

#### FOR

# **1<sup>st</sup> CYCLE OF ACCREDITATION**

# WALCHAND INSTITUTE OF TECHNOLOGY, SOLAPUR

#### WALCHAND INSTITUTE OF TECHNOLOGY P.B.NO. 634, SETH WALCHAND HIRACHAND MARG, ASHOK CHOWK, SOLAPUR.

413006 www.witsolapur.org

Submitted To

#### NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

#### BANGALORE

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# **1. EXECUTIVE SUMMARY**

#### **1.1 INTRODUCTION**

Walchand Institute of Technology (WIT) was established in July 1983 by Shri Aillak Pannalal Digambar Jain Pathashala (SAPDJ) Trust(Estb. 1885). This institution is located in Solapur city in Maharashtra. WIT is one of the pioneering self-financed Institution in Engineering education & research that offers UG, PG and Doctoral programs. It is permanently affiliated with Solapur University, Solapur and approved by AICTE New Delhi. The campus spread over on 22 acres, is fully connected through LAN &some locations are Wi-Fi enabled. The Institution is committed to attaining excellence in imparting quality technical education in conformation with current and future needs of industry. It produces globally competent Engineers imbibed with social & ethical values.

Institute follows OBE with a good academic infrastructure such as Smart & Virtual Classrooms, Laboratories, Workshops, Library, amenities etc. WIT has established Professional Learning Community (PLC) to improve the teaching-learning process for various courses across engineering programs, through collaboration. Research happens to be an integral part of our education. WIT has received grants for research and modernization of laboratories from DST, AICTE, and UGC. Institute has successfully completed the process of Accreditation & Reaccreditation. Highly motivated and enthusiastic faculty, a perfect blend of young and experienced is the backbone of WIT. On an average 60 MNCs & SMEs visit campus for recruitment. Institute has entered into MOUS with various leading MNCs & SMEs. The institute in collaboration with industries has developed various laboratories. Sports facility is comprised of the eight-lane athletics track, Football, Volleyball, Cricket ground, Basketball etc.

#### Vision

To produce young, globally competent Graduates/Post-Graduates/Doctoral Engineers with an aptitude for leadership and research, to face the challenges of modernization and globalization courageously who will be instrumental in overall growth of the society

#### Mission

- To impart quality Technical Education in accordance with the needs of the society through various academic programs.
- To foster learning process & to provide proper ambiance for motivating students for creating awareness to excel in the ever-expanding field of science & technology.
- To enhance career opportunities for students through exposure to industries & research institutions
- To strive for excellence by encouraging independent critical thinking, creativity & discipline
- To create awareness for engineering ethics & human values for instilling moral, social values & loyalty & to appreciate the rights of others & respect towards society & its heritage
- To help the students to implement their acquired Engineering knowledge for society & community development, thus enhancing a strong sense of social responsibility & accountability
- To reach to the community through various outreach programs to include the scientific-technological spirit among all

- To promote and provide a framework to meet campus sustainability goals & mitigate climate change
- To help in nation building through a pool of dedicated, disciplined, intellectual & integrated manpower

#### 1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

#### **Institutional Strength**

#### Faculty& Staff Members

- Qualified and experienced faculty: Doctorates (13%), pursuing PhD (19%)
- Expertise in multidisciplinary knowledge areas
- Faculty adopts ICT and blended teaching-learning process
- Student centric functioning including mentoring and counselling
- Faculty representation in BOS/Academic council and participation for Curriculum Design, Development & implementation of Affiliating University
- Good number of faculty research publications in International journals & Conferences
- Rendering consultancy services enhancing industry-institute interaction and revenue
- Gender diversity: More than 35 % of faculty are women, more than 40% students are girls
- Faculty & Staff members are competent and trained for skill enhancement.
- Average working experience of staff is more than 11 years

#### Students & Alumni

- Advanced learners have demonstrated potential through projects and various competitive examinations for higher education and professional career
- Highest number of University ranks for all programmes
- Good campus placement, achievements in various activities through awards
- Alumni spread across the globe with more than 600 entrepreneurs

#### **Curriculum & Infrastructure**

- Well-equipped infrastructure and educational learning resources
- Periodic review and revision of curriculum in accordance with industrial needs
- well-established examination and evaluation processes for both ISE & ESE
- State of the art laboratories with research facilities
- Adequate Campus amenities and Wi-Fi along with ICT Facilities
- Good library facility with adequate volumes and titles along with journals
- Gymkhana with all facilities and play ground
- Good residential facilities for boys and girls

#### **Institutional Weakness**

#### Awards & Recognition

- Need to enter in to more MOUs for increasing industry-institute interaction
- Need to increase fundamental and applied research

#### Faculty& Staff Members

- More faculty members need qualification up gradation and get acquainted with latest technology
- Need to focus on quality publications, patent filing and explore commercial potential.
- Consultancy services need to extend for all types of industries

#### Students & Alumni

- Enhance number of students opting for higher education with counselling and training
- Need to increase placements in core companies
- Need to increase alumni interaction and strengthen alumni association through proper networking

#### **Curriculum & Infrastructure**

- Since self-financed institution, limited resources available for development of the laboratory
- University affiliated college, restriction on academic flexibility

#### Institutional Opportunity

- To acquire status of an Autonomous institution
- Oldest and reputed institution which has potential for growing consistently over 34 years, opportunity to expand multi-fold
- Explore centre of excellence and interdisciplinary approach
- To increase fundamental and applied research
- Cater the needs of local industries especially textiles and contribute to the growth of Solapur and making Solapur as a smart city
- To enter in to more MOUs for increasing industry-institute interaction
- To explore alumni involvement in academic and placement activities
- Training for competitive examination both in-house & external agencies
- Requirement for value added training programmes for unemployed rural youth of the region

#### **Institutional Challenge**

- Attraction of students to migrate towards metro cities for admissions
- Mushrooming of engineering colleges in the state and Solapur district.
- Self-financed institution, therefore higher fees for technical education leading students to look for alternative admissions.
- Surrounding institutes offers concession in fees to fill their seat at any cost.
- University Affiliated institute, Rigidity of academic structure and curriculum
- Faster fourth industrial revolution leading to rapid change in technology (Industry 4.0)
- Industrial recession and growth cycle

#### **1.3 CRITERIA WISE SUMMARY**

#### **Curricular Aspects**

Walchand Institute of Technology is affiliated with Solapur University and adopts the curriculum provided by Solapur University, which is revised after every four years. Being the oldest institute in the university, senior faculty members of the institution contribute in designing and developing curriculum for the program offered at University level. Every department of the institution has their representatives on Board of Studies and Academic Council of the university. Care is taken to develop appropriate need-based curriculum in consultation with subject-experts and various stakeholders, so as to suit the professional needs of the students. Institute follows CBCS system in which students can opt for courses of their choice from the available options provided under elective courses category.

The institute has its well-defined process to plan and execute activities for effective implementation of the curriculum delivery. Objectives and outcomes are defined for every course of every program and it is ensured that they are fulfilled at the end of every course. The curriculum imparted is very close to model course curriculum of AICTE.

The curriculum is supplemented through value addition, enrichment and skill development courses. The institute promotes effective industry-institute interaction through various workshops, expert talks, online courses and academic projects. To enhance the employability of the students, transferable and life skill courses are conducted which have the contents beyond the syllabus. To assess and improve the academic requirement of students, feedbacks are taken from various stakeholders like students, alumni, employer, teachers and parents and accordingly corrective measures are taken.

#### **Teaching-learning and Evaluation**

We are a self financed Jain minority institution affiliated to Solapur University, Solapur and approved by A.I.C.T.E., New Delhi. Admissions are through CAP process of Directorate of Technical Education (D.T.E.), Mumbai. Students get admitted from various states across nation.

Every department has qualified and experienced faculty members with good retention and student-faculty ratio maintaining good faculty cadre ratio. @24% faculty members are recipient of awards and grants by recognised bodies.

Institution has adopted the various reforms looking at paramount importance of continuous assessment in which overall weightage for In-sem and End-sem evaluation is 50%.

Academic calendar is prepared at the institute and department level before commencement of the semester. On the basis of various continuous assessments, students' are categorized as advanced & slow performers and accordingly different programs are organized. Results of final year students are excellent (@97-100%) every year.

Professional Learning community (PLC) is formulated, which undertakes training of faculty members for pedagogies & use of ICT while employing various ET practices empowering faculty for content delivery, carrying out research in ET and assisting teachers to create "learner-centric" course contents. All modern tools for continuous assessment are used to arrive at attainment of Program Outcomes and Course Outcomes.

#### **Research, Innovations and Extension**

Institute fosters global competencies amongst students by promoting a research culture and innovations to undertake research projects. It has received grants from government bodies: AICTE, DST and IIT Bombay for research promotion and Modernization & Removal of Obsolescence of laboratories and non-government bodies for developing laboratories.

In our research centre there are eight research guides. Nineteen research scholars have completed their Ph.D. and thirty nine research scholars are pursuing their Ph.D.

The institute has taken an initiative to create an ecosystem for research by creating research infrastructure, developing industry & research projects and transferring knowledge through tailor made programs and consultancy. Around 100 workshops are organized in collaboration with industries in the past five years.

Our institute has its own code of ethics to ensure quality and legitimate practices in research and has been published on the institute Website. Around 130 research papers are published every year by faculty members in reputed Journals including UG recognized Journals. As well through structured system, knowledge transfer is affected.

Our faculty and students actively participate in the large number of extension activities like awareness for environment issues, blood donations, and social issues through various outreach programs and have won awards.

We are a recognized remote centre for National Mission on Education through ICT (NMEICT). We have more than 400 linkages for internship, research and field work. Our institute has 17 functional MOU's with industry for completing sponsored projects, acquiring training, educating faculty and offering help for industrial electives & employability skills.

#### **Infrastructure and Learning Resources**

The institute has excellent infrastructures to cater complete learning practice for students and the faculty. Every department of the institute is well equipped with ICT enabled classrooms, laboratories, tutorial rooms, research laboratories, workshop, seminar hall etc. The institute ensures that the infrastructure in the institute is comfortable for physically challenged students. In addition to this, other facilities like photocopying, health care center, canteen etc. are available on the campus. The hostel facility for girls and boys is available. Institute is having adequate facilities for sports and cultural activities.

The central library has a library management software:ILMS-LIBMAN, Books, e-journals, e-books, Manuscripts and knowledge resources. The library has institutional membership of IIT Bombay Library, National Digital Library of India. A significant amount of the annual budget is utilized for procurement of books, e-journals, print-journals and periodicals. IT infrastructure includes 83 Mbps of leased line connection, 38 access points, 630 computers and Cyberoam firewall. Institute has two centralized MOODLE servers supporting @ 400 users per server. The institute has a well defined policy for upgrading and maintenance of IT infrastructure.

Institute allocates a significant amount of budget for infrastructure augmentation and maintenance such as laboratory equipment, software, academic activities, operation & maintenance etc. There is well-established

System and Procedure for maintaining & utilizing physical, academic and support facilities such as maintenance of electrical, laboratory, water supply/purifier/cooler, generator, and housekeeping.

#### **Student Support and Progression**

Institute is dedicated to support students for their progress and overall development by organizing various activities throughout the year. Students are continuously monitored for academic progress and overall development. Eligible students get scholarship and free-ship from government schemes. Institute provides scholarship to students who are financially weak.

Institute organizes various enhancement and development programs such as Guidance for competitive examinations, Career and personal Counselling, Soft skill development, Remedial coaching, Language lab, Bridge courses, Yoga and Meditation. Students undergo vocational Education and training to bridge gap between industry and institute.

Grievance cell, anti-ragging committee are established consisting of students' representative and faculty members. The committee conducts regular meetings as precautionary measures to maintain good-culture in college premises.

Training and placement cell conducts various pre-placement training on various subjects for enhancing the employability skills. Every year various companies visit for recruitment and around 60% students get placed through the same.

All departments of the institute provide coaching for various competitive exams to encourage students to go for higher studies and around 10% of the fresh graduates pursue higher studies in India and abroad.

Students participate in the various activities organized by the institute and also represent at state and national level sports tournaments & cultural competitions and win the prizes.

Alumni association of our institute is a registered body. The objective is to bring the alumni together to keep them in contact with the alma meter for the overall development of the institute. Alumni's are actively involved in overall through various bodies.

#### Governance, Leadership and Management

The Management has established effective leadership by deploying vision, mission & goals. The institute has formed various committees for managing the day to day activities and the system is fully streamlined.

The institute provides various welfare measure and amenities for teaching and non-teaching staff members. It has set norms for professional development of faculty members and non-teaching staff by motivating to pursue higher studies and attending various development programs. A formal and transparent annual performance appraisal system is also followed to appraise the faculty members & staff on their performance.

The financial aspect of the institute is managed in a very effective and efficient manner. There are established procedures and processes for planning and allocating financial resources.

The institute maintains quality norms in the teaching-learning process. It continuously monitors and examines the process through feedback, audit and evaluation. It ensures the quality at every stage in academics, administration and infrastructure. The institution has a mechanism of conducting internal audit and external audits. Findings are discussed and identified areas are taken up for improvement.

#### **Institutional Values and Best Practices**

Institute organizes various gender equity programs, guest lectures by motivational speakers, blood donation camps and national awareness programs. Institute has various committees specially to provide safety and security such as Grievance cell and Anti ragging cell. Counselling is also provided by mentors. Conservation and renewable energy such as solar panels, rain water harvesting, gray water harvesting for liquid waste recycling is maintained. All new lightning devices are purchased to conserve energy such as LED bulbs, LCD monitors etc.

Being a professional programme there are a very few number of students who are physically challenged. The college infrastructure provides lifts and ramps at appropriate locations in all buildings, extra time and writer is given to such students during University examinations according to prevailing University norms.

Greenery throughout the campus is well maintained which helps to reduce air pollution. The college takes conscious efforts to create awareness about energy.

Institute being located in heart of the city is providing facility for online examinations. The University Central Assessment Process (CAP) is also done in the Institute as it is easily reachable for the faculty to assess the papers.

Institute has number of in build best practices such as Professional learning committee, Outreach Programme to society, Training and placement cell, Entrepreneur development cell, conducting annual technical symposiums and providing services to various government and non government organisations. The institute has 2-way linkage with industries which have led to an excellent rapport benefiting all the stakeholders.

# **2. PROFILE**

#### **2.1 BASIC INFORMATION**

Name and Address of the College		
Name	WALCHAND INSTITUTE OF TECHNOLOGY,SOLAPUR	
Address	Walchand Institute of Technology P.B.No. 634, Seth Walchand Hirachand Marg, Ashok Chowk, Solapur.	
City	Solapur	
State	Maharashtra	
Pin	413006	
Website	www.witsolapur.org	

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Professor	Anita Mukund Pujar	0217-2652700	9422672016	0217-265138 8	arkulkarni10@gma il.com
Principal	Shashikant Annarao Halkude	0217-2653040	9422457776	0217-265153 8	principal.witsolapu r@gmail.com

Status of the Institution	
Institution Status	Private and Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular Evening

Recognized Minority institution		
If it is a recognized minroity institution	Yes	
If Yes, Specify minority status		
Religious	JAIN	
Linguistic		
Any Other		

Establishment Details	
Date of establishment of the college	21-06-1983

University to which the college is affiliated/ or which governs the college (if it is a constituent college)

State	University name	Document
Maharashtra	Solapur University	View Document

Details of UGC recognition			
Under Section	Date	View Document	
2f of UGC	24-07-2012	View Document	
12B of UGC	20-12-2013	View Document	

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)				
Statutory Regulatory Authority	Recognition/App roval details Inst itution/Departme nt programme	Day,Month and year(dd-mm- yyyy)	Validity in months	Remarks
AICTE	View Document	30-03-2017	12	AICTE issues Extension of Approval every year on submission of required application or documents by the institute

Details of autonomy		
Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?	No	

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	Walchand Institute of Technology P.B.No. 634, Seth Walchand Hirachand Marg, Ashok Chowk, Solapur.	Urban	22.05	30461.5

## **2.2 ACADEMIC INFORMATION**

Details of Pro	ogrammes Offe	red by the Col	lege (Give Data	a for Current A	Academic year	)
Programme Level	Name of Pr ogramme/C ourse	Duration in Months	Entry Qualificatio n	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BE,Civil Engineering	48	HSC MHCET JEE	English	60	60
UG	BE,Compute r Science And Engineering	48	HSC MHCET JEE	English	120	107
UG	BE,Electroni cs Engineering	48	HSC MHCET JEE	English	60	46
UG	BE,Electroni	48	HSC	English	120	110

	cs And Telec ommunicatio n Engineering		MHCET JEE			
UG	BE,Informati on Technology	48	HSC MHCET JEE	English	60	58
UG	BE,Mechani cal Engineering	48	HSC MHCET JEE	English	120	120
PG	ME,Civil Engineering	24	BE BTECH GATE	English	25	6
PG	ME,Comput er Science And Engineering	24	BE BTECH GATE	English	18	5
PG	ME,Electron ics Engineering	24	BE BTECH GATE	English	18	11
PG	ME,Mechani cal Engineering	24	BE BTECH GATE	English	18	8
Doctoral (Ph.D)	PhD or DPhil,Civil Engineering	60	ME MTECH PET GATE	English	2	0
Doctoral (Ph.D)	PhD or DPhi l,Computer Science And Engineering	60	ME MTECH PET GATE	English	2	0
Doctoral (Ph.D)	PhD or DPhi l,Electronics Engineering	60	ME MTECH PET GATE	English	2	0
Doctoral (Ph.D)	PhD or DPhi l,Electronics And Teleco mmunication Engineering	60	ME MTECH PET GATE	English	2	0
Doctoral (Ph.D)	PhD or DPhi l,Mechanical Engineering	60	ME MTECH PET GATE	English	2	0

#### Position Details of Faculty & Staff in the College

	Teaching Faculty											
	Profe	Professor				Associate Professor			Assis	Assistant Professor		
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government		1	1	15		1	1	35		1	1	108
Recruited	9	2	0	11	9	5	0	14	77	31	0	108
Yet to Recruit				4				21				0
Sanctioned by the Management/Soci ety or Other Authorized Bodies				0		7		0				16
Recruited	0	0	0	0	0	0	0	0	8	8	0	16
Yet to Recruit		1		0				0				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				81					
Recruited	80	1	0	81					
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				42					
Recruited	34	8	0	42					
Yet to Recruit				0					

#### **Qualification Details of the Teaching Staff**

	Permanent Teachers											
Highest Qualificatio n	Professor			Associate Professor			Assistant Professor					
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total		
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0		
Ph.D.	9	2	0	9	5	0	6	0	0	31		
M.Phil.	0	0	0	0	0	0	0	0	0	0		
PG	0	0	0	0	0	0	75	33	0	108		

	Temporary Teachers											
Highest Qualificatio n				ssor	Assist							
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total		
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0		
Ph.D.	0	0	0	0	0	0	2	0	0	2		
M.Phil.	0	0	0	0	0	0	0	0	0	0		
PG	0	0	0	0	0	0	7	7	0	14		

	Part Time Teachers											
Highest Qualificatio n	ofessor		Associate Professor		Assistant Professor							
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total		
D.sc/D.Litt.	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		

Details of Visting/Guest Faculties							
Number of Visiting/Guest Faculty	Male	Female	Others	Total			
engaged with the college?	21	1	0	22			

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
Doctoral (Ph.D)	Male	0	0	0	0	0
	Female	0	0	0	0	0
	Others	0	0	0	0	0
UG	Male	1327	170	0	0	1497
	Female	986	32	0	0	1018
	Others	0	0	0	0	0
PG	Male	21	0	0	0	21
	Female	24	0	0	0	24
	Others	0	0	0	0	0

Programme		Year 1	Year 2	Year 3	Year 4
SC	Male	11	5	10	9
	Female	8	6	8	10
	Others	0	0	0	0
ST	Male	0	0	0	0
	Female	0	0	1	1
	Others	0	0	0	0
OBC	Male	111	66	62	48
	Female	66	46	60	60
	Others	0	0	0	0
General	Male	108	84	80	93
	Female	79	62	50	58
	Others	0	0	0	0
Others	Male	94	141	114	134
	Female	21	35	18	25
	Others	0	0	0	0
Total		498	445	403	438

Provide the Following Details of Students admitted to the College During the last four Academic Years

### **3. Extended Profile**

#### 3.1 Program

Number of courses offered by the institution across all programs during the last five years

Response: 315

Number of self-financed Programs offered by college

Response: 15

Number of new programmes introduced in the college during the last five years

Response: 0

#### **3.2 Students**

#### Number of students year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
2561	2476	2503	2462	2487

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

2016-17	2015-16	2014-15	2013-14	2012-13
318	318	318	318	318

#### Number of outgoing / final year students year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
632	621	614	564	497

#### Total number of outgoing / final year students

Response: 2926

#### **3.3 Teachers**

#### Number of teachers year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
163	160	162	158	159

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

2016-17	2015-16	2014-15	2013-14	2012-13	
158	158	158	158	158	

#### Number of sanctioned posts year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
158	158	158	158	158

#### **Total experience of full-time teachers**

Response: 1899.5

Number of teachers recognized as guides during the last five years

**Response: 8** 

Number of full time teachers worked in the institution during the last 5 years

Response: 799

#### **3.4 Institution**

Total number of classrooms and seminar halls

Response: 37

#### Total Expenditure excluding salary year-wise during the last five years (INR in Lakhs)

2016-17	2015-16	2014-15	2013-14	2012-13
877.96	889.66	864.26	940.80	752.48

Number of computers

Response: 630

Unit cost of education including the salary component(INR in Lakhs)

Response: 0.89

Unit cost of education excluding the salary component(INR in Lakhs)

Response: 0.32

# **<u>4. Quality Indicator Framework(QIF)</u>**

#### **Criterion 1 - Curricular Aspects**

#### **1.1 Curricular Planning and Implementation**

**1.1.1** The institution ensures effective curriculum delivery through a well planned and documented process

#### **Response:**

Since we are affiliated institution, we follow the course curriculum prescribed by Solapur University, which is continuously revised at an interval of 4-5 years. Being the pioneering institute of Maharashtra and Solapur University, our many senior faculty members contribute in planning and implementation of curriculum not only at Institute level but also at University level. All our departments have at least one representative on Board of Studies (BoS) of the university, Academic Council and Senate. Care is taken to develop appropriate need-based curriculum in consultation with experts and various stakeholders in line with the needs of various professional bodies and model course curriculum. The course curriculum is Choice Based Credit System. The course curriculum is planned on various Blooms' Taxonomy level. We plan to allow students to pursue their choice in the form of electives.

The institute has its well-defined process to plan and execute activities for effective implementation of the curriculum delivery through its academic calendar. The academic calendar includes teaching plan, schedule of assignments and quizzes, stakeholders' meet, schedules of In-Sem Evaluation and End-Sem Evaluation, Industry visit, Internship, co curricular & extracurricular activities. On the basis of Institution academic calendar, department and teachers prepare their academic calendar and teaching plans for every theory and practical subject for minimum of 15 weeks.

Every semester, time-table preparation and subject allocation is done well in advance. Subject allocation is done on the basis of area of specialization of faculty, qualification, number of times the subject taught and experience. Objectives and outcomes are defined for every subject (course) of program, and it is ensured that they are attained at the semester end. Delivery of course curriculum includes width and depth beyond course curriculum.

Faculty are trained for newly introduced courses in the curriculum through workshops organised by various industries, IITs, and NPTEL online courses so as to achieve effective delivery. For improvement in the performance of the weaker students, remedial classes are planned. As direct second year students join the semester late, make-up classes are conducted by faculty for every subject. The college also offers skill-development and value-addition courses for students to enrich the curriculum. Our faculty use various active learning strategies while delivering lectures so as to enhance the critical thinking and problem solving ability of the students. Faculty of the institute have created Open Educational Resources (OERs) to enrich students learning using various ICT tools and techniques.

Assessment of students is done during the semester through "In Semester Evaluation" and "Internal Continuous Assessment". In In-Sem Evaluation (ISE), three tests are conducted for every subject. Students are evaluated based on their performance in tests and additional assignments with respect to subject. For Internal Continuous Assessment (ICA), students are evaluated for their performance throughout the semester. At the end of semester student has to appear for a university exam i.e. End Semester Evaluation

(ESE). Attainment of POs and PSOs is done by faculty members on the basis of inputs from various stakeholders. Indirect assessment of attainment is done through "Course exit survey".

File Description	Document
Any additional information	View Document

#### 1.1.2 Number of certificate/diploma program introduced during the last five years

#### **Response:** 4

1.1.2.1 Number of certificate/diploma programs introduced year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
4	0	0	0	0

File Description	Document
Details of the certificate/Diploma programs	View Document
Any additional information	View Document

#### **1.1.3 Percentage of participation of full time teachers in various bodies of the Universities/** Autonomous Colleges/ Other Colleges, such as BoS and Academic Council during the last five years

**Response:** 41.14

1.1.3.1 Number of teachers participating in various bodies of the Institution, such as BoS and Academic Council year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13	
15	9	14	13	14	
File Description					
File Descriptio	n		Document		
-	on cipation of teachers	in various bodies	Document View Document		

#### **1.2 Academic Flexibility**

# **1.2.1** Percentage of new Courses introduced out of the total number of courses across all Programs offered during last five years

#### Response: 42.86

1.2.1.1 How many new courses are introduced within the last five years

#### Response: 135

File Description	Document
Minutes of relevant Academic Council/BOS meetings.	View Document
Details of the new courses introduced	View Document
Any additional information	View Document

# **1.2.2** Percentage of programs in which Choice Based Credit System (CBCS)/Elective course system has been implemented

#### **Response:** 66.67

1.2.2.1 Number of programs in which CBCS/ Elective course system implemented.

#### Response: 10

File Description	Document
Name of the programs in which CBCS is implemented	View Document
Minutes of relevant Academic Council/BOS meetings.	View Document
Any additional information	View Document

#### **1.2.3** Average percentage of students enrolled in subject related Certificate/ Diploma programs/Addon programs as against the total number of students during the last five years

#### **Response:** 46.97

1.2.3.1 Number of students enrolled in subject related Certificate or Diploma or Add-on programs yearwise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
2169	873	867	1184	800

File Description	Document
Details of the students enrolled in Subjects related to certificate/Diploma/Add-on programs	View Document
Any additional information	View Document

#### **1.3 Curriculum Enrichment**

**1.3.1** Institution integrates cross- cutting issues relevant to Gender, Environment and Sustainability, Human Values and Professional Ethics into the Curriculum

#### **Response:**

There are various courses in the curriculum which address cross cutting issues relevant to Environment, Sustainability, Human Values and Professional Ethics. The list of these courses is given below. Detailed description of these courses is uploaded in additional information.

		Department	Relevance	Year imple	emen
Environmental Science	SE	All departments	Environment and Sustainability	12013	-14
Economics	ТЕ	All departments	Human Values and Professional Ethics	12013	-14
1 0 0		All departments	Human Values and Professional Ethics	12013	-14
Introduction To Sociology	TE	All departments	Human Values and Professional Ethics	12013	-14
Stress And Coping	TE	All departments	Human Values and Professional Ethics	12013	-14
Professional Ethics & Human Values	TE	All departments	Human Values and Professional Ethics	12013	-14
Communication Skills	FE	General Engineering	For Employability enhancement	/2012	-13
Professional Communication	FE	General Engineering	For Employability enhancement	2012	-13
Environmental Engineering-I	TE	Civil Engineering	Environment and Sustainability	12012	-13
	Economics         Intellectual Property Rights For         Technology Development And         Management         Introduction To Sociology         Stress And Coping         Professional Ethics & Human         Values         Communication Skills         Professional Communication	EconomicsTEIntellectual Property Rights For Technology Development And ManagementIntroduction To SociologyTEStress And CopingTEProfessional Ethics & Human TE ValuesFECommunication SkillsFEProfessional CommunicationFE	EconomicsTEAll departmentsIntellectual Property Rights ForTE Technology Development And ManagementAll departmentsIntroduction To SociologyTEAll departmentsIntroduction To SociologyTEAll departmentsStress And CopingTEAll departmentsProfessional Ethics & HumanTE ValuesAll departmentsCommunication SkillsFEGeneral EngineeringProfessional CommunicationFEGeneral Engineering	EconomicsTEAll departmentsHuman Professional Ethicsand Professional EthicsIntellectual Property Rights ForTE Technology Development And ManagementAll departmentsHuman Professional Ethicsand Professional EthicsIntroduction To SociologyTEAll departmentsHuman Professional Ethicsand Professional EthicsStress And CopingTEAll departmentsHuman Professional Ethicsand Professional EthicsProfessional Ethics & Human ValuesTEAll departmentsHuman Professional Ethicsand 	EconomicsTEAll departmentsHumanValues Professional Ethicsand2013 and2013Intellectual Property Rights ForTE Technology Development And ManagementAll departmentsHumanValues Professional Ethicsand2013 and2013Introduction To SociologyTEAll departmentsHumanValues Professional Ethicsand2013 and2013Stress And CopingTEAll departmentsHumanValues Professional Ethicsand2013 and2013Professional Ethics & Human ValuesTEAll departmentsHuman Professional Ethicsand2013 and2013Professional Ethics & Human ValuesTEAll departmentsHuman Professional Ethicsand2013 and2013Professional Ethics & Human ValuesFEGeneral EngineeringFor Employability2012 enhancementForEmployability2012 enhancementProfessional CommunicationFEGeneral Engineering Environmental Engineering-IFor Employability2012 enhancementEnvironmentand2013

10	Environmental Engineering-II	TE	Civil Engineering	Environment Sustainability	and2012-13
11	Air Pollution & control	BE	Civil Engineering	Environment Sustainability	and2012-13
12	Solid and Hazardous & Wast Management	еBE	Civil Engineering	Environment Sustainability	and2012-13
13	Industrial Waste Treatment	BE	Civil Engineering	Environment Sustainability	and2012-13

To address cross cutting issue like **Gender**, we organise many special Programs for girls. Every year Yoga day is celebrated by conducting Yoga activity by renowned Yoga Teacher Mrs. Maya Gandhi for girls and lady faculty of the college. Every year NSS unit organises guest lecture and discussion session for girls and lady faculty on their health issues. There is special "Women Grievances cell" for girls, lady faculty and staff. We appoint two Ladies' Representatives in Students' Council of the institute. Our students participate in rallies associated with "Stribhrun Hatya", "Save Girl Child" etc. In our institute equal opportunity is given to the girls along with the boys in various committees formed for different activities like cultural, co-curricular, Technical symposiums, sports.

Various events are organised under the institute's NSS Cell which addresses issue like **social responsibilities**. Under this Students and faculty of the institute are involved in Smart-City projects of Solapur. Students participated in rallies for some social issues like "Voting", "Blood Donation". Students and faculty of WIT have also contributed for taking Oath for "Road Safety", "Voting", "Saving Water". Students also participate in the events on some social issues like "Andhashradha Nirmulan", "Swachata Abhiyan".

File Description	Document
Any Additional Information	View Document
Link for Additional Information	View Document

**1.3.2** Number of value added courses imparting transferable and life skills offered during the last five years

#### Response: 21

1.3.2.1 Number of value-added courses imparting transferable and life skills offered during the last five years

#### Response: 21

File Description	Document
Details of the value-added courses imparting transferable and life skills	View Document
Brochure or any other document relating to value added courses.	View Document
Any additional information	View Document

#### **1.3.3** Percentage of students undertaking field projects / internships

#### Response: 31.75

1.3.3.1 Number of students undertaking field projects or internships

File Description	Document
List of students enrolled	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document

#### **1.4 Feedback System**

1.4.1 Structured feedback received from 1) Students, 2)Teachers, 3)Employers, 4)Alumni and 5)Parents for design and review of syllabus-Semester wise/ year-wiseA.Any 4 of the above

**B.Any 3 of the above** 

C. Any 2 of the above

**D.** Any 1 of the above

#### **Response:** A.Any 4 of the above

File Description	Document
Any additional information	View Document
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management	<u>View Document</u>
URL for stakeholder feedback report	View Document

1.4.2 Feedback processes of the institution may be A. Feedback collected, analysed and action taken	
B. Feedback collected, analysed and action has be	en taken
C. Feedback collected and analysed	
D. Feedback collected	
<b>Response:</b> B. Feedback collected, analysed and action	on has been taken
File Description	Document
Any additional information	View Document
URL for feedback report	View Document

#### **Criterion 2 - Teaching-learning and Evaluation**

#### 2.1 Student Enrollment and Profile

#### 2.1.1 Average percentage of students from other States and Countries during the last five years

#### Response: 11.31

2.1.1.1 Number of students from other states and countries year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13	
217	266	282	314	331	

File Description	Document	
List of students (other states and countries)	View Document	
Institutional data in prescribed format	View Document	

#### 2.1.2 Average Enrollment percentage (Average of last five years)

#### Response: 82.42

2.1.2.1 Number of students admitted year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
513	484	454	506	594

2.1.2.2 Number of sanctioned seats year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
619	619	619	619	619

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document

2.1.3 Average percentage of seats filled against seats reserved for various categories as per

#### applicable reservation policy during the last five years

#### Response: 50.94

2.1.3.1 Number of actual students admitted from the reserved categories year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
115	182	134	179	200

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document

#### 2.2 Catering to Student Diversity

**2.2.1** The institution assesses the learning levels of the students, after admission and organises special programs for advanced learners and slow learners

**Response:** 

#### Programs for both slow learners and advanced learners

#### 1. Content Delivery

- 1. Blended teaching-learning process using instructional strategies and use of ICT
- 2. Captured lectures for flipped classroom
- 3. Expert talk, Guest lectures, seminars/presentations on advanced topics
- 4. Mock practical oral examinations
- 5. Mini-projects
- 6. For improving soft skills: Extempore Session, Debate, group discussion
- 7.For improving skills required for placement: More practice on Quantitative Aptitude, Verbal and Non Verbal Reasoning, Technical skills etc

#### 2. Assessment Strategies

- 1. In semester Evaluation (ISE) Three Tests
- 2. Internal Continuous assessment (ICA)
- 3.Conventional methods and ICT based assessment through Quiz using tablets, MOODLE, inbuilt assessment through OER etc.

#### 3. Academia-Industry Interaction

- 1. Industrial Training
- 2. Industrial visits

#### 3. Industry Expert Talks on latest trends

On the basis of various continuous assessments as mentioned in assessment strategies students' are categorized as advanced and slow performers.

After interaction with these groups, strategies and its weightage are decided for the following actions/treatments for students' improvement and building their confidence. Those poor performing students are again re-examined after remedial classes for improvement.

#### **Programs for slow learners**

1. Remedial/Revision classes

- 2. Make-up classes
- 3. Retests/additional test for improvement
- 4. More practice in the form of Assignments, Lab practices, presentations etc.
- 5. Use of Instructional strategies
- 6. Counseling/personal guidance as per need

#### **Programs for advanced learners**

- 1. Outside participation through National/International level Conferences and workshops through various technical festivals.
- 2. Organization of various events at the national level technical symposium (WITchar, WITech, and Acceleration) every year at the institute to showcase their leadership and interact with outside counterparts.
- 3. Various co-curricular and extra-curricular events through Professional student's chapter (ISTE, CSI) and various student associations, Entrepreneurship Development cell, Soft-skill development center etc.
- 4. Self-learning through online certification courses like NPTEL, MOOC on IITBombayx, Spoken tutorial etc.
- 5. Preparing students for competitive exam for higher studies and for employment

File Description	Document
Link for Additional Information	View Document

#### 2.2.2 Student - Full time teacher ratio

#### Response: 16.21

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document

#### 2.2.3 Percentage of differently abled students (Divyangjan) on rolls

#### **Response:** 0.2

Response: 0.2		
2.2.3.1 Number of differently abled students on rolls		
Response: 5		
File Description	Document	
List of students(differently abled)	View Document	
Institutional data in prescribed format	View Document	
Any additional information	View Document	

#### 2.3 Teaching- Learning Process

**2.3.1** Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences

#### **Response:**

Now a day, lots of information is available through WWW. Therefore, it's not enough for a teacher only to transfer knowledge and information to students but to ensure that students are able to assimilate knowledge and information, through appropriate and timely practice/s. Hence, it is not enough for teacher only to focus on lecturing, demos, assignment etc. but to adopt student-centric methods through active learning, where students will apply the knowledge, discuss, do peer assessment, help each other, boost cooperative and collaborative learning. Learning methods need to be applied depending on types of learners.

At our institute, to improve students' learning by reducing the gap between teachers' expectations and students' level of learning, faculty members are practicing various learning and teaching methodologies. Students' learning outcome depends on the instructional strategy being employed by the faculty member. Therefore, while planning for course delivery, teachers at our on the basis of predefined learning outcomes, develop the assessment methods and then select instructional strategies that engage students in multiple activities rather than just attending and noting down points while in class, making the class more active and assist in attaining the identified learning outcome.

Following are some of the strategies employed by faculty members during their content delivery:

#### **Participative Learning:**

- 1. Employing gamification during course delivery like puzzles, Treasure and Hunt etc.
- 2. Think-pair-share, Think-pair-solo, Peer instruction etc.
- 3. Short tests followed by group discussion (sTiGD) activity
- 4. Flipped classroom with various out-of-class and in-class activities
- 5. Modified Think-pair-share using FOSS

6. Role-play demonstrating various concepts

#### **Experiential Learning:**

Experiential learning is the process of learning through experience. Institute is inculcating self–learning and lifelong learning skills through Projects, seminars, mini projects, vocational training, parametric study, lab practices etc.

- 1. Use of various Tools to build & enhance fundamentals and Skills of programming languages
- 2. Use of visualizations like animations, videos and simulator for parametric study
- 3. Workshops with hands-on sessions
- 4. Industrial/Vocational training
- 5. Use of handouts available such as notes, worksheets, assignments, laboratory sheets and question sheets
- 6. Projects, Mini-projects
- 7. Use of Virtual-labs to build fundamentals through experimental demonstration

#### **Problem Solving Methodologies (for critical thinking and analytical thinking):**

Student's knowledge and skills to solve complex and real-time problems right defining from problem statement to develop solutions for the problem working for an extended period of time are enhanced through:

- 1. Real-time projects providing solutions on various Societal issues through Project Based Learning
- 2. Open Ended Quizzes a Strategy to Enhance Critical Thinking
- 3. Handout based Learning for subjects with lab practices
- 4. Different programming contests where student design and develop solutions to given problem statement
- 5. Interdisciplinary activities

#### Other additional student centric approaches for enhancing student learning

- 1. Use of technologies and tools like WhatsApp application, Apps development for course delivery or assessment, debugger tools, business intelligence tools etc
- 2. Effect of guided presentation for effective writing for first year and second year students

Now in the scenario of seat remaining vacant indicating slow learners are also admitted. Therefore, it is equally important to address learning for both slow and advance learner while opting for the appropriate method.

File Description	Document
Link for Additional Information	View Document

2.3.2 Percentage of teachers using ICT for effect (LMS), E-learning resources etc.	ive teaching with Learning Management Systems
Response: 92.41	
2.3.2.1 Number of teachers using ICT	
Response: 146	
File Description	Document
List of teachers (using ICT for teaching)	View Document
Any additional information	View Document
Provide link for webpage describing the " LMS/ Academic management system"	View Document

# 2.3.3 Ratio of students to mentor for academic and stress related issues Response: 19.7 2.3.3.1 Number of mentors Response: 130 File Description Document Year wise list of number of students, full time teachers and students to mentor ratio Any additional information View Document

#### 2.3.4 Innovation and creativity in teaching-learning

#### **Response:**

Innovative teaching is necessary for the present and future of education to help students to reach their full potential, to enhance student's essential and creative thinking power. However, teachers' competency for innovative teaching is a key factor influencing innovative teaching performance. At our institute, we inculcate the habit of innovative teaching in the faculty members. In turn, our teachers are now employing various innovations in teaching-learning process to improve students' learning by reducing the gap between teachers' expectations and students' level of learning. Innovations are in the form of content generation, use of instructional strategies, various ICT tools blended with conventional methods for course delivery and assessment. As well since rate of obsolesce is increasing rapidly an attempt is made to inculcate habit of self learning for empowering them as a life-long learner.

Diagnostic, formative and summative assessments are used to assess students' engagement using various

proven forms such as MCQ questions tests, crossword puzzle, quizzes, survey questionnaire, rubrics etc. In addition to conventional ways of assessment different ICT tools are employed for effectiveness and instantaneous assessment.

These innovations tend to ensure increased student engagement catering nearly to all diversity. Students are going beyond listening, copying of notes, and execution of prescribed procedures. Due to this more discussions amongst the students are happening through talking, writing, reflecting and expressing their views. Students has liberty to study at their pace and convenience.

#### Innovations in teaching-learning:

#### **1. Generation of course content:**

Our ICT experts and ET practitioners assists teachers to create course contents learner centric and supporting all types of learners. This enables students to study at their pace and convenience with following OER:

- 1. Handouts for lab practices
- 2. Apps for courses
- 3. Video lectures
- 4. Presentations on various topics
- 5. Module for effective writing skills and programming skills
- 6. Template for Project Based Learning

#### 2. Continuous use of different Instructional Strategies and ICT tools during course delivery

Conventional teaching learning process is strengthened by blending following ET practices for active learning namely:

- 1. Use of Google classroom
- 2. Visualization (videos, Simulation, Animations etc.)
- 3. Think-Pair-Share, Think-pair-solo
- 4. Flipped Classroom
- 5. Peer Instruction
- 6.Role-play
- 7. Gamification
- 8. Project and Problem based learning

#### 3. Virtual Laboratories

Virtual Laboratories have facilitated various simulation studies enabling students to understand the theoretical concepts and to study effect of variables or parametric study through experiments.

#### 4. Inculcating self – learning & lifelong learning through online courses

Every year @1000 students and faculty members are completing one or more online courses through NPTEL, MOOC platforms like IITBombayx, Spoken Tutorials, institute created videos and OER etc.

Thus a central platform for collaborative learning is provided by the institute for effective teaching learning process.

#### 5. Use of learning management system (LMS) like MOODLE

Moodle platform is effectively used for

- 1.Assignment
- 2. Online examinations
- 3. Deployment of study material
- 4. Assessments of students in various competitions
- 5. Feedback etc.

#### 6. Webinars

Industry expert are delivering webinars on topics beyond curriculum, market trends, opportunities in industry etc on regular basis. Even faculty members share their education technology practices to outside faculty member and industry through webinar regularly.

File Description	Document
Any additional information	View Document

#### 2.4 Teacher Profile and Quality

2.4.1 Average percentage of full time teachers against sanctioned posts during the last five years

Response: 100

File Description	Document
Year wise full time teachers and sanctioned posts for 5 years	View Document
List of the faculty members authenticated by the Head of HEI	View Document

#### 2.4.2 Average percentage of full time teachers with Ph.D. during the last five years

#### Response: 12.15

2.4.2.1 Number of full time teachers with Ph.D. year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
27	19	18	16	16

File Description	Document
List of number of full time teachers with PhD and number of full time teachers for 5 years	View Document
Any additional information	View Document

# 2.4.3 Teaching experience per full time teacher in umber of yearsResponse: 12.02File DescriptionDocumentList of Teachers including their PAN,<br/>designation,dept and experience detailsView DocumentAny additional informationView Document

# 2.4.4 Percentage of full time teachers who received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the last five years

#### **Response:** 117.09

2.4.4.1 Number of full time teachers receiving awards from state /national /international level from Government recognised bodies year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
67	40	30	25	23

File Description	Document	
Institutional data in prescribed format	View Document	
e-copies of award letters (scanned or soft copy)	View Document	

# 2.4.5 Average percentage of full time teachers from other States against sanctioned posts during the last five years

#### Response: 24.05

2.4.5.1 Number of full time teachers from other states year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
42	39	41	35	33
			·	
File Descriptio	n		Document	
List of full time	on e teachers from othe alifying degree was		Document     View Document	

### **2.5 Evaluation Process and Reforms**

### 2.5.1 Reforms in Continuous Internal Evaluation(CIE) system at the institutional level

#### **Response:**

Institution has adopted the various reforms driven by university for internal evaluation. Prior to introduction of CGPA and CBCS system, theory subject had 100% assessment weightage through endsemester evaluation (ESE). Looking at paramount importance of continuous assessment, CGPA system was adapted in 2014 in which theory subjects weightage for In-semester evaluation (ISE) is 30% and whereas 70% for ESE. For laboratory courses overall 70% is internal continuous assessment (ICA) and 30% is ESE.

Now, due to these reforms for a semester ESE and ICA + ISE nearly constitute equal weightage enhancing weightage of internal assessment.

Earlier Industrial Training was not part of course curriculum. Voluntarily students were undergoing industrial training. To increase corporate world knowledge, skills an individual needs, and most important the positive attitude that grooms and nurtures development of an individual and society, vocational training made mandatory in curriculum. On completion, students submit report which is assessed by faculty members.

University curriculum offers humanities and technical Self learning courses which are evaluated through end semester evaluation. Additionally, institute is continuously taking efforts to inculcate the habit of selflearning amongst students through online certification courses through NPTEL, MOOC courses on IITBombayX platform, Spoken tutorial etc.

Now, as a reform along with conventional assessment modes, ICT tools like Google forms, MOODLE are used for ISE and ICA.

Institute has adapted Outcome based education. Hence, assessment is aligned with Program Outcomes (Pos) & Program Specific Outcomes (PSOs) which are attained through course outcomes. Assessment questions include both subjective and objective types. Questions are based on different levels of Bloom's Taxonomy. Subjective questions are short and long in nature. The weightage of 20% is given to objective assessment so that students are getting themselves prepared for competitive examinations for higher studies

and placements.

For theory courses, ISE is based on their performance in three tests every semester. As well additional modes of assessment are unit based assignments, subject seminar, quizzes etc. Poor performing students are again re-examined after remedial classes for improvement.

For laboratory/practical subjects, ICA is based on student's performance throughout the semester and due weightage is for attendance, performance, timely completion of assignments.

Multiple assessment tools are used for assessment. These tools are oral examinations, group discussions, case studies, presentations, design sheet submission, e-submissions for at least one course every semester, out of class activity like flipped classroom approach, online certification like NPTEL, IITBombayX etc. Special consideration for their participation in various national and social activities as a participant and organizer is weighed.

Projects are jointly assessed by faculty members and industry experts where students demonstrate their project representing their project idea along with individual communication, leadership, management and team work skills. Parameters for project assessment are innovation, sustainability, field relevance, societal applications, technical proficiency etc.

File Description	Document
Link for Additional Information	View Document

### 2.5.2 Mechanism of internal assessment is transparent and robust in terms of frequency and variety

#### **Response:**

Continuous Internal Assessment is an ongoing process of evaluating students' performance throughout the semester. Internal assessment is comprised of In-semester evaluation (ISE) for theory subjects and Internal continuous evaluation (ICA) is for Laboratory subjects along with various other learning modes like experiential, Project Based Learning and self learning. Internal Assessment nearly weighs 45 to 50% of total assessment.

Our internal assessment is very transparent due to following features:

- 1. Well defined assessment schedule for every semester which is a part of published academic calendar
- 2. Course curriculum for every test is predefined and made known to students well in advance
- 3. Weightage is known to students
- 4. Aggrieved students have an opportunity to put forward their grievance addressal and redressal, if not satisfied with grievance addressal
- 5. Assessment results are in public domain along with answer books
- 6. Students' performance in assignment and laboratories are communicated in stipulated cycle. For any queries they are free to contact subject teachers
- 7. Opportunities of reassessment for slow learners and assessment on higher difficulty level for

#### advanced learners

For theory courses, Internal Semester evaluation (ISE) is based on their performance in three tests uniformly spread over the semester. As well other modes of assessment are assignments, topic seminar, quizzes etc. Concern faculty member assesses the papers and discuss students' learning through their performances. The students raise their doubts to seek clarification. With this context student raise their grievance for the subject teacher's assessment with which they are not satisfied. In case, student is not satisfied with the respective teacher, they are at liberty to appraoch departmental committee. Students showing poor performance are allowed to take one more test so that the best of four can be considered for final evaluation.

ICA for laboratory courses on the basis of set of experiments/assignments which are already made known to students is carried out during the session and assessment is made know to student weekly. The underperforming student is given opportunity to improve their performance.

ICA is based on appropriate weightage to the following

- 1. Regular attendance of student
- 2. Proactiveness during session and its accuracy
- 3. Performance in weekly assignments
- 4. Quality of assignments completed and adherence to schedule of submission of assignments

Over a period of time, we have been giving a good hearing on the grievance of the students and accordingly the changes/alterations have been incorporated in the system making it more robust. Its robustness is proved again and again due to fact that grievances of the students are diminishing exponentially. We always encourage the input from the students in this regard.

File Description	Document
Link for Additional Information	View Document

# 2.5.3 Mechanism to deal with examination related grievances is transparent, time-bound and efficient

#### **Response:**

All the students of the institute are required to undergo Theory & Practical Examinations during their course of studies. This assessment is comprised of two parts namely internal assessment (ISE +ICA) and ESE. The institute provide a mechanism for Redressal of the grievances, if any, for ISE+ICA components of assessment whereas any grievance regarding ESE student is required to approach university authority. Institute's grievance addressal is at department level and redreaasal at institute level.

#### **1. Institute's grievance addressal**

### 1.1 At Department Level

Every year department constitutes a redressal committee comprising Head, senior teachers & subject expert. Those students not satisfied with assessment of the respective teacher, are at liberty to approach departmental redressal committee within two days after display of the results of each ISE test. Committee gathers all such addressals applications and listens to them to find satisfactory solution to their grievance. In case student is not still satisfied at department level, he/she can approach redressal committee at institute level in next eight days.

### 1.2 At Central level

There is a Grievances Redressal Committee at the Institute comprising of Head of Institution as Chairman & other teaching and non-teaching staff representative as members as follows –

Sr. No.	Name	Contact	Designation
		Number	
1.	Dr. S.A.Halkude	9422457776	Principal/
			Chairman
2.	Dr. S.S.Patil	9422065735	Convener (Sr. Faculty)
3.	Mrs. M.A.Nirgude	9822617675	Faculty Member
5.	Mr. M.S.Basargaon	9404301485	Faculty Member
6.	Dr. P.R.Kulkarni	9822083607	Faculty Member
7.	Mr. R.V.Argiddi	9423326050	Faculty Member
8	Mrs. R.K. Dixit	9850563472	Faculty Member
9.	Mr. K.S.Patil	9960828604	Member-Secretary

Grievance addressal committee meets at least twice in a year. In case any of the students has any complaint regarding his practical/oral/internal examination, he/she can directly give a representation to the Chairman/member of this Grievance Redressal Committee. In case of any grievance the members of the cell are empowered to sort out the problems at their level through discussion with students. In case the members fail to find out any solution then the matter is referred to the principal for final comment on the matter.

This transparent system enables students to show better performance in further examinations and improve their present scores.

### 2. At University Level

During the examination session, students can raise their doubts regarding

- 1. Scope and Quality of question
- 2. Adequacy of data and time

This student grievance is forwarded to university alongwith the recommendations of subject experts.

After the declaration of result, aggrieved students regarding assessment can ask for photocopies of answer book by paying prescribed fees within 15 days of declaration of result. After receiving photocopy, if the examinee founds some errors on total or answer checking, he/she can apply in prescribed format for the rectification of these errors. The candidate can also apply for the revaluation pointing towards total or unchecked part of the answer sheet.

University Lapses committee is a statutory provision to investigate and take disciplinary action for, malpractices and lapses on the part of candidates, paper-setters, examiners, moderators, referees, teachers or any other persons connected with the conduct of examinations.

File Description	Document
Any additional information	View Document

#### 2.5.4 The institution adheres to the academic calendar for the conduct of CIE

#### **Response:**

Every year an academic calendar is prepared at institute level to plan the curricular, co-curricular and extracurricular activities and published before the commencement of the semester. All components of stakeholders like alumni meet, parents meet, industry interactions etc. are considered while preparing academic calendar. Head of the department along with faculty members prepares an academic calendar for the department based on institute academic calendar. Every department strictly follows this academic calendar.

Items in Academic Calendar	Conduct during the period or in the academic week	Performance Feedback / Distr during the period or in the acade
In semester Evaluation Tests (ISE)	3 tests per semester	Answer books are checked w performance is discussed in cl
	SemI: Aug. 2nd week	Communication to parents of students.
	Sept.2nd week	
	Oct. 3rd week	
	SemII: Feb. 2ndweek	
	Mar. 3rd week	
	April 2ndweek	
Assignments, seminars	Per week throughout the semester.	Corrected and discussed in the sub
End-sem. Examination (ESE)	Conducted by University	Evaluation done in @ 45 days an issued to students by University.
	SemI: Nov/Dec. and	issued to students by Oniversity.

Remedial Classesslow learnersefforts are taken to bring weake efforts are taken to bring weake efforts are taken to bring weake and of self-learning. plannedSelf LearningOnline courses like NPTEL, plannedStudents will have at least one of part of self-learning. part of self		SemII: May/June	
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Every academic year ends with Annual prize distribution program felicitating students and faculty		3. Course exit survey	
		4. Program exit survey	
		nual prize distribution program felici	tating students and faculty
File Description Document			

File Description	Document
Any additional information	View Document

### 2.6 Student Performance and Learning Outcomes

**2.6.1** Program outcomes, program specific outcomes and course outcomes for all programs offered by the Institution are stated and displayed on website and communicated to teachers and students

#### **Response:**

Our institution is following outcome-based education (OBE) since 2011. The institution has invited the experts and conducted various workshops to understand PEOs, PSOs, POs, COs and their assessment using direct and indirect method for teachers.

Now, initially CGPA system and now CBCS is implemented in the institution increasing weightage of Insemester evaluation (ISE) and Internal Continuous Assessment (ICA) using various tools. Our course curriculum is available on university website as well as institute website. The course curriculum of every course exhibits course objectives for teacher and course outcomes for students simultaneously.

Now, since one more revision of course curriculum after adapting OBE is complete, our teachers are well aware of OBE and its assessment using various direct and indirect methods.

PEOs are defined for all Programmes whereas POs are common for all Programme. PSOs are prepared for every Programme & COs are prepared for every course in the Programme. These PEOs, POs, and Cos are uploaded on the website & are made widespread for every faculty & student to access. They are also displayed on the notice boards in the department. The POs and PSOs are discussed with the faculty by the Head of Department. Every faculty discusses the Course Outcomes in his/her introductory lecture and assessment method for attainment. A Course Survey & a Programme Exit survey are used as evaluation tools to find the attainment of POs, PSOs & COs.

File Description	Document
COs for all courses (exemplars from Glossary)	View Document
Any additional information	View Document

**2.6.2** Attainment of program outcomes, program specific outcomes and course outcomes are evaluated by the institution

**Response:** 

#### CO, PO & PSO Attainment

University course curriculum defines course outcomes (CO) for all the courses which are available on the public domain. Course attainment has been computed by the respective subject teacher. The Program Specific Outcomes (PSOs) which are prepared by institute and Program Outcomes (POs) are taken for

calculating attainment. The course outcomes are mapped with POs and PSOs with their attainment level on the scale of 1 (low), 2 (moderate) and 3 (high). Thus PO and PSO attainment from various course outcomes are mapped. The course outcomes are written and their mapping with POs are reviewed frequently by a committee of senior faculty members before they are finalized.

### Attainment of COs:

CO attainment levels are measured based on the results of the internal assessment and external examination conducted by the university. This is a form of direct measurement of attainment.

Three internal assessment tests are conducted for each course in a semester. In each test, the percentage of students who achieve a set target (usually, 60% of the maximum marks, i.e. 15 of 25) for the COs that are covered is computed. After the three tests, the average of these percentages is computed to decide the attainment level.

Thus, the average of the percentage of students attaining the entire COs decides the CO attainment level. The percentage of students attaining this target level of each CO is computed and the average of these percentages is considered for deciding the attainment level of course outcome.

Similarly, after the declaration of the university results, the percentage of students who attained the COs is computed. Here, it is assumed that the questions answered by a student cover all the course outcomes defined for that course.

#### The overall CO attainment level is computed as:

Overall CO attainment level = 50% of CO attainment level in Internal assessment + 50% of CO attainment level in University Exam.

The above procedure of computing overall CO attainment is carried out for all the courses, enabling computation of PO and PSO attainment levels.

#### Attainment of POs and PSOs:

POs and PSOs are attained through the attainment of COs. This is called direct attainment of POs and PSOs. The overall CO attainment value and the CO-PO mapping values are used to compute the attainment of POs. Similarly, the overall CO attainment value and CO-PSO mapping values are used to compute the attainment of PSOs.

The overall attainment of POs is computed by adding direct attainment and indirect attainment values in the proportion of 80:20 respectively. The direct attainment of POs is the average of individual PO attainment values through course outcomes.

For determining indirect attainment of POs and PSOs, program exit survey and course exit surveys are considered through a designed questionnaire for graduating students.

Finally, overall PO attainment values are computed by adding direct and indirect PO attainment values in a scale of 0 to 3 and are compared with the set target values of POs in consultation with the members of 'departmental advisory board (DAB)'.

	File Description	Document
	Any additional information	View Document

#### 2.6.3 Average pass percentage of Students

#### Response: 96.78

2.6.3.1 Total number of final year students who passed the examination conducted by Institution.

### Response: 632

2.6.3.2 Total number of final year students who appeared for the examination conducted by the institution

Response: 653	
File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document

# 2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process	
Response: 3.49	
File Description	Document
Database of all currently enrolled students	View Document

# **Criterion 3 - Research, Innovations and Extension**

## **3.1 Resource Mobilization for Research**

**3.1.1** Grants for research projects sponsored by government/non government sources such as industry ,corporate houses, international bodies, endowment, chairs in the institution during the last five years (INR in Lakhs)

#### **Response:** 155.07

3.1.1.1 Total Grants for research projects sponsored by the non-government sources such as industry, corporate houses, international bodies, endowments, Chairs in the institution year-wise during the last five years(INR in Lakhs)

2016-17	2015-16	2014-15	2013-14	2012-13
25.51425	49.52754	5.95	44.84	29.24018

File Description	Document
List of project and grant details	View Document
e-copies of the grant award letters for research projects sponsored by non-government	View Document
Any additional information	View Document

### 3.1.2 Percentage of teachers recognised as research guides at present

#### Response: 5.06

3.1.2.1 Number of teachers recognised as research guides

#### Response: 8

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document

# **3.1.3** Number of research projects per teacher funded, by government and non-government agencies, during the last five year

#### Response: 0.15

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

Response: 24

Response. 24	
File Description	Document
Supporting document from Funding Agency	View Document
List of research projects and funding details	View Document
Any additional information	View Document
Funding agency website URL	View Document

# **3.2 Innovation Ecosystem**

**3.2.1** Institution has created an ecosystem for innovations including incubation centre and other initiatives for creation and transfer of knowledge

**Response:** 

#### Eco system for innovations

The institute has remarkable research culture wherein most of faculty members, research scholars & students are engaged in research work. Number of workshops are organized for assimilation & dissemination of knowledge for teachers and students not restricted to our institute.

Laboratories are well equipped and provide an adequate infrastructure used for research. Research laboratories are funded by government agencies like AICTE and DST. In all 13 labs are funded and some laboratories are industry sponsored. A Cloud Computing Lab and earthquake shake table are funded by AICTE and IIT Bombay has funded an Aakash Lab. IBM has supplied the institute with Rationale Rose software. Two laboratories ACTEL Lab & Cypress semiconductor labs are industry sponsored . Air pollution high volume sampler equipment is sponsored by Central Pollution Control Board (CPCB) for continuous monitoring of air quality.

Institute is recognized as Engineering Research center by Solapur University in Computer Science & Engineering, Civil Engineering, Electronics Engineering, Mechanical Engineering and Electronics & Telecommunication Engineering. We have 8 research guides that help in developing research projects.

At UG level we encouraged students to take up real time projects, out of such projects, quiet a good no. of projects are sponsored by industry/society. This has inculcated a research environment.

The library is well equipped with the number of reference books and standard National & International Journals and e-Journals that permit an extensive literature review. Our research scholars and students have access to IIT Bombay Library through annual membership, opening door to most of the happenings around the world

The institute provides a budget for research and development activity, which help in funding for research work, publications and travel for research activities. This encourages faculty to publish their research work. On an average 140 research papers are published annually in well reputed national & International Journals

and conferences. Faculty members are sponsored for attending conferences and workshops, which help them in assimilation & dissemination of knowledge. We make faculty register for their Ph.D. work in different university to ensure that environment of heterogeneous research culture is finally established at our institute.

#### Other initiatives for creation and transfer of knowledge

A number of industry related projects are undertaken & completed in the institute both as academic curriculum projects and as projects from industry. Presently, Around 58 research scholars are perusing their research works for Doctoral degree. As on date, nineteen Research Scholars have completed their Ph.D. at our institute research center. The institute has allowed faculty from other institutes and industry experts to get associated with our faculty for guidance and consultancy. Some tailor made programs are done for industry persons by our expert faculty.

The institute caters a large number of consultancy jobs which in turn bring about research experiences and also create real time data which lead to research. The institute follows professional values and human ethics by creating a "code of ethics". Anti- plagiarism in all research work using plagiarism check software readily available for all the research projects

File Description	Document	
Any additional information	View Document	

# **3.2.2** Number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the last five years

**Response:** 84

3.2.2.1 Total number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13	
17	16	12	28	11	
File Descriptio	on		Document		

### **3.3 Research Publications and Awards**

3.3.1 The institution has a stated Code of Ethics to check malpractices and plagiarism in Research

Response: Yes		
File Description	Document	
Institutional data in prescribed format	View Document	

# **3.3.2** The institution provides incentives to teachers who receive state, national and international recognition/awards

#### Response: Yes

File Description	Document	
List of Awardees and Award details	View Document	
e- copies of the letters of awards	View Document	
Any additional information	View Document	

#### 3.3.3 Number of Ph.D.s awarded per teacher during the last five years

#### Response: 2.38

3.3.3.1 How many Ph.Ds awarded within last five years

Response: 19

File Description	Document
URL to the research page on HEI web site	View Document
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc	View Document
Any additional information	View Document

# **3.3.4** Number of research papers per teacher in the Journals notified on UGC website during the last five years

#### Response: 3.16

3.3.4.1 Number of research papers in the Journals notified on UGC website during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
100	100	100	100	100

File Description	Document
List of research papers by title, author, department, name and year of publication	View Document
Any additional information	View Document

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

#### Response: 0.8

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

	014-15	2013-14	2012-13
41 33 17		14	21

File Description	Document
List books and chapters in edited volumes / books published	View Document
Any additional information	View Document

# **3.4 Extension Activities**

**3.4.1** Extension activities in the neighbourhood community in terms of impact and sensitising students to social issues and holistic development during the last five years

### **Response:**

The impact of the activities conducted in our institute to sensitize students to social issues and holistic development are categorized.

### Extra-Curricular:

A blood donation camp is organized in association with various blood banks as social awareness among students. Students are made aware of the importance of donating blood. Students and faculty help in coordinating this camp and approximately 1000 bottles of blood are donated every year by students and faculty. The institute bags every year an award of "Best Blood Donating Institute" by the 4 blood banks. The institute is also felicitated by Government of Maharashtra for outstanding contribution for social cause.

Girls counseling to overcome the problem of HB count and low weight with the help of local doctors is

organized. These counseling benefit girls as most of them have these problems. A camp was organized for making faculty aware of their blood pressure and sugar levels.

To make students sensitive to the importance of environment issues tree plantation program is organized at our institute. Rallies are conducted to address issues of cleanliness, gender and Aids awareness by government agencies.. Under the NAMP project sponsored by Central Pollution Control Board (CPCB), faculty is involved in finding pollution in the atmosphere. In the event of "How to save Rivers" awareness is created.. A film festival is organized by Kirloskar Group.

Our campus is used by the government police department to educate on road traffic norms. Mock drill of terrorist attack is organized to make students and staff sensitive towards preventing exigencies..

Skill development programs for society like Pradhan Mantri Kaushal Vikas Yojana (PMKVY) are conducted.

#### **Co-curricular:**

The students from the institute attend vocational courses for industrial exposure, training and project development. Our institute permits outside diploma and MCA students from neighboring colleges to participate in our technical symposiums.

We have organized career counseling for 12th class students to make them aware of engineering education

Teachers from neighboring degree and diploma colleges register for courses at the remote center.to attend training programs on recent technologies and pedagogy.

### National programmes Digital India, Digi Dhan, Voters awareness, Swachh Bharat Abiyan etc. Societal Programmes

We organize a rally on awareness for aids and cleanliness (Swachh Bharat Abhiyan). We organize a "Digital Week" activity for students and faculty to make them use digital technology. We give information to society about Digital cash (Digi Dhan)

We also organize voters awareness camp, voters registration for students faculty and staff, rally on awareness for aids and cleanliness (Swachh Bharat Abhiyan). Our students work on projects for development of smart city for society.

Awareness camps like "Chuppi todo" to spread awareness of child abuse are conducted. Our students participate in programs for social, economic and political empowerment of youth promoted through Young Inspiration Network (YIN).

Awareness programs introducing precautionary measures for fire safety are conducted at our campus by RTO fire brigade unit of Solapur. Our students and faculty visit the blind schools and villages to show their concern for the blind and to spread computer literacy.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

# **3.4.2** Number of awards and recognition received for extension activities from Government /recognised bodies during the last five years

#### **Response:** 42

3.4.2.1 Total number of awards and recognition received for extension activities from Government /recognised bodies year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
20	07	05	06	04

File Description	Document	
Number of awards for extension activities in last 5 years	View Document	
e-copy of the award letters	View Document	
Any additional information	View Document	

### 3.4.3 Number of extension and outreach Programs conducted in collaboration with Industry, Community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the last five years

#### Response: 51

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

2016-17	2015-16	2014-15	2013-14	2012-13
11	11	06	13	10

File Description	Document
Reports of the event organized	View Document
Number of extension and outreach programs conducted with industry,community etc for the last five years	<u>View Document</u>
Any additional information	View Document

# 3.4.4 Average percentage of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the last five years

Response: 93.46

3.4.4.1 Total number of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. yearwise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
2325	2250	2300	2345	2450

File Description	Document
Report of the event	View Document
Average percentage of students participating in extension activities with Govt. or NGO etc.	View Document
Any additional information	View Document

# **3.5** Collaboration

**3.5.1** Number of linkages for faculty exchange, student exchange, internship, field trip, on-the-job training, research, etc during the last five years

Response: 3270

3.5.1.1 Number of linkages for faculty exchange, student exchange, internship, field trip, on-the-job training, research, etc year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
830	642	600	642	556

File Description	Document
Number of Collaborative activities for research, faculty etc.	View Document
Copies of collaboration	View Document
Any additional information	View Document

# **3.5.2** Number of functional MoUs with institutions of National/ International importance, Other Institutions, Industries, Corporate houses etc., during the last five years (only functional MoUs with ongoing activities to be considered)

#### Response: 59

3.5.2.1 Number of functional MoUs with institutions of national, international importance, other universities, industries, corporate houses etc. year-wise during the last five years (only functional MoUs with ongoing activities to be considered)

2016-17	2015-16	2014-15	2013-14	2012-13
17	16	13	7	6

File Description	Document	
e-copies of the MoUs with institution/ industry/ corporate house	View Document	
Details of functional MoUs with institutions of national, international importance, other universities etc. during the last five years	View Document	
Any additional information	View Document	

# **Criterion 4 - Infrastructure and Learning Resources**

## 4.1 Physical Facilities

**4.1.1** The institution has adequate facilities for teaching- learning. viz., classrooms, laboratories, computing equipment, etc.

#### **Response:**

The Institute has created infrastructure as per needs of each department adhering to AICTE & Solapur University norms. Institute has developed infrastructure more than mandated by regulatory agencies to facilitate effective teaching and learning since its inception. The campus is spread over 22 Acres of land which facilitates excellent infrastructure for teaching-learning process, career progression and higher education.

The Campus has four buildings Main building, Civil-Mechanical building, Library building and Central Workshop.

#### The main building accommodates:

Department of Computer Science & Engineering, Information Technology, Electronics & Telecommunication Engineering and Electronics engineering are part of the main building. Administrative office involving all stake holders-Secretary Cabin, Principal cabin, Boardroom, Account Section, Student section, Counselling cell, Training and Placement cell, Public relation officer unit ,canteen and Boys common room.

#### The Civil-Mechanical building accommodates:

Department of Civil engineering, Mechanical engineering and Girls common room are part of Civil-Mechanical building.

#### **Central Library:**

The Library building has two floors covering 1262.14 sq. mts. It accommodates a central library, an extension of Departments of Computer Science & Engineering, an extension of Electronics & Telecommunication Engineering, and remote centre.

#### Central workshop:

The Central workshop is spread over 1743.24 Sq. meters and is divided into five sections Fitting, Carpentry, Sheet Metal, Welding, Lathe machine and Automobile.

**Class Rooms:** The Institute has 29 classrooms which are well-furnished, well-ventilated, spacious with good acoustics for conducting theory classes as per AICTE norms. Each department is also provided with adequate tutorial rooms. Each Classroom has a seating capacity of approximately 80 students, 10 classrooms equipped with WiFi/LAN enabled internet connectivity and all Classrooms are provided with LCD projectors and Laptops.

**Laboratories:** The Institute has 80 Laboratories. All laboratories in the institute are well equipped and well maintained. The college has an exclusive Language Lab to cater to the enrichment of communication skills. The institute has 4 research laboratories and few laboratories are sponsored by industry, statutory bodies and reputed institutes. Laboratories are provided with printers and scanners.

**Seminar Hall:** The institute has 8 Seminar halls, Out of which 4 are ICT enabled. These are used for organizing webinars, presentations, workshops and seminars.

**Studio recording:** Facilities are available to video lecture recording and preparing e-Content for course content delivery.

**ICT facilities:** The Institute has multimedia facilities providing audio visual equipment. It includes an Infrastructure which is more than the requirements of AICTE.

- To facilitate webinars, synchronous & asynchronous interaction through AVIEW software.
- For content generation in the form of Presentation, Videos and Open Educational Resources (OER) etc.,
- Assessment using MOODLE, Akash Tablets etc. and content delivery for e.g.: visualization, simulation, demo execution.

The Institute continuously keeps upgrading the internet bandwidth due to increase in the use of ICT. The usage of MOOCs, Virtual Lab, Spoken Tutorial, NPTEL Videos, Webinars etc. enrich teaching-learning. A separate server with 10 TB HDD is being maintained exclusively for NPTEL video streaming within the campus. The adequate backup facility is provided at every department. New Software licences and packages are purchased and upgraded as per requirement.

File Description	Document	
Any additional information	View Document	
Link for Additional Information	View Document	

# **4.1.2** The institution has adequate facilities for sports, games (indoor, outdoor),gymnasium, yoga centre etc., and cultural activities

#### **Response:**

The Institute committed to create a balanced atmosphere of academic, cultural and sports activities for the overall personality development of students. Institute has established sports facilities and cultural events since its inception. An area of 42,199 Sq.mts playgrounds are used for outdoor sports like Athletics, Cricket, Hockey, Football, Kho-Kho, Kabaddi, Tennis, Volleyball, Basketball, etc. and 537.8 Sq.mts open air theatre is available in the campus for conducting cultural activities.

**Sports Activities:** The Institute encourages students by providing adequate budget and resources for sports activities. A playground for outdoor games like Cricket, Volleyball, Tennis, Kho-Kho, Kabaddi and basketball are available and facility for Indoor games such as table tennis, chess, and carrom are avilable in the campus. A number of students have participated in various interuniversity, intercollege and Interdepartmental tournaments and bring honours like medals, trophies and certificates. 60-70% of students utilize Sports facility. Institute organizes yoga and pranayama classes for the faculty and students regularly by the yoga experts in campus.

Sr. No.	Facility Available	Details of the Facility Available	
1	Sports Ground	Sports ground is used for outdoor games like	
		• Cricket field available - 01	
		<ul> <li>Basket Ball Courts - 02</li> </ul>	
		• Tennis Courts - 02	
		• Football field available - 01	
		• Volleyball Courts - 03	
		• Handball Courts - 02	
		• Hockey field available - 01	
		<ul> <li>Kabaddi Courts - 04</li> </ul>	
		• Kho-Kho Courts – 02	
		• 400 M track (8 lane)	
2	Indoor Games	Following indoor game facility is available:	
		• Chess-6 Chess boards and gamezer available	
		• Carrom-2 Carrom boards are available	
		• Table Tennis-1 T.T Table is available.	
3	Swimming Pool	Markandeya Swimming pool is made available for pra	actice/
		minimum 3 months)	
4	Badminton Court	Badminton Court at Bhagatsing Market near Ashy	vini 1
		minimum 3 months) is made available for practice/selec	tion.
5	Wrestling, Gymnasium, Body buildi and Weightlifting	ngShree Health Club Old Employment Chowk, Solapur.	
6	Yoga, Pranayama	Spacious hall is available for Yoga and Pranayama.	

1 a b c + 1.2(a) · $1 a c m c y t o t o p o t o s$	Table 4.1.2(a)	:	<b>Facility for Sports</b>	5
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**Cultural Activities:** A separate budget is allocated for cultural activities. The Institute encourages the students to participate in various cultural activities and make the students excel in their fields of interest. Institute conducts various cultural activities like "ATHARVA", Ganesh utsav, Teachers Day, Engineer's Day Activities and Art Exhibition every year. Street Play competitions are held to create awareness for social issues. Students participate in Engineer's Youth Festival, debate competition like Speak for India and Maharashtra edition. They take part in cultural events at district level like Jallosh and Yuva Mahotsav where they showcase their talents. Students participate in traditional day exhibiting the diverse cultures from which they originate. 70-80% students utilize facility for cultural activity.

### Table 4.1.2(b) : Facility for Cultural events

Sr. No.	Facility Available	Details of the Facility Available	
1	Open air theatre	537.8 Sq.m open to air theatre is made available on the	camp
		M137, M138(Stage and room facility is available)	
2	Seminar hall/Auditorium	324.0 Sq.m CM 130,131 closed hall is available having	seati
		500.	
File Desc	rintion	Document	

File Description		Document
	Any additional information	View Document
	Link for Additional Information	View Document

# **4.1.3** Percentage of classrooms and seminar halls with ICT - enabled facilities such as smart class, LMS, etc

#### Response: 83.78

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

#### Response: 31

File Description	Document
Number of classrooms and seminar halls with ICT enabled facilities	View Document

# **4.1.4** Average percentage of budget allocation, excluding salary for infrastructure augmentation during the last five years.

Response: 41.89

4.1.4.1 Budget allocation for infrastructure augmentation, excluding salary year-wise during the last five years (INR in Lakhs)

2016-17	2015-16	2014-15	2013-14	2012-13
371.80	441.50	333.50	253.20	391.20

File Description	Document
Details of budget allocation, excluding salary during the last five years	View Document
Audited utilization statements	View Document

### 4.2 Library as a Learning Resource

#### 4.2.1 Library is automated using Integrated Library Management System (ILMS)

#### **Response:**

• Name of the ILMS software: LIB-MAN (Library Management System)

The library has an Online Public Access Catalogue (OPAC) is accessible in campus. Faculty members and students can access it by giving author and title details.

• Nature of automation (fully or partially): Fully Automated

The library is fully automated through LIB-MAN Software. The book circulation is registered based on students bar coded identity card and barcode on books. 1 TSC bar Code Printer and 4 Laser bar code scanner devices are available to make books issue-return process easy and accurate.

• **Version:** 1.0

#### **Description of Library:**

The library is the heart of all academic activities of the Institute. Students are motivated to make the best use of library facilities to promote affinity towards reading and learning which are vital for the holistic development of the students. The library extends vital support to the academic and research needs of the college by providing updated and comprehensive collection of reading material.

#### a) Details of library facility.

Sr. No	Particulars	Availability		
1	Total Area of Library	1262.14 sq.mts		
2	Total seating capacity of Library	265		
3	Working Hours of Library	All working days: 8.00 am to 8.30 pm		
		Academic weekend: 10.00 am to 6.15 pm		
		Examination period 8.00 am to 10.00pm		

#### **b) Details of library holdings:**

#### I. Central Library Books:

	Details	Number	
B	ook Titles	21306	
	Volumes	55044	
	Journals	57	
Thesis: Ph.D Dissertations		17	
M.E Thesis		246	

#### II. Department library Books:

Details Number					
Book Titles	930				
Volumes	1068				
c) Number of books added during the last five years					

Year	2012-13	2013-14	2014-15	2015-16	2016-17	Total
Book Titles	705	597	665	509	967	3443
Volumes	3268	2668	2627	2454	1625	12642

#### d) Initiatives to render the library services to students.

- Institutes central library fully satisfies student's requirement of textbooks as per AICTE norms. Text books & reference books prescribed in the syllabus are provided in sufficient volumes. Apart from Text books on regular curriculum, Library contains some value education books, books for GATE and competitive examinations.
- The library comprises of sections like Digital library, dedicated reference section, current journal section, book issue/return section, periodicals section. A Separate space is reserved for faculty and PG students
- 25 Computer terminals with internet connectivity are available to the students for accessing elearning resources.
- Spacious and well furnished space with ergonomic consideration is allocated for reading section in the library.
- All the books are arranged subject-wise according to Dewey Decimal Classification (DDC) number for easy retrieval of books.
- To identify and to minimize the theft cases CCTV cameras are installed in the reading and reference section.
- Online library portal (<u>http://witsolapur.digimat.in</u>/) is made through which student and staff can access e-learning resources such as NPTEL video courses.

File Description	Document	
Any additional information	View Document	
Link for Additional Information	View Document	

# **4.2.2** Collection of rare books, manuscripts, special reports or any other knowledge resources for library enrichment

#### **Response:**

The Institution has the practice of collecting and maintaining rare books, manuscripts, special reports or

any other knowledge resources to benefit students and faculty for their knowledge enhancement, research and exploring new things apart from the standard books.

**Rare books:** The Institute library is enriched with good numbers of rare books. Various rare books are downloaded from Rare Book Society of India (RBSI). The E-Book collections are made available and accessible to the students and faculty as reference material for enrichment of their knowledge. Separate racks are provided for rare books in a library.

**Manuscripts:** Manuscripts in hard and soft form are available in the central library for students and faculty use. The number of manuscripts available in the central library during the assessment period is as below

Manuscript Type	2012-13	2013-14	2014-15	2015-16	2016-17
Ph. D Dissertations	1	2	4	8	2
M.E Thesis	26	86	64	62	8

**Other knowledge resource:** The Institute library is enriched with books on developing analytical skills, soft skills management, business communication, entrepreneur skills, placement, higher study and competitive exam preparation books are available in a library. Newspapers are made available in the library to enrich the General Knowledge and Current Affairs of students. IS Codes Separate racks are provided of IS Codes as reference material to the students to peruse and apply their contents for project work and furtherance of knowledge.

File Description	Document
Any additional information	View Document

4.2.3 Does the institution have the following:	
1.e-journals	
2.e-ShodhSindhu	
3.Shodhganga Membership	
4.e-books	
5.Databases	
A. Any 4 of the above	
B. Any 3 of the above	
C. Any 2 of the above	
D. Any 1 of the above	
<b>Response:</b> B. Any 3 of the above	

File Description	Document
Details of subscriptions like e-journals,e- ShodhSindhu,Shodhganga Membership etc.	View Document

# **4.2.4** Average annual expenditure for purchase of books and journals during the last five years (INR in Lakhs)

#### Response: 23.65

4.2.4.1 Annual expenditure for purchase of books and journals year-wise during the last five years (INR in Lakhs)

2016-17	2015-16	2014-15	2013-14	2012-13
23.77	26.66	26.31	18.87	22.65

File Description	Document
Details of annual expenditure for purchase of books and journals during the last five years	View Document
Audited statements of accounts	View Document

4.2.5 Availability of remote access to e-resources of the library		
Response: Yes		
File Description	Document	
Details of remote access to e-resources of the library	View Document	

#### 4.2.6 Percentage per day usage of library by teachers and students

#### Response: 10.85

4.2.6.1 Average number of teachers and students using library per day over last one year

#### Response: 295

File Description	Document
Details of library usage by teachers and students	View Document
Any additional information	View Document

### 4.3 IT Infrastructure

### 4.3.1 Institution frequently updates its IT facilities including Wi-Fi

#### **Response:**

#### LAN facility & Hardware Details: Server, Router, Switches

Institute has a campus wide networking provided to all the buildings through structured cabling and Wi-Fi facility. We have established client-server architecture in the year 2008 with fifteen Layer 2 manageable switches and one Manageable Layer 3 switch, Active directory server, Proxy server, Mail server and Application server. Laboratory wise Virtual LANs (VLAN) are created. The continuous scaling up depending upon usage is done by increasing numbers of manageable switches and VLANs. As on date, there are forty four manageable switches, ten POE Manageable Switches spread over the campus. Servers were upgraded in 2016 and Active Directory server was replaced by LDAP server. Intranet (Mail server) facility is used for internal communication.

At the fixed location such as laboratories, office, faculty cabin, library, connectivity is through structured cabling to avoid loss of connectivity. However, Wi-Fi facility is provided in places where flexibility is required such as hostel, seminar hall, conference hall and few open meeting spots.

#### Wi-Fi facility:

Wi-Fi facility is started in the year 2009-10. Point to Point (P2P) connectivity is provided from the server room to hostel campus using two P2P and twelve access points. This facility is upgraded due to demand and establishment of new infrastructure. As on date total thirty eight Wi-Fi and seven P2P access points are used in the campus. Wi-Fi facility is provided wherever flexibility is required.

#### **Internet Connectivity:**

The Institute continuously keeps upgrading the internet bandwidth according to the requirement of online examinations, workshop, campus placement training, Practice of MOOCs, Virtual Lab, Spoken Tutorial, NPTEL Online Courses and webinar needs. Currently, the institute is using 83 Mbps internet bandwidth managed through the router for proper utilization as per the requirements. As per necessity a dedicated line is provided to facilitate an uninterrupted communication.

**Firewall**: Initially, Internet facility provided through the Proxy server (software based). Security policies were enhanced through hardware-based Sonicwall firewall in 2009. Due to increase in a number of users firewall was upgraded to Cyberoam firewall with Unified Threat Management (UTM) which Includes Anti-Virus, Web Filtering, Anti-Spam and Content Filtering in the year 2013 and renewed licenses in 2016. This firewall is integrated with LDAP Server for authentication. Internet access is given to authenticated users.

**MOODLE Platform:** Institute has deployed MOODLE Platform as LMS in 2012. Each department had separate MOODLE servers supporting 80-100 users for submission and assessment. Institute upgraded MOODLE Platform with Two centralized MOODLE servers supporting @ 400 users per server. LDAP server and MOODLE server are integrated for authorized access. Student can access Moodle outside our network using separate URL.

#### **Licenced Software:**

Institute keeps upgrading the software packages and purchases software's currently being used as per requirements. Antivirus is provided on every machine and is updated from time to time. Institute has licenses for Operating System such as Microsoft Campus agreement license and Microsoft Perpetual licenses and 44 legal application softwares. All other terminals are loaded with freeware operating system. Open source application software is also abundantly used.

File Description	Document	
Any additional information	View Document	
Link for Additional Information	View Document	

4.3.2 Student - Computer ratio	
Response: 4.07	
File Description	Document
Student - Computer ratio	View Document

4.3.3 Available bandwidth of internet connection i >=50 MBPS 35-50 MBPS 20-35 MBPS 5-20 MBPS Response: >=50 MBPS	n the Institution (Lease line)	
Kesponse: >= 50 MDFS		
File DescriptionDocument		
Details of available bandwidth of internet connection in the InstitutionView Document		

# **4.3.4** Facilities for e-content development such as Media Centre, Recording facility, Lecture Capturing System (LCS)

Response: Yes

File Description	Document
Facilities for e-content development such as Media Centre, Recording facility,LCS	View Document

# 4.4 Maintenance of Campus Infrastructure

**4.4.1** Average Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, as a percentage during the last five years

#### Response: 61.56

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

2016-17	2015-16	2014-15	2013-14	2012-13
586.9	558.23	495.04	590.13	437.83

File Description	Document
Details about assigned budget and expenditure on physical facilities and academic facilities	View Document
Audited statements of accounts.	View Document

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

#### **Response:**

The institution has the structured system for creation and maintenance of infrastructure to facilitate effective teaching - learning along with co-curricular and extracurricular activities to ensure overall development of the institution.

#### Academic and support facilities:

#### Laboratory:

The Laboratories are regularly maintained by the Laboratory faculty In-charge and laboratory assistant along with menial staff. Steps are taken for location, upkeep and maintenance of sensitive equipment (voltage fluctuations, constant supply of water etc.). During the maintenance, if anything is required to be procured need to be raised through requisition.

- 1. Records of equipment's are maintained in stock registers as per the process.
- 2. Equipments / appliances are maintained properly and serviced periodically as required.
- 3. Equipments are calibrated.
- 4. Preventive maintenance is carried in-house by the department.
- 5. Some of the maintenance activities are carried out through annual maintenance contract (AMC).
- 6. Overall record of repair and maintenance is kept.

7. Major Break down maintenance, if any is carried out by suppliers of the equipment or external

agencies are deployed.

8. Equipment's that are not in working condition and not repairable are written off from the stock.

#### **Classrooms:**

The classrooms of all departments are maintained at department level. Electrical maintenance, audio systems and LCD projectors are regularly monitored and maintained. Curtains are purchased as per requirement for maintaining adequate light.

Smart Classroom: The smart classes are maintained regularly by monitoring equipments, escan antivirus and the addition or deletion of software on the machines.

Virtual classroom: Virtual classroom environment created by A-VIEW and it is maintained by Remote Center (RC) coordinator.

#### **Computers:**

The institute has adequate number of the computers with internet connections and utility softwares distributed in different locations. The softwares are renewed regularly as per the need. The Campus has an intranet for internal communication which is maintained by a committee who maintains the server, structured cabling & fiber optics and internet connection. They are assisted by laboratory assistants. The institute website updating and MOODLE Server maintenance is handled by a committee regularly.

#### Library:

Library is monitored and maintained by the library committee. Library is equipped with LIB-MAN ILMS with barcode printer & bar code reader LASER gun. Agency provides quick service regarding any problems/issues of software package. Pest control has been done in library regularly for maintain books safe from crickets and termites.

#### Physical and support facilities:

The Sports facilities are maintained by the gymkhana In-Charge and menial staff. Regular procurement of sports goods as per requirements is carried out through requirements received from gymkhana In-Charge.

The landscaping in the form of gardening is maintained by a gardener. This gardener is supported by assistants. Electricity and physical facilities related maintenance done regularly as per requirements.

Institution Security is looked after by a security In-Charge. He is assisted by security guards who work in two shifts round the clock.

Sweepers and a supervisor are also regularly allotted to maintain common area of the college. Separate toilet is made available for boys and girls as well as male and female staff and clean by clean twice in a day.

File Description	Document	
Any additional information	View Document	
Link for Additional Information	View Document	

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# **Criterion 5 - Student Support and Progression**

## **5.1 Student Support**

# **5.1.1** Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years

#### Response: 58.15

5.1.1.1 Number of students benefited by scholarships and freeships provided by the Government year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
1647	1474	1427	1417	1302

File Description	Document
Upload self attested letter with the list of students sanctioned scholarships	View Document
Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years	View Document
Any additional information	View Document

# **5.1.2** Average percentage of students benefited by scholarships, freeships, etc. provided by the institution besides government schemes during the last five years

#### Response: 6.52

5.1.2.1 Total number of students benefited by scholarships, freeships, etc provided by the institution besides government schemes year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
150	159	179	189	137

File Description	Document
Number of students benefited by scholarships and freeships besides government schemes in last 5 years	<u>View Document</u>
Any additional information	View Document

5.1.3 Number of capability enhancement and development schemes -**1.**For competitive examinations 2. Career counselling 3.Soft skill development **4. Remedial coaching** 5. Language lab **6.Bridge courses** 7. Yoga and meditation **8.**Personal Counselling A. 7 or more of the above **B.** Any 6 of the above C. Any 5 of the above **D.** Any 4 of the above **Response:** A. 7 or more of the above Document **File Description** Details of capability enhancement and development **View Document** schemes Any additional information View Document Link to Institutional website **View Document** 

# **5.1.4** Average percentage of student benefited by guidance for competitive examinations and career counselling offered by the institution during the last five years

#### Response: 55.95

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

2016-17	2015-16	2014-15	2013-14	2012-13
1449	1471	1343	1407	1317

File Description	Document
Number of students benefited by guidance for competitive examinations and career counselling during the last five years	<u>View Document</u>
Any additional information	View Document

# **5.1.5** Average percentage of students benefited by Vocational Education and Training (VET) during the last five years

Response: 24.34

5.1.5.1 Number of students attending VET year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
653	634	652	587	515

File Description	Document
Details of the students benifitted by VET	View Document
Any additional information	View Document

# 5.1.6 The institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases

**Response:** Yes

File Description	Document
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	<u>View Document</u>
Details of student grievances including sexual harassment and ragging cases	View Document
Any additional information	View Document

### **5.2 Student Progression**

5.2.1 Average percentage of placement of outgoing students during the last five years

Response: 56.2

5.2.1.1 Number of outgoing students placed year-wise during the last five years					
2016-17	2015-16	2014-15		2013-14	2012-13
311	393	366		276	298
File Description		Document			
Self attested list of students placed			View Document		
Details of student placement during the last five years		View Document			
Any additional information			View I	Document	1

#### 5.2.2 Percentage of student progression to higher education (previous graduating batch)

#### Response: 6.65

5.2.2.1 Number of outgoing students progressing to higher education

Response: 42

File Description	Document
Upload supporting data for student/alumni	View Document
Details of student progression to higher education	View Document
Any additional information	View Document

# 5.2.3 Average percentage of students qualifying in State/ National/ International level examinations during the last five years (eg: NET/ SLET/ GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil Services/State government examinations)

**Response:** 21.87

5.2.3.1 Number of students qualifying in state/ national/ international level examinations (eg: NET/ SLET/ GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil services/ State government examinations) year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
34	35	62	74	54

2016-17	2015-16	2014-15	2013-14	2012-13
159	252	264	354	182
File Description	on		Document	
Upload supporting data for the same			View Document	
Number of students qualifying in state/ national/ international level examinations during the last five years			View Document	
vears				

5.2.3.2 Number of students who have appeared for the exams year-wise during the last five years

# **5.3 Student Participation and Activities**

**5.3.1** 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) during the last five years.

#### Response: 67

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

2016-17	2015-16	2014-15	2013-14	2012-13
9	16	15	11	16

File Description	Document
Number of awards/medals for outstanding performance in sports/cultural activities at national/international level during the last five years	View Document
e-copies of award letters and certificates	View Document
Any additional information	View Document

# **5.3.2** Presence of an active Student Council & representation of students on academic & administrative bodies/committees of the institution

**Response:** 

### Student Council activity:

### Selection:

The Institute has a nominated student council consisting of two ladies representatives, secretary for sports, cultural, National Service Scheme (NSS) and magazine. The University Representative is elected from the class representatives.

### Activity:

Ladies representatives: They help in organizing the activities for girls & motivate them to participate in the events conducted in the institute.

University Representative: He/She is a member of IQAC. He/she acts as an interface between students of the institute and university.

**Sports secretary:** The sports secretary organizes mock tournaments; practice sessions at institute level and coordinate participation of our students for sports events.

**Cultural secretary:** The cultural secretary with the help of faculty coordinator organizes various cultural activities & competitions such as 'Atharva' the annual cultural event, 'Teacher's day' and 'Ganesh Festival'. Art Exhibition is conducted every year where students get a platform to showcase their talents in various art & craft activities. He/ She Motivates students to participate at district level competitions such as 'Jallosh' and 'Youth festival'.

**NSS secretary:** The NSS secretary with departmental coordinators conducts nearly 10 to 15 activities every year. **Blood donation** is arranged twice in a year. The students wholeheartedly donate blood with an overwhelming response.

**Magazine secretary:** The magazine team under the leadership of magazine secretary publishes a multilingual college magazine '**WITness**' with various departmental newsletters. Collecting the material, editing, designing and publishing are carried out by students for magazine. Various sections in the magazine include interviews of well-known personalities.

### Students' role in Academic and Administrative bodies

Following Statutary and professional bodies have student representatives on them :

- IQAC
- Women's Grievance Redressal Committee
- Grievance Redressal Committee
- Antiragging Committee
- ISTE, CSI, IEI

### **Departmental Advisory Board :**

Students are part of departmental advisory board where they can place their feedback related to teachinglearning method, gap identification in the syllabus, academics and infrastructure etc.

### **Technical Symposiums :**

A national level technical symposium 'WITChar' is arranged every year in the month of March as a calendar activity, where technical events are organized by faculty in-charge and student coordinators. Students also coordinate various activities & competitions organized by departments such as 'WITech', 'Acceleration' & 'Challenge 2K' every year. Students go to various institutions for campaigning of these events.

### Institutional Cells :

Students are members of the Entrepreneurship Development Cell (EDC) and Soft Skill Development Cell (SSDC).

### **Departmental Associations :**

Students are members of departmental associations like CESA, MESA, TESA.

The members and other student volunteers run the events organized under these cells.

Training and Placement committee

The student representatives help Training & Placement Officer (TPO) to organize various placement activities. Every department has one representative in Training and Placement committee who help to conduct online aptitude tests on moodle.

File Description	Document
Link for Additional Information	View Document

# **5.3.3** Average number of sports and cultural activities/ competitions organised at the institution level per year

### Response: 19

5.3.3.1 Number of sports and cultural activities / competitions organised at the institution level year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
19	19	19	19	19

File Description	Document
Report of the event	View Document
Number of sports and cultural activities / competitions organised per year	View Document
Any additional information	View Document

### 5.4 Alumni Engagement

**5.4.1** The Alumni Association/Chapters (registered and functional) contributes significantly to the development of the institution through financial and non financial means during the last five years

**Response:** 

### The Alumni Association:

The institute has an alumni association (**Registration number: MHA/1465/05/Solapur dated on 12-12-2005**). The association interfaces between the eminent alumni and the institute creating a strong network. Some of the students, who intend to become entrepreneurs, are placed with our aluminas who have already established themselves as successful entrepreneurs.

The functions of the association are :

- 1) To bring the Alumni together to keep them in contact with the Alma-mater.
- 2) To foster the relationship between Alumni and the present students.
- 3) To get participation of Alumni in the developmental activities of the Institute.
- 4) To develop Industry-Institute interaction through Alumni members.
- 5) To improve placement opportunities for fellow alumni fresh graduates.

The management of the activities of the Association is entrusted and vested in accordance by the Governing Body. The Governing Body includes President, Secretary, Joint secretary, Treasurer and seven other members. The governing body shall meet at least twice in a year.

The General Body meetings of the Alumni Association of W.I.T., Solapur shall be held at least once in a year.

The Alumni of different batches come together and have meets of their batches. So far alumni association of W.I.T. has successfully conducted such Alumni Meets at Solapur, Pune, Delhi and Seatle in U.S.A.

Following bodies have alumni representatives on various statutory bodies

### **Governing Bodies:**

**Internal Quality Assurance Cell (IQAC)** of the institute has alumni as a member who is involved in the development and application of quality benchmarks for various academic and administrative activities of the institution.

### **Departmental Advisory Board:**

Alumni are part of the departmental advisory board. They have active participation in the development activities of the department. They suggest changes in the course content and new courses to be introduced in various programmes.

### **BOS member:**

The alumni who are members of **Board of Studies (BOS)** are invited for the meetings wherein they play a major role in the process of curriculum improvement by suggesting changes according to industry standards.

### **Industry Expert:**

Some of the alumni work as an industry expert. Alumni who are working in different organizations share their professional experience with the students enhancing teaching learning process. This helps students for a transition from campus to corporate.

### Internship & Entrepreneurship Awareness:

Alumni from different domains help students to get internship at industry. The Entrepreneurship Development Cell (EDC) of the institute organises lectures by alumni to inculcate entrepreneurship skills in the students. Alumni are invited as judges for various technical competitions organized at the institute.

### Student's employability enhancement & Placement:

Alumni significantly contribute in the student placement activity. Some alumni act as linkages between the student and company to check that the requirements of the industry are satisfied before they are finally selected.

### Alumni Feedback:

The institute takes regular feedback from alumni in various issues which help in overall development of the students. They share their professional experience and make students aware of recent technologies and tools used in the industry.

File Description	Document
Link for Additional Information	View Document

5 Lakhs	ontribution during	the last five yea	rs(INR in Lakhs)	
Lakhs - 5 La	khs			
b Lakhs - 4 La	khs			
Lakh - 3 Lak	ths			
Response: <1 l	_akh			
ile Descriptio	n		Document	
Alumni associa	tion audited stateme	nts	View Document	
<b>5.4.3 Number</b> Response: 15	of Alumni Associati	ion / Chapters r	neetings held during t	he last five years
	of Alumni Associat	ion /Chapters me	eetings held year-wise d	uring the last five years
5.4.3.1 Number				
2016-17	2015-16	2014-15	2013-14	2012-13

File Description	Document
Number of Alumni Association / Chapters meetings conducted during the last five years.	View Document
Any additional information	View Document
Report of the event	View Document

### **Criterion 6 - Governance, Leadership and Management**

### 6.1 Institutional Vision and Leadership

**6.1.1** The governance of the institution is reflective of an effective leadership in tune with the vision and mission of the institution

### **Response:**

### Vision

To produce young, globally competent Graduates/Post-Graduates/Doctoral Engineers with an aptitude for leadership and research, to face the challenges of modernization and globalization courageously who will be instrumental for overall growth of the society

### Mission

- To impart quality Technical Education in accordance with the needs of the society through various academic programs.
- To foster learning process & to provide proper ambience for motivating students for creating awareness to excel in the ever expanding field of science & technology.
- To enhance career opportunities for students through exposure to industries & research institutions
- To strive for excellence by encouraging independent critical thinking, creativity & discipline
- To create awareness for engineering ethics & human values for instilling moral, social values & loyalty & to appreciate the rights of others & respect towards society & its heritage
- To help the students to implement their acquired Engineering knowledge for society & community development, , thus enhancing a strong sense of social responsibility & accountability
- To reach to the community through various outreach programs to include the scientific technological spirit among all
- To promote and provide a framework to meet campus sustainability goals & mitigate climate change
- To help in nation building through a pool of dedicated, disciplined, intellectual & integrated manpower
- The institute uses decentralization of tasks at various levels under the leadership of head of institution, heads of departments, faculty and students.

### Management

- The management of our institute plays important role to provide facilities like excellent infrastructure, facilities for healthy teaching and learning environment in tune with vision.
- The management periodically reviews the progress of the institute.
- Thus the management proactively encourage and motivates faculty and staff for realizing the vision of the institute.

### Head of the institute

- Head of the institute provides academic leadership and tries to percolate the qualities of leadership among Head of the Departments and faculty by disseminating powers.
- Head of the institution is also appreciated for the execution of best practices of the institute.

### At Head of Department (HOD)

- Heads of the department are supported by Head of the institute and management to carry out activities at department level in order to roll out the academic calendar of department in line with the academic calendar of the institution
- They prepare budget requirement and forward it to the Head of the institute.
- Heads of the department are given freedom to distribute the responsibilities of organizing the activities to the faculty and staff of their department

### Faculty

- Leadership in faculty is groomed by giving them responsibility of various activities at department and Institute level.
- Faculty extend their services as student mentors to guide and council students on academic and personal issues.

### **In-charges for supporting units**

- In-charges are empowered by Head of institute to form their committees and implement concern activities.
- Finance officer, Registrar, Office superintendent, Accountant, Training & Placement officer, Librarian and Rector are appointed for implementing concerned units.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

### 6.1.2 The institution practices decentralization and participative management

### **Response:**

**Decentralization in working:** 

• Library Committee :

Case 1 – Implementation of book loan scheme for SE student

Requirement: student request for book loan facility

Approach:

- 1. Requirement is collected from students regarding book loan facility by Class Coordinator.
- 2. Class Coordinator approaches Department Library Coordinator and discusses about requirements, Class coordinator then contacts concerned teacher for each subject and collect list of most required books and forwards it to Department library coordinator.
- 3.Department Library Coordinator approaches Head of Department who takes a decision about the formal requirement and the scheme.
- 4. Head of Department approaches Head of Institute with requirement.
- 5. Head of Institute after taking a decision to sanction the scheme, checks with librarian about availability of books in Library and processes procurement details for new books,
- 6. A purchase order for new books is removed and a deposit is decided to be collected for this facility by Head of Institute and conveyed to Librarian and Department Library Coordinator. Department Library Coordinator conveys this to Head of Department and this is conveyed to students. The deposit is paid in the office.
- 7. Student avails the books by showing the deposit receipt to the Librarian.
- Hostel case study

Case 2 – change of mess timings

Requirement: Letter received from students regarding insufficient recess timing for lunch

Approach:

- 1. A letter was given by students to class coordinator
- 2. Class coordinator discussed the contents of the letter with head of department
- 3. Head of the departments discuss the matter with Head of the institute
- 4. Head of the institute conducted meeting with all Head of the departments and discussed the matter and finally made a decision to change recess timing so that students from different dept in the institute will get enough time to take their lunch. Two slot of lunch timing 12.40 to 1.30 & 1 to 1.50 pm were finalised.
- 5. The decision was conveyed to all head of the dept. to modify the existing time table and changed recess timings was conveyed to students
- Laboratory case study

### Case 3: Laboratory (Lab) requirements

### **Requirement:** Requirement received from the various lab in charge

Approach:

- 1.Requirement & issues from various Lab. In charge are brought to the Head of Department by the faculty coordinating the activity.
- 2. For policy making, meeting with Head of the institute and faculty is conducted
- 3. Head of Department compiles & issues instructions on various issues as per the policy.
- 4. Requirement & issues are forwarded to Head of the institute.
- 5. Head of the institute takes decision according to the budget allocated for the departments.
- 6. Head of the institute instructs purchase committee
- 7. Purchases are process through request for quo ,comparative statements and preparing of Purchases Order
- 8. When material is received by store ,it is redirected to a lab through Head of Department

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

### **6.2 Strategy Development and Deployment**

6.2.1 Perspective/Strategic plan and Deployment documents are available in the institution

**Response:** 

**Strategic Plan for :** 

### Title: A National level Technical Symposium WIT- char

### **Objective of the Practice**

- To provides students across the country with a top notch platform to display their technical prowess.
- To encourage generation of new thoughts and help these thoughts find expression.
- To provide an arena for the best engineering minds from all over the country to bring to life their innovative ideas and convert them into solutions.
- To invite students from all over the country to share our vision and be part of what ensures to carry forward the legacy of technical excellence.
- To provide a competitive platform to ascertain among the students and learn from others.

### Need Addressed and the Context

Considering the rapid pace of development of technology a need is felt to conduct a symposium to encourage participants to stay abreast to the most recent progress in their fields.

### .The Practice

### **Strategic Planning**

Meeting taken two months before the event:

### Agenda

- Determine the event date in month of March.
- Identify planning committee, one overall coordinator, event coordinator and student coordinator for planning process form each department
- Establish planning meeting times every week and schedule for remaining execution meetings
- Review of last year events and their success. Discussion of retaining successful events or removing some obsolete events.
- Finalize no of events, objectives, program outline. Key communication messages for printed invitations, banners, notepads and web-based materials & app development.
- Confirm and Submit venues for each event.
- Confirm and Submit lodging reservations for judges as well as student participant from outside.
- Identify guests for inauguration and valedictoryceremony.
- Identify judges for various events.
- Prepare budget estimate
- Confirm invitation lists for meals and give details for lunch to accountant.
- Design and develop event database for mailing invitations and tracking outline ceremony.

### • Implementation

- Invitations are given to all colleges
- Entries are collected
- Banners are displayed
- Venue centres are made ready
- Registration of event
- Chief guest is received at campus
- Inauguration is conducted
- Events are started
- Judges evaluate events
- Results send to certificate writing committee
- certificates distributed and students feedback collected in valedictory function
- report of event is prepared
- corrective action for next WIT-char is discussed

### **Evidence of Success**

### Academic

- Practical skill exposed.
- Showcasing technical knowledge and innovations.
- Hands-on experience on the recent trends in technology.
- New perspective towards programming with industry standards.

### Social

- Projects implemented for betterment of the society with unique initiatives events.
- Promotion of futuristic and eco-friendly technologies or technical

### Commercial

- Exhibit talent to industry to convert useful an innovative commercially viable projects into products.
- initiate interest in entrepreneurship activities
- Set a direction in registering for patents or IPR.

### Resources

- Human resources
- Faculty, student coordinators, staff
- Laboratory and venues
- Stationary

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document
Strategic Plan and deployment documents on the website	View Document

6.2.2 Organizational structure of the institution including governing body, administrative setup, and functions of various bodies, service rules, procedures, recruitment, promotional policies as well as grievance redressal mechanism

### **Response:**

Please Note we are **unable to upload image of Organogram of the Walchand Institute of Technology**. **The image is included in the additional information.** 

Organizational structure of the Institution including governing body, administrative setup

The institute has a well structured organization which at its apex has the Governing body headed by the Chairman, The Head of Institute / Principal is the secretary of the Governing body. The Head of the Institute is supported by the Heads of Departments who are responsible for the administration at Department level. The HOD are supported by the Laboratory In charges and faculty of the Department. The Laboratory assistants and menial staff support in the working of the Laboratories and other departmental units.

The Library is the third unit under the Head of the Institute. It is leaded by a Librarian and supported by Assistant Librarian, Clerks / attendants and menial staff.

The second unit under Head of the Institute is the Office. The Office is headed by Registrar for administration activities supported by the OS, Clerks, typists, attendants and menial staff and Finance Officer heads the accounts section supported by the accountant, clerks, attendants and menial staff.

The Head of the Institute chairs other statutory bodies like CDC, special cell, standing committee, and sexual harassment, prohibition committee for women, anti-ragging committee and Grievance committee.

The Head of the Institute coordinates the Extracurricular and curricular activities supported by in chargers for these activities. He also coordinates the Training and Placement activities supported by the Officer for Training and Placement for the pictorial representation of the organization please refers to the additional information uploaded.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

### **6.2.3 Implementation of e-governance in areas of operation**

- **1. Planning and Development**
- 2. Administration
- **3. Finance and Accounts**
- 4. Student Admission and Support

### 5. Examination

- A. All 5 of the above
- **B.** Any 4 of the above
- C. Any 3 of the above
- **D.** Any 2 of the above

### Response: A. All 5 of the above

File Description	Document
Screen shots of user interfaces	View Document
ERP Document	View Document
Details of implementation of e-governance in areas of operation Planning and Development,Administration etc	View Document
Any additional information	View Document

**6.2.4** Effectiveness of various bodies/cells/committees is evident through minutes of meetings and implementation of their resolutions

### **Response:**

Effectiveness of various bodies/cells/committees is evident through minutes of meetings and implementation of their resolutions

An example of Pradhan Mantri Kaushal Vikas Yojana activity successfully implemented based on the Minutes of the meeting of General body

• As per the resolution passed in the meeting of the Governing Body conducted on **March 2016** reflected in the minutes of the meeting it was decided to study the brochure and apply for few courses towards our contribution in nation development.

The Govt. of India requires a large number youth with Engineering Skills, as entire nation is looking for 109 million skilled persons by 2022. And considering this aspect, the Ministry of Human Resource Development, Government of India, New Delhi & AICTE has launched **Pradhan Mantri Kaushal Vikas Yojana** (PMKVY) vide Advertisement No. NSQF/04(01)/AICTE/2016 requesting Engineering Colleges approved by AICTE to contribute in the Skill India initiative: Pradhan Mantri Kaushal Vikas Yojana

In response to the notification of AICTE, and eligibility of our college for conducting the courses, Institute submitted online application on AICTE Portal in June 2016 for starting five courses under PMKVY.

- In September, 2016, Institute received approval by the Ministry of Human Resource Developments, Govt. of India, New Delhi & AICTE, and New Delhi for **four** courses. The courses, fees are not to be charged to the students; however, it will be reimbursed by the Ministry of HRD. Hence per student fees chargeable are NIL. This programme received overwhelming response from the students community. The four courses are Automotive Lathe Operator, Construction -Construction Laboratory Technician, Telecom-Sub-Sector-Handset -Telecom Terminal Equipment Application Developer (Android Application), Electronics and Hardware-Television Repair Technician each had intake of 25. In Application Developer course 3 faculty and remaining all courses 2 faculty were involved.
- The planning for the courses on PMKVY consisted of
- Preparation of brochure
- Campaigning of courses
- Advertisement for PMKVY courses in newspapers
- Deciding expert faculty from department to conduct the course
- The execution of the course consisted
- Registering student to the course who had an adhar card
- Conduction of lectures and practical
- Maintaining of attendance
- Conduction of end examination
- Reporting to Ministry of HRD
- Declaration of results

The feedback of the course was conveyed to the management and the results of the course were conveyed in the next General Body meeting 20 Nov 2016 and 21 Jan 2017.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

### **6.3 Faculty Empowerment Strategies**

6.3.1 The institution has effective welfare measures for teaching and non-teaching staff

### **Response:**

### Welfare measures for teaching and non-teaching staff.

- 1. Appreciation to faculty and staff for performing good work and completing PhD program.
- 2. Recognition to outstanding faculty and staff with "Bhausaheb Gandhi Sevabhavi Puraskar".
- 3. Facility of Group Medical Insurance, EPF and Gratuity Fund for regular staff in the college.
- 4. Availability of financial support through various schemes of employee's co-operative society. (Pathapedhi)
- 5. Provision of employer Welfare Fund Savings Scheme by Credit Co-operative Society.
- 6. Recognition /Promotions for good work based on PBAS performance and outstanding contribution.
- 7. "Earn while you learn" scheme for staff, for higher education durning service.
- 8. Extending facilities for higher studies to faculty and staff.
- 9. Felicitate faculty and staff for completing higher education and distinguished achievement.
- 10. Promotion to higher post for faculty and staff.
- 11. Opportunities for staff and faculty to upgrade their qualification.

12. Duty Leave.

- 13. Medical Leave.
- 14. Birthday celebration.
- 15. Faculties are provided with TA and DA for presenting technical papers in national and international conference
- 16. Admission to ward of faculty and staff on priority basis.
- 17. Need based advance against salary for faculty and staff.
- 18. Maternity leave for female faculty and staff.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

# **6.3.2** Average percentage of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the last five years

### Response: 19.49

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

2016-17	2015-16	2014-15	2013-14	2012-13	
11	43	33	30	37	
File Description	on		Document		
Details of teachers provided with financial support o attend conferences,workshops etc. during the last ive years		View Document			
Any additional	ny additional information		View Document		

# **6.3.3** Average number of professional development /administrative training programs organized by the institution for teaching and non teaching staff during the last five years

### Response: 12.4

6.3.3.1 Total number of professional development / administrative training programs organized by the Institution for teaching and non teaching staff year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
16	12	14	10	10

File Description	Document
Reports of the Human Resource Development Centres (UGC ASC or other relevant centres).	View Document
Details of professional development / administrative training programs organized by the Institution for teaching and non teaching staff	View Document
Any additional information	View Document

6.3.4 Average percentage of teachers attending professional development programs viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Program during the last five years

### Response: 61.52

6.3.4.1 Total number of teachers attending professional development programs, viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Programs year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
103	133	82	87	81

File Description	Document
Reports of the Human Resource Development Centres (UGC ASC or other relevant centers).	View Document
IQAC report summary	View Document
Details of teachers attending professional development programs during the last five years	View Document
Any additional information	View Document

### 6.3.5 Institution has Performance Appraisal System for teaching and non-teaching staff

### **Response:**

University Grants Commission introduced 'Performance Appraisal System' (PBAS), for Teachers in University and affiliated Colleges in September 2010. The Institute follows this methodology, designated by UGC and implemented by Solapur University Solapur.

Performance of the faculty is measured under the following categories:

(I) Teaching, Learning and Evaluation Related Activities

(II) Co-Curricular, Extension, Professional Development Related Activities

(III) Research, Publications and Academic Contributions

Annual PBAS form is filled in and submitted by every faculty at the end of every academic year. A Central Committee of two experts is constituted by Principal, for verification, assessment and evaluation of completed PBAS documents. The Head of Department provides one more 'Expert' from each department. The committee calculates 'Academic Performance Indicators' (API) scores for each and every faculty. The report of the committee is submitted to Principal.

Positive motivation is provided to all those performing exceedingly well according to PBAS. Those who have not shown satisfactory performance are invited for the counseling. The findings about their performance are made known to them. They are advised to improve.

In spite of instructions, if someone is not attempting for improvements, such persons are served with a 'Show cause notice' and asked for their clarification. In the interest of 'Natural Justice', they are provided one more opportunity to improve. In case, still somebody is reluctant to act upon the improvement, a disciplinary action is taken as deemed fit.

Performance based assessment of non-teaching staff is carried out according to Circular No. CFR-1295/P.K. 36/9513, Dt. 1/2/1996, issued by General Administration Department of Maharashtra State Government.

'Peer Review' of Faculty and Non Teaching Staff is also carried out by their colleagues. This makes them understand, how their colleagues find them. Structured feedback of faculty is taken from students regarding their course delivery.

The API scores of PBAS are considered as basic requirement for Career Advancement Schemes implemented for faculty.

File Description	Document
Any additional information	View Document

### 6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

**Response:** 

Financial audits carried out during last five years with the mechanism for settling audit objections.

- The institute ensures an internal financial audit of all its accounts. Our internal financial audits are done annually. Due to our meticulous legal process very few objections arries. All queries are resolved while internal audit is going on.
- The External Auditors verifies all the receipts, payments, cashbooks, bankbooks, vouchers, deadstocks, purchase registers, postage registers and expense bills of the financial year. The last internal audit of the Financial Year 2016-2017 was completed on 29th September 2017.

File Description	Document
Link for Additional Information	View Document

6.4.2 Funds / Grants received from non-government bodies, individuals, Philanthropists during the last five years (not covered in Criterion III) (INR in Lakhs)

### Response: 6.6

6.4.2.1 Total Grants received from non-government bodies, individuals, philanthropists year-wise during the last five years (INR in Lakhs)

2016-17	2015-16	2014-15	2013-14	2012-13	
1.57	1.46	1.52	1.54	0.51	
File Descript	tion		Document		
Details of Fu	<b>tion</b> nds / Grants received f podies during the last f		Document       View Document		

Ann	ual statements of accounts	View Document	

### 6.4.3 Institutional strategies for mobilisation of funds and the optimal utilisation of resources

### **Response:**

### **Resource mobilization policy of the institute:**

Following are the sources through which funds are mobilized for the institute.

- Students fee collected .
- Revenue generated through testing and consultancy services provided to society.
- Taking up various real time projects funded by industry/agencies.
- Moving various proposals for receipt of grant to agencies like AICTE, DST, BCUD, UGC, SERB,IEI etc.
- Undertaking various training programs
- Surplus generated while organizing any activities.
- Funds from parent trust

### **Optimal Utilization:**

Optimal Utilization is insured through following process.

- The requirement is judicially arrived at by taking inputs from the stakeholders (number of pages reduced in journal as per requirement).
- All purchases are done through competitive bidding resulting in least cost of procurement.
- Promoting digital processes (paperless administration)
- In-house maintenance of equipment to maximum possible.
- Doing collaborative programs with society leading to minimization of expenditure.
- Our buildings are green and require minimum use of electricity during the day.
- Use of solar panels to minimize the usage of electricity.
- Use of intranet to avoid menial staff and paper to convey messages.

File Description	Document
Any additional information	View Document
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

**Response:** 

6.5.1 Two examples of best practices institutionalized as a result of IQAC initiatives.

Example 1:

### • Employability enhance program

The major challenge which the institute encountered was the gap between campus and industry requirement and expectation. Skill up gradation was one of the major issues encountered during campus placement. Apart from required skills, students were also weak in general aptitude, communication and presentation skills, team skills, leadership, creativity, problem solving skills, etc. In order to address the above challenges, the IQAC has suggested training program for the students. This training program is the combination of in-house training and out-sourced training which is designed to enhance the employability skill of students.

In the academic 2016-17 the number of students selected by Infosys was marginal i.e. 29 students this was alarming situation which required a review of training activities for improving that placement number qualitatively and quantitatively.

To improve the situation the training and placement cell was asked to take help of IQAC cell by the Head of the Institute. Hence the training and placement worked with the IQAC cell for improving the selection ratio of the Infosys campus placement. The training and placement is collaboration with IQAC drafted a training program which was a combination of in house training and outsource training by industry experts. As part of in-house training, the following training modules are conducted for the students:

- Verbal aptitude
- Quantitative aptitude
- Logical reasoning
- Technical module
- Resume writing

- Group discussion
- Personal interview

To complement the above in-house training, the institute conducts Finishing Schools training throughoutsourced training agencies and industry experts. The Finishing School training is a fast-track course which is designed to train the students in general aptitude, technical domain and soft skills. The institute has tie up with reputed training agencies like Glob arena, Global Talent Track, APTech, etc. to impart out-sourced training for skill up gradation in the above mentioned area.

To major effectiveness of training the IQAC cell directed the training and placement cell to conduct online test series trough Moodle platform. Hence the training and placement conducted a test series for general aptitude based on Infosys pattern over a short period of time there was a qualitative improvement in the scores of the aptitude test. These activities increased the confidence of the student to take online tests. The effectiveness of the tailor-made training program as suggested by IQAC cell is seen in the Infosys campus placement drive of 2017-18.

### Example 2;

### **IQAC Suggestion: Implementation of MOODLE**

In the present scenario for a teacher to conduct a test, a question paper has to be generated and a test has to be conducted. The teacher has then to evaluate the papers, prepare a mark sheet and then discuss the performance with the students. This procedure is time consuming and involves a lot of energy to be spent.

This system has following drawback

- 1. Waste of time.
- 2. Waste of efforts of faculty.
- 3. Waste of paper therefore not a green practice.

Moodle is a free and open source, has proved to be effective in this scenario. It helps selecting questions randomly from a bank prepared by the teacher. It automatically generates the question paper. A test can be conducted online and the test can be evaluated as per the answer key given by the faculty. The result of the test and mark sheet can be generated automatically. This enables a teacher to discuss the answers of the questions not attempted by a majority of students. A teacher now has enough time to conduct remedial classes and conduct more repeat tests. This improves the performance of students continuously and a student performs better in his final examination.

Moodle can also be used for the assessment of theoretical and practical assignments where Moodle serves as an e-resource, discussion forum and enables e-submission. Deadlines can be set on this platform for submissions. The result sheet can be generated and the teacher can send these results to a student. Suggestions can be given to a student regarding improvement. Material for further study can be shared with students. The use of Moodle has also improved the performance of students in their preparation for campus interviews since number of tests can be performed for quantitative, logical reasoning and verbal sections of an interview.

Software competitions can be conducted on Moodle since Moodle supports a large number of users at a time. Facilities like setting of clock, sectional differentiation and immediate results can be handled by Moodle. Moodle is also an effective tool to collect feedback from students and analyse the responses as per requirement. Thus the use of Moodle at our Institute has resulted in

- 1. Saving time and effort of teacher.
- 2. Using energy for remedial sessions.
- 3. A green practice reducing cost of paper.
- 4. Improvement of result of student.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

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

**Response:** 

Teaching learning reforms facilitated by the IQAC.

### Example 1:

### Life Long Learning:

Rate of technology obsolesce is becoming faster day by day. It is paramount. In calculate Self learning courses are introduced. Institute quality assurance committee reviewed teaching learning process; they found that in depth knowledge is required for few subjects in the program to bridge the gap between the curriculum and requirement of the program outcomes. The committee felt the need to start NPTEL and MOOC learning courses which would be an add-on. NPTEL and MOOC provide us high quality learning material free of cost which includes recorded lecturers and assignment based on the material. Students can access it anytime and anywhere, it helps them to self study and have a better learning of the concepts. Students revise curriculum courses and study supporting courses beyond curriculum to get certified.

Our institute established NPTEL Local chapter on 6th Jan 2017.NPTEL Local Chapter is coordinated by a faculty who is a Single Point of Contact (SPOC) for NPTEL.

The copy of web and video courses conducted till date is provided by NPTEL on the 9TB (4TB + 4TB +

1TB) external hard-disk. The contents are freely made available to all the student and faculty members on the Institute local server.

Total 127 different courses were offered by NPTEL out of which 62 courses had end Examination. 49 mentors were appointed for various courses to ensure that students are active in a course and are submitting their assignments on time. The mentors also clarify the doubts that the students have. Nearly 50% students and faculty bagged Elite certificates out of which 26 were in top category and one was gold . 923 students were offered scholarships for these courses.

Example 2:

### **Creating Open Educational Resources (OER)**

Our IQAC team has suggested certain innovative changes to improve learning experiences among students. One of the steps in this direction was OER (Open Educational Resource). The move to open education resource is more than a paradigm shift in content; it is an immersive experience in collaborative teaching and learning. OER is digitized materials offered freely and openly for faculty, students, and self-learners to use and reuse material for teaching and learning. OER includes learning content, software tools to develop, use, and distribute content, and implementation resources such as open licenses. It expands the role of instructor, allowing faculty to become curriculum designers and content creators. The tools and strategies of teaching learning process strengthen the faculty network in their respective domain.

Our faculty develops their own content such as handouts for lab practices, apps for different courses, video lectures, design of multiple choice questions implemented on moodle.

Faculty training programs were arranged on the OER generation. The practical lab handouts, crosswords, games, quizzes, innovative study contents, mobile applications and Videos were generated. Guidelines were set for creating videos and the videos were peer reviewed. At institute level more than 100 videos have been created by concerned faculty from various departments. These OER materials are made available to all students. OER videos link. <u>http://witsolapur.org/plccse.php</u>

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

### 6.5.3 Average number of quality initiatives by IQAC for promoting quality culture per year

### **Response:** 2.2

6.5.3.1 Number of quality initiatives by IQAC for promoting quality year-wise for the last five years

	2016-17	2015-16	2014-15		2013-14	2012-13	
	11	0	0		0	0	
							-
F	ile Description			Docum	nent		
	Number of quality i romoting quality c	nitiatives by IQAC p ulture	er year for	View I	<u>Document</u>		
A	ny additional info	rmation		View I	Document		
I	QAC link			View Do	ocument		

### 6.5.4 Quality assurance initiatives of the institution include:

- 1. Regular meeting of Internal Quality Assurance Cell (IQAC); timely submission of Annual Quality Assurance Report (AQAR) to NAAC; Feedback collected, analysed and used for improvements
- 2. Academic Administrative Audit (AAA) and initiation of follow up action
- **3.**Participation in NIRF
- 4.ISO Certification
- **5.NBA or any other quality audit**
- A. Any 4 of the above
- **B.** Any 3 of the above
- C. Any 2 of the above
- D. Any 1 of the above

### **Response:** B. Any 3 of the above

File Description	Document
e-copies of the accreditations and certifications	View Document
Details of Quality assurance initiatives of the institution	View Document
Annual reports of institution	View Document

# 6.5.5 Incremental improvements made during the preceding five years *(in case of first cycle)* Post accreditation quality initiatives *(second and subsequent cycles)*

**Response:** 

# Quality enhancement initiatives in the academic and administrative domains successfully implemented during the last five years.

**Faculty training** is conducted at our institute to help faculty to accumulate knowledge and disseminate the same to students. These programs are conducted by well reputed institute like IIT Bombay at our remote centre and by Industry at our campus. For some training faculty go to Industry and spend some time on machinery available there and learn new skills. Faculty training has increased by **nearly 45 % because students have to be trained on new employability skills.** 

**Research and publications** – Most of our faculty are involved in research. Our institute has 4 research centres recognised by Solapur University and 58 research scholars are undergoing research guided by 8 research guides. Almost 120 papers are published every year in international journal and conferences. The research publication is consistent from 5 years.

**Faculty qualification and up-gradation**- The institute encourages faculty to go for higher education. The no of faculty registering for Ph.D. has increased in the past 5 years and no of faculty completing Ph.D. has increased. Around 17% of faculty have registered for Ph.D. in the past 5 years.

**Industry elective** – Industry electives like Mobile application Development and Cloud computing, big data and Business Intelligence are included in the curriculum. Around 10% industry electives are offered in the past 5 years.

**Industry Recognition** under the campus connect Inspire contest of Infosys our faculty have bagged awards for their participation in Content Guru, Distinguished Faculty, SILVER partner faculty, SAP fellowship award by IIT Bombay and IUCEE Outstanding Engineering Educator Awards. Around 100 awards are bagged by faculty in past 5 years. 28 MOUs are signed in the past 5 years to increase interaction with industry.

**Network** -Internet bandwidth is upgraded to 83 Mbps(Reliance 48 Mbps+Nasnet 35 Mbps) from 32 Mbps, due to extensive use of e-resources usage, conduct of online examination. Wi Fi spot in hostel, guest house and Institute are enhanced to provide with flexible internet facility. Thus there is constant increase of internet facility in the past 5 years.Nasnet 35

**Developed ICT Infrastructure and smart classrooms** for extensive use of ICT including Videos papered at our institutes and those provided by NPTEL for extensive knowledge gaining. 28 classrooms are equipped with LCD & Laptops and four classrooms are provided Internet connections. Use of ICT is increased since 84 % of faculty use it. Digital content and E-resources – Extensive use of digital contents and E-resources have helped teaching learning process and have helped in implementing E-submissions. Digital content has consistently increased as per requirement.

**Student Internship** –has increased due to the requirement of upgrading employability skills and project based learning. It is almost 100%.

**Student's results** have been consistent for the past five years, average 98% due to constant efforts taken by faculty, mentors and good internal continuous evaluation, remedial classes and make up classes.

Admission has increased by 10% in the past years due to good counselling, placement and existing student's result in the institute.

**Higher education entrance preparation like GATE-** such training has helped students to qualify entrance examination and more students are going for higher studies. The no of students qualifying GATE and going for higher studies has increased

**Enhancing open source Software**- we have implemented open source tools like MOOC and Moodle for evaluation. We have also switched in a phased manner from windows to open source Linux platform. The use of digital platform for evaluation has increased by 10% every year.

**Intranet and Digital initiative**- Intranet and Digital initiative are extensively used at the institute for online banking, collection of Fees, payments, receipts, remuneration etc. Intranet is extensively use for all internal communications

**Recording Studio**-this facility is developed in the institute to create recorded videos by the faculty of the Institute which can be shared with student using different pedagogical approaches. Nearly 100 videos are recorded till now.

File Description	Document
Any additional information	View Document

### **Criterion 7 - Institutional Values and Best Practices**

### 7.1 Institutional Values and Social Responsibilities

7.1.1 Number of gender equity promotion programs organized by the institution during the last five years

### Response: 114

7.1.1.1 Number of gender equity promotion programs organized by the institution year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
23	29	23	20	19

File Description	Document
Report of the event	View Document
List of gender equity promotion programs organized by the institution	View Document
Any additional information	View Document

### 7.1.2

**1. Institution shows gender sensitivity in providing facilities such as:** 

- 1. Safety and Security
- 2. Counselling
- 3. Common Room

### **Response:**

### Safety and Security

To maintain safety and security on the campus the use of identity cards is mandatory for students as well as faculty. A visitor can enter the campus only by taking a gate pass. An adequate number of security guards are placed at different places in the campus. Security guards keep a watch on the entire area with the view to maintain discipline in the campus and monitors parking area and other common areas of the campus.

CCTV cameras are mounted on all public areas within the campus and within the building are continuously monitored. Rectors and their teams monitor security at the hostel. Anti-ragging notices are prominently displayed. Any report in this regard is taken up by the Anti Ragging committee of the institute. A Grievance cell addresses all problems faced by students.

A fire extinguisher is provided in every wing of all buildings. Emergency needs like ambulance and doctor

are made available as and when required immediately.

The laboratories are well equipped for all safety provisions depending upon their type

Girl students, lady faculty and lady staff are treated with great respect in our institute. They are given equal opportunities in all events conducted in the institute. Women's grievance redressal committee exists in the institute which addresses the problems if any faced by girl students, lady faculty and lady staff.

All the preventive measures for the safety and security are being taken care.

### .Counseling

Every faculty in the department works as a mentor to the group of students allocated to them and they conduct regular meetings to check the progress in academics and also address their problems if any.

Walchand Institute of technology has dedicated central counseling cell which is headed by a coordinator who facilities the working of this cell. The counseller provides expert counseling to the students for various behavioral issues as well as academic issues. The cell has a group of expert counselors who are available on the campus every Thursday and Friday from 4.00pm to 6.00pm. Additionally, a Dr. Shrikant Patankar (M.D. Psychiatry) and Dr. Anvekar (M.D. Psychiatry) are also invited to conduct counseling session for the students. Students are guided to face stress and phobia caused during studying. Counseling is also carried out for students taking admission into the institute. Details are provided to students about the admission procedure, advice about various programs and selecting the best institute is given to them. A student is guided on the type of industry he should join, civil services, defense services and also higher education options both in India and abroad by organizing various programs.

### Common Rooms

Common rooms are available in the campus separately for boys and girls. Common rooms are used for students to take their lunch and for students to discuss among themselves. The girl's room is well equipped with emergency needs like sanitary napkin vending machines and first aid kits.

The hostel is also equipped with a sick room and a clinic where a doctor visits sick students.

File Description	Document
Any additional information	View Document

### 7.1.3 Alternate Energy initiatives such as:

### **1.** Percentage of annual power requirement of the Institution met by the renewable energy sources

### Response: 26.04

7.1.3.1 Annual power requirement met by the renewable energy sources (in KWH)

### Response: 61485

7.1.3.2 Total annual power requirement (in KWH)	
---	--

### Response: 236135

File Description	Document
Details of power requirement of the Institution met by renewable energy sources	View Document

### 7.1.4 Percentage of annual lighting power requirements met through LED bulbs

Response: 29.52			
7.1.4.1 Annual lighting power requirement met throug	gh LED bulbs (in KWH)		
Response: 14673	Response: 14673		
7.1.4.2 Annual lighting power requirement (in KWH)			
Response: 49713			
File Description	Document		
Details of lighting power requirements met through LED bulbs	View Document		

### 7.1.5 Waste Management steps including:

- Solid waste management
- Liquid waste management
- E-waste management

**Response:** 

**Solid Waste Efforts:** 

Zero waste management program is aimed under Swach Bharat Abhiyan in Walchand institute of technology. All waste generated from WIT campus and Hostels (boys and girls) are collected at one point in rectangular chamber made of masonry. Vermi composting unit is established in Boys hostel. This is the most successful project and large quantities of high quality vermicompost have been produced for use within the campus.

The unit involves-

1. Waste collection

### 2. Segregation of solid waste- biodegradable and non-biodegradable waste

### 3. Pulverization

- 4. Vermiculture Bed:
  - Half compost is then transferred into vermicompost bed.
  - We use earthworm species Eudrilus eugenie for composting as it gives fine quality vermicompost containing higher percentage of NPK compared to other species of earthworm. The final vermicompost is used for gardening within the college campus.
  - The vermiwash produced during this process is used for spraying herbs & shrubs in college campus as it offers protection against pests and is also rich in NPK, hence it is called as TONIC for plants.
  - Vermi compost product is used for gardening in the hostel and college campus. Vermi wash used as a liquid fertilizer.

### Liquid Waste Efforts

An *anaerobic filter* is a fixed bed biological reactor with one or more filtration chambers in series. As waste water flows through the filter, particles are trapped and organic matter is degraded by the active biomass that is attached to the surface of the filter material. Anaerobic filters are widely used as secondary treatment in household black or grey water systems and improve the solid removal compared to septic tanks or anaerobic baffled reactors. Since *anaerobic filters* work by anaerobic digestion, they can be designed digesters to recover the produced biogas. Treated wastewater from anaerobic filter is used for gardening in hostel and sports ground premises.

The construction of *anaerobic filter* at our campus is similar to septic tanks but severally there are so many chambers and additional baffles in order to ensure upflow. Its total depth is 2.75m and length is 9.75m. Filter material depth is around 1.50m. Three manholes are provided at top of the filter. Inlet and outlet are provided for influent and effluent resp. Grey water is supplied as effluent water. Non-settlable and dissolved solids in also treated as they are brought into close contact with the active bacterial mass fixed on the filter material.

### **E-Waste Efforts:**

The computer systems which are outdated are transferred to other Junior Colleges/Schools, battery damaged is properly recycled.

File Description	Document
Any additional information	View Document

### 7.1.6 Rain water harvesting structures and utilization in the campus

### **Response:**

### Rain Water Harvesting

Institute has successfully implemented a rainwater harvesting model for maximum recharging of groundwater table & bore well.

All the bore wells in the Institute are fitted with rainwater harvesting unit. Entire rainwater captured, channelized & directed for enhancing groundwater table. As well the advantage of sloping topography is taken by arranging the entire campus in three levels to ensure maximum seepage of surface run off in to recharging of ground water.

Runoff from terrace is taken to bore wells through pipe structure and filtration. We have taken trench across the slope in southern border of playground. The depth of the trench is about 4 to 6 feet. The excavated trench is filled with boulders and cobbles to increase the porosity & permeability. The excess water of trench is to be stored in pit. Two such pits of 10 feet depth are excavated in the campus. The surface rain water is collected and filled in dug well through sand filter. At the backside of Boys hostel large pit was taken to recharge entire bore wells in Boys hostel. In our college and hostel campus there is zero discharge of rain water.

The rain water harvesting model is implemented for entire campus and it involves following steps:

a) Rooftop Rainwater Harvesting: This involves catching of rainwater from rooftop of

College buildings. The system implemented is as follows:

- Catchment of rainwater from rooftop;
- Transportation of rainwater through water pipes or drains or downtake
- pipes;
- First flush and filter with mesh to restrict floating material, silt, leaves,
- other organic matter etc.,
- Filteration through brick masonry filled with pebbles, gravel and sand;
- Storage and recharging of borewell;

b) *Open Space Rainwater Harvesting*: Rainwater is recharged through various kinds of structures to ensure percolation of rainwater into ground instead of draining away from surface. The college has employed following methods.

- Recharging of Borewells
- Percolation through College Ground
- *Percolation through Recharge Trenches*: Trench are excavated and filled with porous media like pebbles, small brickbats, silt etc. along the walls of
- Water storage tank for harvesting surface water run-off. This also enhances percolation of rainwater into nearby borewell.

We achieved following results

• Groundwater quality improved

- Groundwater level stabilized
- Aquifer conditions on campus is improved
- Tree plantations in Trenches is a major path for Green Campus
- Water requirement of college is reduced

File Description	Document
Any additional information	View Document

### 7.1.7 Green Practices

- Students, staff using
- a) Bicycles
- b) Public Transport
- c) Pedestrian friendly roads
- Plastic-free campus
- Paperless office
- Green landscaping with trees and plants

### **Response:**

### Green Practices followed by both the faculty members and the students in the campus are:

a) **Bicycles:** The faculty members and students residing nearby are encouraged to come by bicycles. Thus we prevent the emission of carbon dioxide in the campus.

**b)Public Transport:** The institution is just abutting to the National Highway. So we encourage our faculty members and students to use the public transport for safety, security and fuel conservation.

### c)Pedestrians Friendly Roads

The campus has wide, well maintained bitumen macadam (black top)roads, well connecting the campus. We have created footpath to come to buildings from parking area. By creating one way tracks possibility of accidents is minimized.

### **Plastic free campus:**

As an initiation, use of plastic bags and cups are discouraged in the campus. Even in the canteen usage of steel plates/ leaf plates and steel cups or paper cups are mandatory.

### **Paperless office:**

Institute has intranet infrastructure for faculty communication. Dedicated lease line connectivity from two internet providers namely Reliance and NAS net internet service through Optical Fibre Cable with 83Mbps (1:1) total bandwidth taken together.

The office promotes paperless practices like -

- 1. Collecting students fees through online payment gateway SBI collect
- 2. ERP System for all office automation
- 3. Digital payment for CAP bill, External examiner bill etc.

### **Digital payment:**

Students pay their fees through online payment facility. We provide students with payment gateway through our website. Faculty salary is deposited online in the bank. All resource persons, examiners and adjunct faculty are paid online. Bills for procurement of equipments, college magazine bills, internet bills, renewal of licenses are paid online.

We are campaigning for DIGIDHAN for society as an outreach programme.

### **Other Administrative Paperless functioning**

Some of the examples are –

- i. Online attendance record
- ii. Online submissions
- iii. Online display of examination results
- v. Online Students' feedback for teaching-learning process
- vi. Circulation of notices via intranet

vii. College newsletter Global Connect quarterly published in electronic form.

### Green landscaping with trees and plants:

The campus is majorly covered by greenery in the form lawns and trees. The Institute successfully implements a Tree Plantation Program every year, which has resulted in a green and eco-friendly campus. There is a separate maintenance section to look after green environment in the campus. Proper landscaping and well maintained lawns contribute to good ambience.

The institute has made all arrangements for rainwater harvesting in campus and in hostel. This has significantly improved the ground water level. Many initiatives are taken for water management and preservation. This water is also used for the maintenance of greenery in the campus.

Green covers in the form of lawns admeasuring 4828.05 sq.m. by planting Variety of Plants like Ficus, Almonda, Golden Bamboo, Silver Oak, Mahugunia, Nimb, Kadamb, Alesteno, Spathodia etc.

The campus is also planted by thick golden bamboo hedge and thick plantation near the compound wall for preventing from dust and noise pollution.

Due to all green initiative our campus is pollution free, encouraging students & faculty to stay for a longer period.

File Description	Document
Any additional information	View Document

### 7.1.8 Average percentage expenditure on green initiatives and waste management excluding salary component during the last five years

### Response: 6.59

7.1.8.1 Total expenditure on green initiatives and waste management excluding salary component yearwise during the last five years(INR in Lakhs)

20	016-17	2015-16	2014-15	2013-14	2012-13
6	6	61	43	83	36

File Description	Document
Green audit report	View Document
Details of expenditure on green initiatives and waste management during the last five years	<u>View Document</u>
Any additional information	View Document

7.1.9 Differently abled (Divyangjan) Friendliness Resources available in the institution:

- 1. Physical facilities
  2. Provision for lift
  3. Ramp / Rails
  4. Braille Software/facilities
  5. Rest Rooms
  6. Scribes for examination
  7. Special skill development for differently abled students
  8. Any other similar facility (Specify)
- **B.** At least 6 of the above
- C. At least 4 of the above

### **D.** At least 2 of the above

### **Response:** B. At least 6 of the above

File Description	Document	
Resources available in the institution for Divyangjan	View Document	
Any additional information	View Document	
link to photos and videos of facilities for Divyangjan	View Document	

# 7.1.10 Number of Specific initiatives to address locational advantages and disadvantages during the last five years

### **Response:** 44

7.1.10.1 Number of specific initiatives to address locational advantages and disadvantages year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
9	10	9	9	7

File Description	Document
Number of Specific initiatives to address locational advantages and disadvantages	View Document
Any additional information	View Document

# 7.1.11 Number of initiatives taken to engage with and contribute to local community during the last five years (Not addressed elsewhere)

### **Response:** 27

7.1.11.1 Number of initiatives taken to engage with and contribute to local community year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
9	5	5	5	3

File Description	Document
Report of the event	View Document
Details of initiatives taken to engage with local community during the last five years	View Document
Any additional information	View Document

### 7.1.12

# Code of conduct handbook exists for students, teachers, governing body, administration including Vice Chancellor / Director / Principal /Officials and support staff

### Response: No

File Description	Document
URL to Handbook on code of conduct for students and teachers, manuals and brochures on human values and professional ethics	<u>View Document</u>

7.1.13 Display of core values in the institution and on its website	
Response: No	
File Description	Document
Provide URL of website that displays core values	View Document

7.1.14 The institution plans and organizes appropriate activities to increase consciousness about national identities and symbols; Fundamental Duties and Rights of Indian citizens and other constitutional obligations

Response: Yes

File Description	Document
Details of activities organized to increase consciousness about national identities and symbols	View Document
Any additional information	View Document

### 7.1.15 The institution offers a course on Human Values and professional ethics

Response: Yes

File Description	Document
Any additional information	View Document
Provide link to Courses on Human Values and professional ethics on Institutional website	View Document

# **7.1.16** The institution functioning is as per professional code of prescribed / suggested by statutory bodies / regulatory authorities for different professions

Response: Yes

File Description	Document
Provide URL of supporting documents to prove institution functions as per professional code	View Document

# 7.1.17 Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties during the last five years

### Response: 47

File Description	Document
List of activities conducted for promotion of universal values	View Document
Any additional information	View Document

# **7.1.18** Institution organizes national festivals and birth / death anniversaries of the great Indian personalities

### **Response:**

### National Festivals celebration

Walchand Institute of Technology, Solapur celebrates "Gandhi Jayanti" and "Lal Bahadur Shastri Jayanti" on 2ndOctober every year. On this occasion students and staff members took the "Swachhata Oath" and then college campus is cleaned by them. Also students participate in different events like rally, street-play and competitions in which Swachhata is the main theme. We also celebrate "Good Governance Day" on occasion of birth anniversary of our former Prime Minister Mr. Atal Bihari Vajpayee on 25th December. Different competitions are organized on this occasion for students like essay writing, debates etc. to generate awareness among them about government commitment towards a transparent and accountable administration for public.

Every year we celebrate SardarVallabhbhai Patel Jayanti on 31st October. On this occasion students and

staff took the "Rashtriya*Ekta*Diwas Pledge" and students participate in competitions like elocution on the Life of SardarVallabhabhai Patel and prepared the slogans ontopic "RashtriyaEkta" in college campus.

Every year National voter's day is celebrated on 25th January. Awareness amongst voters need to be created regarding their voting rights and importance of participating in the electoral process.Walchand Institute of Technology, Solapurorganizes various programslike street play, rally, new voter registration drive in campus etc.,to create voting awareness amongstudents and common people to encourage them actively take part in the election process to create transparent democratic nation.

National Yoga day is celebrated on 21st June. The renowned yoga teachers are invited on this occasion to train students and staff members on common yoga practices as per the common yoga protocol. They explain the importance of practicing yoga in everyday life. Separates sessions are organized for girls and women staff members.

The Independence Day, Republic Day and Maharashtra Day are celebrated every year. On these occasions renowned persons from the societies were invited as chief guests. Their motivational speech inspires the students and staff members. Students also participate in different events like rally, street-play and competitions organized on these national days.

File Description	Document	
Any additional information	View Document	

# 7.1.19 The institution maintains complete transparency in its financial, academic, administrative and auxiliary functions

### **Response:**

The institution maintains complete transparency in its financial by auditing all financial report by the government authorities, also the financial budget of the institution are approved by the governing body. All audited statements are available on the institute website. Service conditions like procedures for recruitment and promotional polices are made available on the website for information. Policy for deputation of faculty for higher studies is published on the institute website. Promotional policies for employees of WIT are published on the institute website and are strictly followed on merit.

All information regarding Rules and regulations for students and notices from time to time are displayed prominently and most of them are available on our website. Mere moralization and framing of rules do not work. The students are guided from time to time to follow the rules of discipline in the institute premises. All instruction sessions are conducted as scheduled. Co-Curricular and extracurricular activities are conducted beyond college hours.

Our Institute provides a structured environment where students learn values of cooperation, hard work etc by working as organizer for almost all programs organized at institute level except annual day and freshers welcome. Everybody is provided with an opportunity to showcase their skills, leadership and team spirit.

At the start of semester, academic calendar is prepared by the college and by the departments which will be

followed by all. Academic calendar reveals curriculum delivery and method of evaluation throughout the semester along with details of co curricular and extracurricular activities. Grievances regarding evaluation can be conveyed by a student to the concerned teacher or through the grievance redressal cell of the Department/Institution level. Academic improvement of the students are continuously monitored by allocating mentors, coordinators etc.

A committee is set up before taking any serious disciplinary action in which the student is given a chance to put forward his opinion after which a decision is finalized. Positive and negative motivations are provided to students to ensure discipline in the campus.

Co-curricular activities, workshops and the expert lectures are arranged for faculty and students also get an exposure to industry culture and practices. Students and faculties are involved in these events to maintain transparency in the organization of such events and give equal opportunity to the participants and resource persons for these events. Care is taken that different faculty and students are selected each time for industrial trainings so that more faculty and students get exposure to industry environments and then contribute to teaching industry electives or offer industry projects implemented at the institute. It has prominently contributed to the growth of the department and the institution.

For inculcating human values in students and faculty, courses are included in the curriculum, programs are organized at institute level for inculcating values like cleanliness, respect for gender, anti-ragging, anti-terrorism, anti-child abuse, ethical development etc involving social interactions. Ragging is strictly prohibited.

Faculty members are encouraged to take up various workshops, seminars for knowledge upgradation.

File Description	Document
Any additional information	View Document

### 7.2 Best Practices

**7.2.1** Describe at least two institutional best practices (as per NAAC Format)

### **Response:**

**BestPractice1-PLC - A model incorporating ET practices for continues improvement in teaching Learning process**.

Sudden expansion in engineering education has led to paucity of faculty members. Delivery of engineering education through large no of untrained faculty members has suffered significantly due to lower quality course delivery & imparting poor skill set.

To overcome challenge of a paucity of trained & experienced teacher, we have formulated Professional Learning community (PLC) which undertakes training of faculty members for pedagogies & use of ICT while employing various ET practices empowering faculty for content delivery & carrying out research in ET while scaling up. Organizational structure of PLC is in pyramid form involving novice practitioners,

ET experts, ET researchers, coordinators & administrators.

Through continuous monitoring, peer review, experimentation and counseling, the results have been achieved to empower teachers to create course content in form of videos, OER etc. for the benefit of student learners. More than @100 videos and @30 OERs are created. As an outcome the student learning has been enhanced leading to their better performance in various assessment processes & enhancing their employability potential.

29 faculty members are recipients of **SAP Fellowship Award** for FDP on "Use of ICT in Education for Online and Blended Learning" conducted by IIT Bombay. Also, four faculty members are recipient of **IUCEE outstanding Engineering Educator Award** at national level amongst top 10.

Our PLC experiment was highly appreciated by gathering of International Conference (LaTiCE 2016) and organizers have disseminated this success story to stakeholders for implementation.

### **BestPractice2-Outreach Programmes for the Society**

Institute undertakes various outreach programmes for society through collaborative efforts of students and faculty members. We implement various society-relevant, real-time and smart-city related projects thus providing solutions, free of cost. Solapur is predominantly known for textile industries and agriculture. The institute has provided various measures to textile industry for its productivity improvement, Technical solutions for reducing the water requirement of the sugar industry by 40%, 'Equitable Distribution' of water and 'Irrigation Scheduling'. The institute is working on Monsoon Prediction Models at 'All India' and 'Regional' Scales that help to manage the water resources of country efficiently. A solution has been provided for deaf and dumb that helps to understand their communication. Counselling is offered to the outside students for arriving at a proper selection for their professional career with perfect neutrality. We encourage youth to participate in the process of national development and promote national integration through cooperative action. Digital Awareness programs and use of ICT in schools and colleges are organized. To inculcate sense of responsibilities and respect towards society, awareness programs such as voter awareness, female-foeticide, sexual harassment at workplace, Swacch-Bharat-Abhiyan, Tree plantation and Mahanetradan-Abhiyan are organized. Two blood donation camps in a year are well recognised by the society. Special sessions are conducted for HB-Weight Improvement for girls and yoga training for all. Skill development program for outside students are continuously rolled out. Faculty members are motivated to keep updated with state-of-art technologies that help to enhance the employability of students.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

### 7.3 Institutional Distinctiveness

**7.3.1** Describe/Explain the performance of the institution in one area distinctive to its vision, priority and thrust

### **Response:**

### Mutually Beneficial Industry-Institute Collaboration

The institute continuously strives to achieve its vision that states "To produce young, globally competent Graduates/ Doctoral Engineers with an aptitude for leadership and research, to face the challenges of modernization and globalization courageously, who will be instrumental for overall growth of the society"

The Institute has a well structured Industry Institute Partnership Cell (IIPC) for engaging activities with Industry in collaboration. Industry experts including our alumni, who are frontiers in their respective professions, are invited for interaction. Discussions are focused around internships, student projects, guest lectures, Industry Adjunct faculty, curriculum reframing, entrepreneurship, collaborative academic activities and research, technical support for establishing new laboratories, etc. Industry expert's representations on various institute bodies provide us an opportunity to seek & implement suggestion of improvement.

- Recommendations of industry experts are sent to the board of studies for due consideration and as a result several subjects have been implemented in the curriculum under direct guidelines from industry.
- Exposure to industrial environment is provided in the form of industrial visits, guidance in project implementation and assistance in assessment.
- Orientation courses for students from college to corporate are organised. Skill development programmes are under taken by the institute with the view of making students Industry-friendly and Industry ready candidates
- Institute has many functional MoUs with industries, benefiting both through laboratory development and other various collaborations.
- The faculty undertake research and consultancy service to industries such as textile, Agro, construction & core industries and central & state Government and non-government bodies.
- We render our service free of cost for many projects of societal interest and local bodies. To mention few:

1. The institute has provided service to local textile industries that include ergonomic study and improvement in working conditions in textiles and other local SMEs. It has worked on how to increase the productivity in textile industry by using low cost retrofitting and automation.

2. Solapur having the highest number of sugar factories in Maharashtra, the institute has provided the solution for reduction of water requirement of sugar factory by 40% using '4R' (Recycling, Reuse, Reduction, Recovery) techniques, enabling sugar factories expand their capacity with the same water requirement.

3. A problem regarding inequitable and unjust distribution of canal water was referred to us. On thorough study of system, we have arrived at and proposed a solution' for 'Equitable distribution of canal water' and 'Irrigation Scheduling', using 'Tail to Head' irrigation approach by employing various techniques and technology.

- The institute has 2-way linkage with industries where industry experts provide training to the faculty and students through various foundation programs and faculty provide training to industry and other academia.
- The Placement & Training Cell functions with the primary aim of placing students in top-notch companies even before the course completion.
- The institute has established Entrepreneurship Development Cell with the objective of creating and fostering the spirit of entrepreneurship among the youth.

Industry collaborations have led to an excellent rapport benefiting all the stakeholders.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

### **5. CONCLUSION**

### **Additional Information :**

The institute has following awards and recognitions.

- Adjudged twice for an AICTE-CII survey award for Best Industry Linked Institute in Civil Engineering 2013 & 2014 and Mechanical Engineering 2014 at National Level by MHRD India.
- Ranked in the band of 150-200 in NIRF ranking framework conducted by Ministry of Human Resource Development, Govt. of India.
- Ranked 50th in Times of India Survey for Best Engineering Institutes at national level amongst all Govt. & Private institutes & ranked 29th amongst Private Engineering.
- Got EDU Rand Rank: 6th in Maharashtra 2014
- Honoured as "Best Student Chapter Award 2017" in Maharashtra –Goa Section by ISTE
- Best College Award in Solapur University Jurisdiction (Urban) 2015 awarded by Solapur University.
- Award of Recognition in outstanding contribution in rolling out Infosys Campus Connect offering Industrial Electives during the period Jan 2015 to Dec 2015 and accepted as Partner Institute.
- Recipient of 1st rank (2017-18) and 5th rank (2016-17) in India and recognized as a valuable NPTEL Local chapter for performance.
- Recognized as a research centre by Solapur University, Solapur. Currently 17 research scholars have completed Ph.D. and 43 are pursuing Ph.D. degree at our research center. It has more than 850 research publications and 2 patents in last five years.
- More than 20 MOUs with various Industries and Organization.
- Recognized as a Remote Center on behalf of National Mission of Education using ICT for offering distance training to faculty & students.

### **Concluding Remarks :**

Walchand Institute of technology, one of the pioneering self-Financed Engineering Institute of Maharashtra is marching ahead with its vision of producing globally competent engineers imbibed with professional, ethical and social values. Institute started with only three UG programmes, is today offering 6 UG, 4 PG and 5 Doctoral programmes indicating its desire to grow vertically. It strives to achieve excellence by developing healthy liaison with all stakeholders to enrich teaching-learning process for producing employable engineers who will be instrumental in national development. Campus is vibrant with lot of all around activities throughout the year supported by professional bodies like IEI, ISTE, CSI, student associations and various cells such as Soft skill development cell and Entrepreneurship development cell. We have been keeping pace with the changing time by adopting blended teaching learning and expanding our knowledge base. This is due to pro active faculty members with a proper blend of young & experienced. Today faculty are upgrading their knowledge base through qualification upgradation. @ 15% faculty members are possessing doctoral degree. We have been successful in maintaining gender diversity while simultaneously maintaining heterogeneous culture of the institute. Best of infrastructure has ensured excellent academic delivery. In last decade our research culture has progressed by leaps & bound with industrial collaboration. This all has been possible due to transparent good Governance and a very substantial participation by alumni who have proved their leadership in their respective profession. Institute's success has been acknowledged by society through various awards & recognition.



### **6.ANNEXURE**

#### **1.Metrics Level Deviations** Metric ID Sub Questions and Answers before and after DVV Verification Average percentage of students enrolled in subject related Certificate/ Diploma programs/Add-on 1.2.3 programs as against the total number of students during the last five years 1.2.3.1. Number of students enrolled in subject related Certificate or Diploma or Add-on programs year-wise during the last five years Answer before DVV Verification: 2016-17 2015-16 2014-15 2013-14 2012-13 1000 873 867 1000 800 Answer After DVV Verification : 2016-17 2014-15 2012-13 2015-16 2013-14 2169 873 867 1184 800 Number of value added courses imparting transferable and life skills offered during the last five years 1.3.2 1.3.2.1. Number of value-added courses imparting transferable and life skills offered during the last five years Answer before DVV Verification: 13 Answer after DVV Verification: 21 4.2.4 Average annual expenditure for purchase of books and journals during the last five years (INR in Lakhs) 4.2.4.1. Annual expenditure for purchase of books and journals year-wise during the last five years (INR in Lakhs) Answer before DVV Verification: 2016-17 2015-16 2014-15 2013-14 2012-13 25.99 26.08 22.08 23.21 23.11 Answer After DVV Verification : 2016-17 2015-16 2014-15 2013-14 2012-13 23.77 26.66 26.31 18.87 22.65 7.1.12 Code of conduct handbook exists for students, teachers, governing body, administration including Vice Chancellor / Director / Principal /Officials and support staff Answer before DVV Verification : Yes

	Answer After DVV Verification: No Remark : unable to open link for referringcode of conduct in the college URL. Able to get Solapur university link
7.1.13	Display of core values in the institution and on its website
	Answer before DVV Verification : Yes Answer After DVV Verification: No Remark : Core values are not linked to college and the supporting document not authorised

### **2.Extended Profile Deviations**

### **Extended Profile Deviations**

No Deviations