures, street plays, poster displays, counseling, and other activities. In accordance with grievance committee regulations, the institution established anti-ragging, student disciplinary, women empowerment, SC/ST student welfare, and mentoring committees. The tasks of these committees are described on the institution's website and during orientation and induction activities. CCTV cameras and 24-hour campus security keep students and faculty safe. XIE's mentoring programs assist students in their academic, emotional, social, and cognitive development. Individualized counseling is provided to students. The restrooms for girls are separately available. For student's health protection, restrooms are frequently cleaned by Housekeeping Staff.

Programs for gender sensitization and women's studies on campus, programs such as International Women's Day, guest lectures, and seminars on nutrition sexual harassment and legal regulations are held to promote gender sensitization. Women Development Cell frequently arranges several scholarship programs like ALLYN FUND UP-SKILLING SCHOLARSHIPS, John and Frank Trocki Best XIE Girl students Award, John and Frank Trocki Women of creativity Award. There was a poster competition on gender equality. Counseling: The Women's Development cell is made up of at least one female representative from each department. The committee members advise and assist the student community with their problems.

National Commemorative days and the birth anniversaries of prominent Indians are observed on an yearly basis to inculcate principles and nationalism in students. Flag-hoisting, project displays, poster presentations, walks, essay writing are all part of the festivities. Employees and students are enthralled by notable speakers on specific days. International Yoga Day, Teachers Day, Woman's Day, Independence Day, Gandhi Jayanthi, and Republic Day are all observed at the XIE.

XIE has a strong ethical work culture that is based on inclusivity. It observes highest ethical standards in all its activities. Equal opportunities are provided to all individuals irrespective of gender, race, caste, colour, creed, language, religion, political or other opinion, national or social origin, property, birth or other status. There is an effective mentor-mentee system in the institution, wherein the mentor looks after academic as well as non-academic issues of the students. Additionally, a lady counselor is appointed in the institution, who visits college regularly. Any

student can meet and consult her in case of any psychological or mental issues. The confidentiality is maintained by the counselor as well as college.

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

7.1.2

The Institution has facilities and initiatives for

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

Response: A. 4 or All of the above

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

7.1.3

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

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

Response: A. All of the above

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

7.1.4

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

Response:

In our college we undertake various initiatives in the form of celebration of days of Eminent personalities, National Festivals, NSS and other such activities. These activities provide an inclusive environment by bringing students and teachers with diverse backgrounds on a single platform. These functions help in developing tolerance and harmony towards culture, region, language, religious and other social, economic diversities. The subject Environmental Management and Professional Ethics are available to all U.G students across all the disciplines. Two important national festivals, Republic Day and Independence Day are celebrated every year on our College Campus. All teaching, non-teaching staff and students participate in this program.

An inclusive environment is one in which members feel respected by and connected with one another. XIE believes in cultural diversity and cultural tolerance as a key to social harmony and has a diverse range of student body as well as employees from diverse regions. In our Institute, the analysis has shown that students at the institute come from diverse cultural backgrounds such as North India, South India and from different religions such as Hindus, Muslims, and Christians.

A cosmopolitan environment is built with each person bringing to the group a unique perspective which is influenced by his or her own unique cultural identity. The Institution follows a tolerant recruitment policy with recruitments of staff from all parts of the Country. This has resulted in making the employees cultural identity a multifaceted one. Diversity along all cultural dimensions is recognized, valued and respected.

Irrespective of the state or the religion, the institute practices cultural inclusiveness to deepen

mutual understanding and trust. Regardless of the cultural background, the institute focuses on developing all the students through academics, co-curricular and extracurricular activities.

The annual cultural fest of the institute 'Spandan' is celebrated with great zeal. The entire campus adorns a festive look on this day. Various interdepartmental competitions are arranged during this day. In fact, the preparations and preliminary competitive events start much before 'Spandan'. Music, dance, literary, theater and fine arts events are a part of these competitions. Students irrespective of their religion and cultural background drive this fest.

Through NSS activities, students get the rural connect and they develop empathy towards economically weaker sections of the society. Students are encouraged to provide technological solutions to difficult pressing problems of rural society by undertaking meaningful project works. Such tasks build desired value systems amongst the student community.

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

7.2 Best Practices

7.2.1

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

Response:

INSTITUTION BEST PRACTICES

Best Practices 1

Title of the Practice

Skill development lab for building employability skills among students.

Objectives of the Practice

The present day job market demands that the students be trained with new programming skills such as Python, Java, 3D studio, C, C++, Mysql, etc. which require computers with good configuration of RAM and SSD harddisks. The objective of a Skill Development Lab for building employability skills among students is to equip them with a diverse set of skills that are essential for success in the professional world. The primary goals of such a lab include:

- 1.Enhancing Core Skills
- 2.Technical Proficiency
- 3.Networking Opportunities
- 4.Digital Literacy

The Context

The institute is home to an industry sponsored skill development lab; the 'Apple Mac lab'. It has been sponsored by TATA Capital and ICICI. To meet the technical demands of the industry, the institute has attempted to up-skill the students beyond the contents of the syllabus through this venture that involves an industry contribution.

The Practice

The Apple MAC lab is industry-sponsored and supported by TATA CAPITAL and ICICI foundation and is implemented to its full potential. The lab consists of 15 machines with configuration M1 8core CPU, 7core GPU with 8GB RAM and 256GB SSD sponsored by TATA CAPITAL .It also consists of 17 machines with configuration i5 processor with 8GB RAM and 240GB SSD sponsored by ICICI foundation. The lab is used by a significant number of students for a variety of academic purposes, including lectures, projects, training programs, and seminars. The existence of this lab has encouraged the institute to conduct certain skill-based courses such as 'Applied Data Science and its Applications'. 'LaTex workshop', etc. The system programming capacity of the devices supports certain high-end software that helps the students in making complex projects required for the subjects of SPCC, Green IT, IoT, Data Mining, etc. Moreover, the institute also conducted a special Python course for the first year students as well as provided training in Python to the staff and students of other institutes associated with it.

Ultimately, the objective is to prepare students not only for their first job but to empower them with a skill set that fosters continuous growth and adaptability in the ever-evolving job market.

- 1.Apple Suite: Numbers, Pages, Keynote.
- 2.Data Analysis and Visualization: Excel, R, Python
- 3.Programming Languages: Python, Java, JavaScript, C++, Flutter
- 4.Web Development:
 - HTML/CSS
 - JavaScript
- 5.ERP Systems: Qualcampus

Evidence of Success

The usage of the lab was highest during the months of December and January, which coincides with the time during the semester break when final year students are working on their major projects, whereas the second and third year students used it for exploring new technologies compatible only with the iOS environment. The students have been able to learn skills beyond the syllabus through this skill-development venture, which has increased the placement ratio

Problems Encountered and Resources Required

Close monitoring of the premises is of utmost importance as the systems are prone to theft or damage whilst using them.

Best Practices 2

Inculcating confidence in the students through Course Summary Videos and Presentations

Objectives of the Practice

Self-confident and well-communicated individuals are crucial to the industry. The practice of making and presenting course summary videos aims to boost self-confidence of the students and make them articulate communicators.

The Context

In order to encourage thorough awareness of the curriculum and to enable plenty scope for syllabus revision among the students, the institute has introduced the practice of 'Course Summary videos and Presentations' wherein the students are expected to either present or submit a short video of themselves summarizing the contents of the syllabus of each subject that they have learned and submit it to the respective course-in-charges by the end of each semester.

The Practice

Since the last three years, the institute has promoted the practice of 'Course Summary videos and presentations' diligently among the students to foster a thoroughness of the syllabus and ensure complete understanding of all the concepts specified in it. The students are encouraged to submit a video or give a presentation in class summarizing all that they have learned through the subject in the course of the semester. This ensures that the students are well-aware of all the contents of the course and also gives them a chance to display their understanding. By creating the summary videos and presentations, the students also revise the contents of the syllabus when speaking about it. This has enabled better knowledge of the subjects and aided in preparing for the university exams. These videos and presentations also serve as a platform for the students to hone their speaking skills and confidence as it allows them to articulately convey their understanding in a clear and concise manner. The best course summary in each subject is also rewarded thus serving as a positive reinforcement for students to submit

their best and most confident summary of the subjects.

Asking students to prepare course summary videos and presentations can have several positive impacts on their learning experience, skill development, and overall engagement. Here are some potential benefits:

1. Enhanced Understanding
2. Active Learning
3. Communication Skills
4. Technology Proficiency
5. Critical Thinking.
6. Self-Assessment
7. Confidence Building
8. Real-world Application

Overall, incorporating the creation of course summary videos and presentations into the learning process can lead to a more dynamic, interactive, and student-centered educational experience with lasting benefits for their academic and professional growth.

Evidence of Success

The overall understanding of the subject matter has improved among the students and has helped them score better in oral and practical exams. Students have also inculcated public speaking skills and display a rise in their confidence level through the comparison of their course summary videos over the years.

Problems Encountered and Resources Required

The submission of the videos is often taken online especially during the lockdown and requires a huge amount of storage cloud space. Due to storage limitations on ERP, an alternative submission method of accepting the submission on the local system through USB had to be devised.

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

7.3 Institutional Distinctiveness

7.3.1

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

Response:

Encouraging environment-conscious learning and practices through the institutes' initiatives and ventures.

Deeply rooted in the Jesuit tradition, the institution takes its ideology of 'Care for creation' with much sincerity and earnestness. The institute induces eco-conscious living through its initiatives and learning that it exposes its students to. As a responsible citizen of the world; the institute plays its role responsibly to conserve resources and protect the environment and encourages its stakeholders to do the same.

The institute has adopted the following environmentally-conscious practices:

- The Enterprise Resource Planning (ERP) system is used to limit paper-usage and generation of paper waste. Notices, assignments, quizzes, etc are shared through this system, thus encouraging a paperless venture.**
- Celebrations and notable days that are observed only witness the use of reusable steel plates and cups that were given to all staff members; thus limiting waste generation.**
- The institute organizes beach-cleanups, tree-plantation drives, water-conservation awareness runs, etc. under the initiative of the NSS.**
- The students are made aware of their role towards the environment through workshops and seminars conducted by the National Service Scheme of XIE (NSS), as well as intercollegiate events like the West Zonal Jesuits Higher Education Association South Asian workshop for 'Eco-warriors'**
- The institute has installed EV (Electrical Vehicle) chargers on campus and uses EV cars for its commute requirements, which have received acclaim from the local bodies and citizens.**
- Smartboards in the classrooms have also replaced the dust problem created by chalk and blackboard.**
- The institute also powers its energy usage with solar panels.**
- The faculty members frequently guide and encourage the students to incorporate the Graduate attribute or Program Outcome-7 (PO7)- 'environment' in their academic endeavors. Students are motivated to take up 'environment-friendly' topics for creating mini-projects and attempt quizzes online.**

- Student groups have also received awards for their projects on ‘Sustainability’ at locally held ‘Conventions on Sustainability’.

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

5. CONCLUSION

Additional Information :

The Institute follows the Outcome-based Education approach in the teaching-learning-evaluation process. The institution puts forward the idea of holistic excellence by keeping social and environmental welfare at par with academic achievements.

Days of Patriotism and cultural importance are duly commemorated. The annual cultural event Spandan, sports event Sparx, and technical event Transmission are organized every year with the participation of faculty, staff, and students. The hallmark of Cultural events is to promote cultural diversity among students, whereas sports events are to ensure a healthy mind in a healthy body, technical events are designed to create a competitive spirit gauging student performance.

Concluding Remarks :

The governance and leadership of the Institute perfectly aligns with the Vision and Mission of the institute. We have the conviction that robust curricular aspects, student-centric teaching learning & evaluation, progressive Research, Innovation & extension, adequate Infrastructure & Learning Resources, favorable Student support & Progression, and ethical Institutional Values & Best Practices all together contribute to the Institution's overall growth. The Institute will do continuous refinements to achieve distinguished output benefitting all our stakeholders. With dedicated efforts of almost a decade, Xavier Institute of Engineering, Mumbai is constantly marching ahead providing high quality Engineering Education.

6.ANNEXURE

1.Metrics Level Deviations

Metric ID	Sub Questions and Answers before and after DVV Verification																				
1.2.1	<p>Number of Certificate/Value added courses offered and online courses of MOOCs, SWAYAM, NPTEL etc. (where the students of the institution have enrolled and successfully completed during the last five years)</p> <p>Answer before DVV Verification :</p> <p>Answer After DVV Verification :31</p> <p>Remark : Input changed as per the documents provided.</p>																				
1.2.2	<p><i>Percentage of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years</i></p> <p>1.2.2.1. Number of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years</p> <p>Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2022-23</th> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> </tr> </thead> <tbody> <tr> <td>568</td> <td>603</td> <td>622</td> <td>401</td> <td>220</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1"> <thead> <tr> <th>2022-23</th> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> </tr> </thead> <tbody> <tr> <td>568</td> <td>603</td> <td>660</td> <td>401</td> <td>220</td> </tr> </tbody> </table>	2022-23	2021-22	2020-21	2019-20	2018-19	568	603	622	401	220	2022-23	2021-22	2020-21	2019-20	2018-19	568	603	660	401	220
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568	603	622	401	220																	
2022-23	2021-22	2020-21	2019-20	2018-19																	
568	603	660	401	220																	
1.4.1	<p><i>Institution obtains feedback on the academic performance and ambience of the institution from various stakeholders, such as Students, Teachers, Employers, Alumni etc. and action taken report on the feedback is made available on institutional website</i></p> <p>Answer before DVV Verification : A. Feedback collected, analysed, action taken& communicated to the relevant bodies and feedback hosted on the institutional website</p> <p>Answer After DVV Verification: A. Feedback collected, analysed, action taken& communicated to the relevant bodies and feedback hosted on the institutional website</p>																				
3.1.1	<p><i>Grants received from Government and non-governmental agencies for research projects / endowments in the institution during the last five years (INR in Lakhs)</i></p> <p>3.1.1.1. Total Grants from Government and non-governmental agencies for research projects / endowments in the institution during the last five years (INR in Lakhs)</p> <p>Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2022-23</th> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>15</td> <td>8</td> <td>1.25</td> <td>0.75</td> </tr> </tbody> </table>	2022-23	2021-22	2020-21	2019-20	2018-19	0	15	8	1.25	0.75										
2022-23	2021-22	2020-21	2019-20	2018-19																	
0	15	8	1.25	0.75																	

Answer After DVV Verification :

2022-23	2021-22	2020-21	2019-20	2018-19
0	00	00	00	00

Remark : Input changed as no audit statement or utilization certificate is provided for any of the year.Grants in the form of Equipments / software / skill development centers will not be considered. Research project grants should be reflected in audited statements / utilization certificates.

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

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

Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
17	12	13	02	0

Answer After DVV Verification :

2022-23	2021-22	2020-21	2019-20	2018-19
15	12	12	02	00

Remark : Input changed as guest lectures not to be included in this metric.

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

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

Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
9	6	8	7	4

Answer After DVV Verification :

2022-23	2021-22	2020-21	2019-20	2018-19
9	6	8	7	4

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

3.4.3.1. Number of extension and outreach Programs conducted in collaboration with

industry, community, and Non- Government Organizations through NSS/ NCC etc., year wise during the last five years

Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
13	8	4	18	0

Answer After DVV Verification :

2022-23	2021-22	2020-21	2019-20	2018-19
13	07	01	18	00

Remark : Input changed as Events conducted for the benefit of their own students not to be included under outreach programs. Only extension activities for the benefit of community is considered.

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

Answer before DVV Verification :

Answer After DVV Verification :13

Remark : Input changed as one day activities are excluded. Hence number of MOUs are 13.

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

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

Answer before DVV Verification : 744

Answer after DVV Verification: 591

Remark : Input changed as duplicate bills are excluded.

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

1. Soft skills

2. Language and communication skills

3. Life skills (Yoga, physical fitness, health and hygiene)

4. ICT/computing skills

Answer before DVV Verification : A. All of the above

Answer After DVV Verification: B. 3 of the above

Remark : Input changed as per supporting documents.

5.3.1 **Number of awards/medals for outstanding performance in sports/ cultural activities at University / state/ national / international level (award for a team event should be counted as**

one) during the last five years

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

Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
7	7	3	8	6

Answer After DVV Verification :

2022-23	2021-22	2020-21	2019-20	2018-19
03	04	00	06	06

Remark : Input changed as Only University / state/ national or international achievements will be considered.

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

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

Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
27	30	27	34	33

Answer After DVV Verification :

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

Remark : HEI input changed as Events cannot be split into activities. Multiple activities on the relatively closer dates to be considered as one only.

2.Extended Profile Deviations

ID	Extended Questions					
1.1	Number of teaching staff / full time teachers during the last five years (Without repeat count): Answer before DVV Verification : 56 Answer after DVV Verification : 56					
2.1	Expenditure excluding salary component year wise during the last five years (INR in lakhs) Answer before DVV Verification: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;"></td> <td style="width: 20%;"></td> <td style="width: 20%;"></td> <td style="width: 20%;"></td> <td style="width: 20%;"></td> </tr> </table>					

2022-23	2021-22	2020-21	2019-20	2018-19
241.99	161.35	178.07	191.77	198.53

Answer After DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
351.02	188.65	223.28	256.80	335.47