

FOR 1st CYCLE OF ACCREDITATION

GOKHALE EDUCATION SOCIETY'S R. H. SAPAT COLLEGE OF ENGINEERING, MANAGEMENT STUDIES AND RESEARCH, NASHIK

GOKHALE EDUCATION SOCIETY'S R. H. SAPAT COLLEGE OF ENGINEERING, NASHIK PRIN. T. A. KULKARNI VIDYANAGAR, NASHIK 422005

www.ges-coengg.org

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL BANGALORE

(Draft)

1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Gokhale Education Society was founded on 19th February 1918, on the third death anniversary of Namdar Gopal Krishna Gokhale, by his illustrious disciple late Principal T. A. Kulkarni, who was a great social worker. Society has completed 100 years of useful existence and has today more than 140 units spread over three zones Mumbai, Nashik, Thane-Palghar catering 1.25 lakhs pupils as is one of the oldest and pioneering educational institution established with the main objectives of developing quality citizens through education and training and to raise the dignity of teaching profession. With a trail blazing journey of hundred years, Gokhale Education Society is managed entirely by the teachers; occupy a significant place in the educational map of the country, with its diversified and continuing education programs. It has emerged as lead and quality educational enterprise in India and an epitome of excellence in different types of education.

Gokhale Education Society's R. H. Sapat College of Engineering, Management Studies and Research, Nashik was established in 2009, is approved by AICTE, New Delhi, Recognized by Government of Maharashtra and affiliated to the Savitribai Phule Pune University (SPPU), Pune. The institute is ISO 9001:2015 certified. At present, Institute offers five Bachelors degree courses in Computer, Electrical, Electronics and Telecommunication, Mechanical and Civil engineering. Institute also offers five postgraduate courses leading to Master's degree in Engineering in Computer, Electrical (Power Electronics & Drives), Electronics (Digital Systems), Mechanical (Mechanical Engineering Design) and Master in Computer Application (M.C.A.) in Engineering. The total intake capacity of Institute is 480 students for undergraduate level and 156 students for postgraduate level.

The Institute is committed to provide value embedded quality technical education to students. The institute believes in philosophy of igniting minds and empowering competencies. The processes and practices of technical education are in line with this philosophy. In the institute, academic process is well documented and various innovative teaching learning methods are introduced at different levels of programs considering diversity and need. Institute follows a continuous evaluation system by each faculty, which has created a notable impact on performance of students in various fields.

Vision

- To Produce World class Engineers for converting global challenges into Opportunities through "Value Embedded Quality Technical Education".
- To develop this College as an Academy of Higher Learning in the field of Engineering & Technology.

Mission

- To Impart Technical Education through effective Teaching-learning process,
- To Nurture Creativity and Critical thinking in applying engineering skills to face the fast growing globalization.
- To Develop Holistic personality of the learners.
- To make this Institute as a Lead Centre of Research.

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1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- Strong foundation with centenarian social background of Society
- Expert faculty with vivid industrial experience with enthusiasm for research
- Faculty and Staff members are competent and trained for skill enhancement
- Effective teaching learning process with good academic results
- Good track record of training and placements
- Affordable cost of education
- Located in the heart of the city and surrounded by Industrial hub
- Increased palcement due to active Interaction with Industry
- Hostels for Boys and Girls in campus
- Good support for Extra and Co-curricular activities
- Well-equipped central library
- Well-equipped campus with bank, Post office, sport facility, Security facility and Wi-Fi campus
- Green Campus
- Staff members as part of management of the society

Institutional Weakness

- Less number of major research projects
- Moderate number of publications in reputed journals
- Maximum students with average merit at entry level
- Moderate alumni interaction and need to strengthen alumni association through proper networking
- Less consultancy work

Institutional Opportunity

- Research and consultancy initiatives
- Revenue generation through resource sharing
- Faculty and student exchange programs with foreign Universities
- To come up as autonomous institute

Institutional Challenge

- Increase placements in core industries
- More MOUs for increasing industry-institute interaction
- To attract students with higher merit
- To cope up with emerging technologies

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

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The institute follows the curriculum designed and approved by the Savitribai Phule Pune University. The faculty members contribute in designing the curriculum as a subject coordinator etc. for syllabus revision.

The Institute has strategic plan for effective implementation of the curriculum. Academic planning is done keeping in view Institute Vision, Mission, and PSOs of various programs. The processes are defined for executing academic activities as per the academic planning done before commencement of the year.

Department Academic Calendars are prepared which include curricular, co-curricular and extra-curricular activities. Various activities related to academic planning are carried out. The Course planning is done by faculty members which include course content, identified curriculum gaps based on pre-defined POs and COs, keeping in line with Institute mission. The implementation and delivery of the curriculum is regularly coordinated by Department Academic Coordinators (DACs) and monitored by HODs.

Academic process which ensures the quality of the curriculum delivery, attainment of components of course delivery like Unit tests, seminar, projects, practical, assignment, continuous assessments and students attendance are monitored. The Institute has taken initiative to start add-on courses to ensure all round development of students and their placement.

Feedback system of the Institute is in place to collect feedback on curriculum, course content delivery, extension activities, faculty development, infrastructural facilities, Laboratory development and value addition of Departments from various stake holders.

Teaching-learning and Evaluation

Institute assesses learning levels of the student's performance in various examinations and during teaching learning process. Based on these evaluations special activities are executed as per need. The faculty encourages students to learn through self-study and from their peers, guides them to develop effective and lifelong skills. Innovative teaching approaches like exploratory learning methods are adopted by teachers. Institute takes care to provide required training and resources to the faculty members for implementing these innovative practices. Utilization of resources like NPTEL, YouTube, slide share, etc., enhances effectiveness of teaching learning process.

Institute is committed to provide value embedded quality technical education to students at affordable cost. Various activities aiming at multidimensional development of student are executed regularly.

Institute has sufficient number of well qualified, experienced and competent teachers some of them are having industry experience. Transparent and unbiased recruitment procedure is executed. Various facilities are provided to the teachers to meet professional standards.

Institute strictly follows all the examination reforms and the time lines given by the University. The evaluation process is efficient, transparent and unbiased. Overall skills acquired by students are considered for measuring learning outcomes. The evaluations and stake holders' feed backs are analysed and reviewed to bridge gap in industry requirements.

Research, Innovations and Extension

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The Institute has constituted Research and Development Committee to encourage research and consultancy associated activities. Administrative help, academic assistance, financial support and execution autonomy is given to researchers for smooth progress of research schemes. The Projects, design and development of vehicles for various competitions such as SAE- BAJA, Supra etc. done. Every department has identified the forefront areas and available infrastructure is used optimally to obtain desired R & D outputs. Institute has received grants for various research projects from government and non-government agencies. The institute regularly organize workshops and Seminars on industry academia practices. The institute motivates faculties and students to publish their research work in reputed journals and conferences. Institute follows code of ethics to check malpractices and plagiarism in research. Institute has framed consultancy and testing policy to encourage faculty members for consultancy. Institute promotes and supports students to participate various challenging technical and research activity/competitions to inculcate research component amongst them.

The Institute has collaborations with various organizations and industries. It provides opportunities for industry-institute sponsored projects, training and hands-on experience to students and faculties. It also helps in laboratory set up, research and consultancy work.

Students of the institute are actively involved in several extension activities in the neighborhood community in terms of impact and sensitizing students to social issues and holistic development using platforms such as National Service Scheme (NSS), Student Welfare Department (SWD), Women Empowerment Cell (WEC) and the departments of institute individually. Unnat Bharat Yojna, Mahaforest Yojna, Sarva Jal Abhiyan, Cyber Security Awareness Campaign, Traffic Awareness Campaign, International Yoga day are some of the schemes implemented by the Institute as extension activities.

Infrastructure and Learning Resources

The physical facilities comprise of 27 classrooms, 52 laboratories, 6 seminar halls, ample space for outdoor & indoor sports activities, related academic and administrative rooms. Ramps and lifts are provided for physically disabled students.

Library comprises of 18377 books, 92 journals with 537 sq.m area. The Library is using commercial software SOUL 2.0 for automation of Library Services. NPTEL study material is available to students and faculty.

Institute has good IT infrastructure and regularly updates, IT facilities in terms of hardware, software and firewall system as per need. The institute has network of 664 computers with 74 Mbps internet connectivity to fulfill the academic and research need. Centralized firewall cyberoam is used for network monitoring, management and internet security. The institute has developed some enterprise resource planning modules.

The records kept indicate the maintenance/repair/calibration of the equipments. General civil maintenance and upkeep of civil infrastructure, landscaping is carried out by society. The institute has appointed external agencies for housekeeping and security of campus. Emergency exits and fire fighting system are provided to counter situations like fire and natural calamities.

Student Support and Progression

Institute has effective and efficient system for overall development of students. It ensures development of students in academics, co-curricular and extra-curricular activities with the help of students associations and

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student's chapters. Institute has mentoring system, where there is one teacher mentor for approximately twenty students. A faculty continues to act as a mentor, till the student completes his/her program. Mentor looks after mentees for academics as well as overall development.

Institute has effective system for informing students about various schemes of scholarships and freeships. Institute also supports some of the needy students. Institute has various committees such as student grievance cell, anti-ragging and women's grievance cell to resolve student grievances.

The teaching-learning process is enhanced by various activities such as Expert lectures, Industrial training/Visits, Workshops, seminars, technical events, project exhibitions to provide exposure to students for overall development. Students are made aware of various opportunities after graduation. Various training programs are conducted for career guidance and entrepreneurship development. Training and placement cell and departments play vital role in conducting mock interviews, expert lectures, training sessions and soft skill development programs for students.

The Institute also organizes various co-curricular and extracurricular activities in "Resonance" a cultural and sports event which eventually help the students to showcase their talent and leadership skills. Our students have participated and owned awards in various events at university, state and national level.

These attempts result in around 40 to 45% of students are placed through campus placement drives and around 8 to 10% of students are opting for higher studies and remaining students are placed through off campus recruitment drives in Industry. Many of the students become successful entrepreneurs. The alumna and stakeholders provide us feedback to enhance the system.

Governance, Leadership and Management

Institute has framed well defined vision and mission in-line with our parent organization Gokhale education society. It presents affordable, value embedded quality technical education which incorporates adequate infrastructure, research laboratories, industry-interaction, co-curricular and extra-curricular activities.

The governance fosters participative management and plays significant role in the reforms to raise the Institute in preference of stakeholders. The culture of decentralized governance is followed with well-defined protocols for getting internal autonomy. Careful strategic planning is done for development of the institution. Processes are implemented to excel in academic governance. The well defined organizational structure helps smooth functioning of administrative and academic processes.

Financial support is provided to faculties for higher studies and attending conferences. Faculties are also encouraged with financial support to attend skill development programs, seminars, workshops, conferences, projects. Institute has well designed performance appraisal system for faculty and nonteaching staff. The institute observed three tier structures for performance assessment.

Budgeting system is implemented to make efficient use of financial resources. Financial shortfall is managed through advance funds from society. Additional funds are received from funding agencies, industries and donors for research, infrastructure and laboratories development. Recruitment process is followed as per rules. Internal Quality Assurance Cell (IQAC) has been formed.

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Institutional Values and Best Practices

The institute is graced and enriched with green campus having number of centenary old banyan trees. Institute has adopted eco-friendly practices such as waste management and green initiatives. For better utilization of natural resources solar PV systems (30KW) and rain water harvesting system are deployed. The deployed solar generation unit and solar water units help to reduce carbon emission. As a part of social responsibility institute focuses on extension activities for environmental consciousness, moral, ethics and gender equity. The institute focuses on technical advancement with safety facilities like CCTV, fire extinguisher, campus security etc. Institute got location advantage by which home community is benefitted in terms of techno-social aspects.

The delegation of powers at institute level, motivation to research, teacher's orientation programs, the rigours skill development programs at different levels/ industrial training for students, learning through seminars helps in overall growth of the faculties and students. To inculcate universal values, among the students institute celebrates national festivals every year.

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2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	GOKHALE EDUCATION SOCIETY'S R. H. SAPAT COLLEGE OF ENGINEERING, MANAGEMENT STUDIES AND RESEARCH, NASHIK
Address	Gokhale Education Society's R. H. Sapat College of Engineering, Nashik Prin. T. A. Kulkarni Vidyanagar, Nashik
City	Nashik
State	Maharashtra
Pin	422005
Website	www.ges-coengg.org

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Professor	Dipak Vitthalrao Patil	0253-2570106	9970510532	0253-257010 4	dipakvpatil17@gm ail.com
Principal	Prafulla Chintaman Kulkarni	0253-2311842	9850962732	0253-257010 4	principal@ges- coengg.org

Status of the Institution	
Institution Status	Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular

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Recognized Minority institution	
If it is a recognized minroity institution	No

Establishment Details Date of establishment of the college 23-05-2009

State	University name	Dogument

State	University name	Document
Maharashtra	Savitribai Phule Pune University	View Document

Details of UGC recogni	tion	
Under Section	Date	View Document
2f of UGC		
12B of UGC		

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)				
Statutory Regulatory Authority	Recognition/App roval details Inst itution/Departme nt programme	Day,Month and year(dd-mm- yyyy)	Validity in months	Remarks
AICTE	View Document	04-04-2018	12	For Academic Year

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

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Location and Area of Campus				
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	Gokhale Education Society's R. H. Sapat College of Engineering, Nashik Prin. T. A. Kulkarni Vidyanagar, Nashik	Urban	10	14319

2.2 ACADEMIC INFORMATION

Details of Pro	ogrammes Offe	red by the Col	lege (Give Data	a for Current	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,Compute r Engineering	48	Higher Secondary Certificate	English	120	113
UG	BE,Electroni cs And Telec ommunicatio n Engineering	48	Higher Secondary Certificate	English	60	13
UG	BE,Electrical Engineering	48	Higher Secondary Certificate	English	120	72
UG	BE,Mechani cal Engineering	48	Higher Secondary Certificate	English	120	77
UG	BE,Civil Engineering	48	Higher Secondary Cerificate	English	60	46
PG	ME,Comput er Engineering	24	B. E.	English	24	9
PG	MCA,Master In Computer Applications	36	Graduate	English	60	29
PG	ME,Mechani cal Design Engineering	24	B. E.	English	24	13
PG	ME,Digital Systems	24	B. E.	English	24	1
PG	ME,Power Electronics And Drives	24	B. E.	English	24	5

Position Details of Faculty & Staff in the College

	Teaching Faculty											
	Profe	essor			Asso	Associate Professor			Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				17				27				80
Recruited	4	1	0	5	7	1	0	8	52	19	0	71
Yet to Recruit				12				19				9
Sanctioned by the Management/Soci ety or Other Authorized Bodies				0				0	J			22
Recruited	0	0	0	0	0	0	0	0	17	4	0	21
Yet to Recruit				0				0				1

	Non-Teaching Staff									
	Male	Female	Others	Total						
Sanctioned by the UGC /University State Government	7	-21		0						
Recruited	0	0	0	0						
Yet to Recruit				0						
Sanctioned by the Management/Society or Other Authorized Bodies				25						
Recruited	16	4	0	20						
Yet to Recruit				5						

	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				15						
Recruited	11	1	0	12						
Yet to Recruit				3						

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.	4	1	0	7	1	0	1	0	0	14	
M.Phil.	0	0	0	0	0	0	0	0	0	0	
PG	0	0	0	0	0	0	51	19	0	70	

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Temporary Teachers											
Highest Professor Qualificatio n		Assoc	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	1	0	0	1	
M.Phil.	0	0	0	0	0	0	1	0	0	1	
PG	0	0	0	0	0	0	11	4	0	15	

Part Time Teachers										
Highest Qualificatio n	Professor			Associate Professor			Assistant Professor			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt.	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?	2	0	0	2		

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

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Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	1051	5	0	0	1056
	Female	913	1	0	0	914
	Others	0	0	0	0	0
PG	Male	51	0	0	0	51
	Female	87	0	0	0	87
	Others	0	0	0	0	0

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

Years										
Programme		Year 1	Year 2	Year 3	Year 4					
SC	Male	32	19	16	15					
	Female	11	11	10	15					
	Others	0	0	0	0					
ST	Male	15	6	5	9					
	Female	5	8	8	3					
	Others	0	0	0	0					
OBC	Male	132	118	63	82					
	Female	86	70	53	105					
	Others	0	0	0	0					
General	Male	69	66	68	64					
	Female	50	44	49	57					
	Others	0	0	0	0					
Others	Male	30	29	23	38					

Female

Others

Total

3. Extended Profile

3.1 Program

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

Response: 684

4	File Description	Document
	Institutional Data in Prescribed Format	View Document

Number of programs offered year-wise for last five years

2017-18	2016-17	2015-16	2014-15	2013-14
10	10	10	10	8

3.2 Students

Number of students year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
2122	1970	1938	1908	1647

File Description	Document	н
Institutional Data in Prescribed Format	<u>View Document</u>	

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

2017-18	2016-17	2015-16	2014-15	2013-14	
469	518	476	464	340	

File Description	Document	
Institutional data in prescribed format	View Document	

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

2017-18	2016-17	2015-16	2014-15	2013-14
515	452	510	405	320

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File Description	Document
Institutional Data in Prescribed Format	<u>View Document</u>

3.3 Teachers

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

2017-18	2016-17	2015-16	2014-15	2013-14
121	119	128	112	104

File Description	Document
Institutional Data in Prescribed Format	View Document

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

2017-18	2016-17	2015-16	2014-15	2013-14
156	153	151	130	113

File Description	Document
Institutional data in prescribed format	View Document

3.4 Institution

Total number of classrooms and seminar halls

Response: 33

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

2017-18	2016-17	2015-16	2014-15	2013-14
234.29	194.63	268.95	271.73	206.89

Number of computers

Response: 664

4. Quality Indicator Framework(QIF)

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:

- Institute is affiliated to Savitribai Phule Pune University, thus, we thoroughly follow the syllabus laid down by the University.
- The Institute follows curriculum and adheres to academic calendar prescribed by the esteemed University.
- The Institution ensures effective curriculum delivery through a well-planned and documented academic policy.
- The subject distribution takes place before the commencement of the semester. The subject allocation is scrutinized depending upon the area of expertise of the respective teachers.
- Department wise academic calendar, class time table, individual time table, lab time table, lab utilization and activity calendar are prepared.
- For each course, its pre-requisites, concepts and learning objectives are clearly stated, based on which the teaching plan is prepared.
- Faculty maintains course file which contain the information like department academic calendar, individual time table, syllabus, course objective and outcome, teaching plan, lecture notes, experimental write-ups, assignments/tutorials, question banks and university question papers. Staffs also prepare e-material like PowerPoint presentations, e notes, etc.
- In semester exams are conducted as prescribed by the University.
- The academic performance of students is continuously monitored by class tests, assignments and oral evaluations along with result analysis of Online and In-semester examinations. The appropriate remedial measures are initiated for the students having poor performance in these evaluations.
- Monthly attendance record is prepared by the class coordinator and further brought into notice of the students and their parents via an e-attendance system.
- A local Teacher-Guardian scheme addresses the students grievances related to teaching-learning as well as personal issues.
- Additional workshops, seminars and lectures are organized to broaden the horizon for cognitive thinking (research, problem solving approach, live problem handling, etc.)
- CO-PO-PSO mapping is computed by each staff member for the respective subjects.
- ISO audit is conducted very semester to evaluate and ensure smooth academic functioning in the department.
- Course wise feedback is taken from students. Individual course feedback is collected though an online portal, where each student has to give course wise feedback. The feedback is analyzed by the Head of Department and corrective actions are taken accordingly.
- The effective implementation of curriculum is ensured by supplementing classroom teaching with expert lectures, seminars, mini projects, in-house and industry supported projects, industry visits, industrial internships, hands-on-sessions, tutorials, case studies, e-learning, NPTEL lectures, assignments, internal-tests etc.

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• Students at both UG and PG levels are provided numerous opportunities for innovation via internships, projects, undergraduate research, independent study courses, online courses etc.

After conclusion of teaching, final assessment of the term-work is done and marks are submitted to the University.

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

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

Response: 19

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

2017-18	2016-17	2015-16	2014-15	2013-14
7	5	5	1	1

File Description	Document
Minutes of relevant Academic Council/BOS meetings	View Document
Details of the certificate/Diploma programs	View Document
Any additional information	<u>View Document</u>

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: 22.26

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

2017-18	2016-17	2015-16	2014-15	2013-14
6	6	4	6	4

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File Description	Document
Details of participation of teachers in various bodies	View Document
Any additional information	View Document

1.2 Academic Flexibility

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

Response: 36.11

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

Response: 247

File Description	Document
Minutes of relevant Academic Council/BOS meetings.	View Document
Details of the new courses introduced	<u>View Document</u>
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: 100

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: 65.82

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

2017-18	2016-17	2015-16	2014-15	2013-14
2062	1910	1100	1168	280

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

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:

The Institute is always attentive towards the holistic development of the students. In view of this, the Institute has carried out supporting activities and conducted various value added courses enriching the University curriculum and overall development of the students.

The activities are arranged by the respective committees formed by the Institute, to name a few; formation of Women Grievance Redressal Cell, NSS chapter, Anti-ragging Cell, and other departmental activities.

The activities address the social issues viz. Swachha Bharat Abhiyan, blood donation camps, traffic awareness programs, plantation, importance of water and its conservation, health awareness etc. In addition to this, the important issues of gender equality, women safety, balancing life and career, women health awareness were identified and accordingly guiding programs were organized.

Dr Pritesh Junagade was invited to deliver lecture on Blood Diseases: Diet and Treatment, followed by blood donation camp. Cleanliness drive named 'Prayaas' was organized to create awareness for "Swachh Bharat". Social worker and women activist Mrs. Aparna Ramtirthakar interacted with the staff and students on the subject "I am proud of being a woman".

National Service Scheme (NSS) plays a vital role in enriching the souls and minds of the students. The overall objective of this scheme is 'Education and Service' to the community and by the community. Arpan Blood Bank arranged a blood donation camp. Special Youth Camp was organized under which, plantation program at ZP school ground was successfully conducted. Sarva Jaal Abhiyaan conveying the importance of water conservation was held by Sakaal group.

Women Grievance Redressal Cell is a platform to resolve the various issues of women. Prof.T.N.Date (K.K.W.I.E.E.R.,Nashik) and Dr. Medha Saikhedkar (NBT Law College) enlightened about balancing life

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& career, whereas Mr.Ajinkya H. Patil (Grongingen University, Netherland) spoke about awareness on gender equality and women safety.

Dr. Nareshchandra Kathole highlighted the importance of Civil Services Exam preparation, whereas, Mr. Rajesh Deshpande spoke about employability of an engineer. Prof. P. A. Chaudhari (H.O.D. MCA Dept) gave insight about importance of pursuing professional practice for women. Dignitaries like Prof S. R. Kulkarni, Dr Anjali Kulkarni, Prof. H. Amrute, Prof. Usha Kiran Pisharodya and Prof.Dr.P.B.Bhore, train them periodically.

The Emergency Response Team (ERT) educates volunteers about disaster management and trains them in basic disaster response skills, such as fire safety, light search and rescue, team organization, and disaster medical operations. ERT organized various activities and training for the team members comprising of presentation on Material Safety Data Sheet (MSDS), First aid & Cardiopulmonary resuscitation (CPR) and mock drill for fire fighting in association with BOSCH. Mr.Kiran Patil from Bharati Enterprises demonstrated fire fighting equipments.

Through all the above mentioned activities, the students are given exposure to various environmental and social issues. With the amalgamation of academic pursuit and multi faceted value system, the curriculum is enriched to develop the holistic personality of the students.

File Description	Document
Any Additional Information	<u>View Document</u>
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: 13

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

Response: 13

File Description	Document
Details of the value-added courses imparting transferable and life skills	View Document
Any additional information	View Document

1.3.3 Percentage of students undertaking field projects / internships

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Response: 26.2

1.3.3.1 Number of students undertaking field projects or internships

Response: 556

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

- 1.4.2 Feedback processes of the institution may be classified as follows:
- A. Feedback collected, analysed and action taken and feedback available on website
- B. Feedback collected, analysed and action has been taken
- C. Feedback collected and analysed
- D. Feedback collected

Response: A. Feedback collected, analysed and action taken and feedback available on website

File Description	Document
Any additional information	<u>View Document</u>
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: 0.23

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

2017-18	2016-17	2015-16	2014-15	2013-14
4	4	4	6	4

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

2.1.2 Average Enrollment percentage (Average of last five years)

Response: 73.26

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

2017-18	2016-17	2015-16	2014-15	2013-14
730	783	621	676	508

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

2017-18	2016-17	2015-16	2014-15	2013-14
939	1036	952	927	679

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

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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: 97.61

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

2017-18	2016-17	2015-16	2014-15	2013-14
469	518	436	464	328

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

Gokhale Education Society's R. H. Sapat College of Engineering, Management Studies and Research focus on the employability skills along with knowledge sharing. At every levels of academic journey of students, institute exerts enhancement activities to improve the student's skill quality. To identify the students as advanced learner or slow learner, performance in various examinations as well as in practical and lecture sessions is used.

Activities for Advanced learners:

Technical skill Development:

Workshop/Seminar/Internal Certification programs on recent trends

Corporate training (ZENSAR Employability Skill Development Program)

Participation in Conferences/Competitions/Technical Events

Mini-projects

Design and implementing applications

Application of research papers in projects

Involvement in consultancy projects		
Industrial training		
Industrial visits		
Managerial and leadership Development		
Student Chapters like ISHRAE,CSI, IPA		
Project competition like I-Rise, Avishkar		
Group Paper presentation		
Encouragement to professional certifications		
Encouragement to Higher studies		
Access to e- resources		
Motivation and guidance for Placement activities /competitive exams		
Case Studies: According to need of industry skill development workshops, certification programs are arranged on regular basis. I-Rise is a project competition organized by our institute regularly since last 3 years. I-Rise promotes interaction of students with academicians and industry experts. It also promotes interdisciplinary learning approach along with logical thinking, problem solving ability and team work. The mechanical engineering students have designed and developed all terrain vehicles for the participation in national level competition SUPRA.		
Computer engineering and E&TC students participated in national level competition Hackathon 2017 and 2018. Computer engineering team won Hackathon 2017 with first prize worth 1 Lac rupees at national level organized by Ayush Ministry, Government of India. Students from E&TC and Mechnical Department participated in National Level Project Competition Karmveer Expo. Mechanical engineering students won first prize. E&TC students also won First and Second prize for IOT based Smart City Project and Civil engineering department organized 40 hrs software training program on ETAB and REVIT for final year students. E&TC and Electrical department conducted GATE guidance.		
Activities for Slow learners :		
Extra lectures/Revision Lectures		
Extra practical sessions		
Question bank		
Mock oral/practical examination		
Counseling of students and parents using social media		

Counseling – special hints and techniques(Time management, Memory and reading techniques)

Guidance for Projects

Personal attention towards slow learners in teaching process

Case studies: It was found during academics, that second year computer, electrical and E&TC engineering students were facing problems in performing programming assignments. To overcome this problem, revision sessions of basics in C, C++ programming languages were arranged; similarly revision sessions on use of different instruments and devices in Electronics and Telecommunication department were organized. Institute has made special provision of soft skills training to mould the slow and advanced learners to plan their career and placements in all departments.

Specially developed question banks and assignments are made available to slow learners. Some departments are conducting written examination for the same. We also encourage fast learners to undergo these processes. Institute encourages advanced learners to participate in various competitions and activities conducted within and outside the institute.

File Description	Document
Any additional information	<u>View Document</u>
Link for Additional Information	View Document

2.2.2 Student - Full time teacher ratio		
Response: 17.54		
File Description Document		
Any additional information View Document		

2.2.3 Percentage of differently abled students (Divyangjan) on rolls Response: 0.09 2.2.3.1 Number of differently abled students on rolls Response: 2

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File Description	Document
List of students(differently abled)	<u>View Document</u>
Institutional data in prescribed format	View Document
Any other document submitted by the Institution to a Government agency giving this information	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:

Experiential learning is to earn knowledge through both personal and environmental interactions. Participatory learning motivates learners upon using their own experience and skills in solving problems. Some of practices are mentioned below.

Experiential learning:

Industrial training: 20 days industrial training is provided to third year Mechanical, Electrical, E&TC and Civil Engineering students in each summer and winter vacations. The faculty members also accompany them to understand the practices/procedures/processes in industry.

Internship Programs: The industries provide needs technical training to student and subsequently they are assigned with industrial problems to solve. The students get training on its own on required technology. M.C.A students are involved in this program in last semester.

Learning through Advanced simulation tools: Automation studio, to solve the various design problems by electrical, E&TC and mechanical engineering departments. Net simulator software is used to solve network design problems in computer engineering. Mechanical engineering students use Hyper-works and Auto-cad software for different design problems. Electrical Engineering students use PLC and SCADA for the same.

State of Art facilities: NVIDIA CUDA teaching Centre, ANSYS MAXWELL software for 2D and 3D low frequency electric field simulation for design of electromagnetic and electromechanical devices, dSPACE offers a comprehensive tool chain for virtual validation, rapid control prototyping, ECU auto coding, and hardware-in-the-loop (HIL) simulation.

Learning through consultancy work: Students help faculties in consultancy work.

Participative Learning, Collaborative learning and Problem Solving Methodologies:

Group Discussion and Debates

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Field visits and Excursion

Industry problems and Mini Projects: The problems are obtained from industries or our staff members define the problem statement. These problem statements are provided to the group of students for solving as projects. In addition students can choose topic of their interest and built projects on their own. This scheme is implemented for aspiring/interested second and third year students in all departments.

Based on this theme "HACKATHON (Computer Department)" is arranged in our institute since last year, problems obtained from industries (TCS) are provided to group of students, and the teams were trying to solve the provided problem in continuous 5 days competition.

It is regular practice in computer department to depute interested students in industries during week end days and in the vacations, though the internship is not mandatory for them in syllabus.

Design and development of Applications:

Electrical and Mechanical Engineering students prepare working models to solve real life problems. Civil engineering students have Constructed a Bandhara. Computer engineering and M.C.A. students have designed and developed websites; mobile applications and different application softwares. The mechanical engineering students have designed and developed vehicles. IOT models are developed by electronics engineering students.

Enquiry based Learning:

Technical Presentations by Students: Students form a group, choose the topic of their interest and make use of resources beyond the classroom for investigating of open problems/new avenues.

Peer- Lead Team Learning: Students learn through explaining concepts to other students (ex. Mozilla CLUB).

Additional experiments designed other than syllabus

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

2.3.2 Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc.

Response: 85.12

2.3.2.1 Number of teachers using ICT

Response: 103

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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: 20.8

2.3.3.1 Number of mentors

Response: 102

Tresponse. To 2	
File Description	Document
Any additional information	View Document

2.3.4 Innovation and creativity in teaching-learning

Response:

Creativity and innovation is the heart of teaching and learning that brings interest and motivation to learners. Students want something practical, relevant and useful for their professional life. It helps them to become active learners, sometimes getting hands-on experience by doing things.

In our institute following methods are used.

- 1.**Self Learning through real life problems learning method:** Students are given various opportunities to practice and learnt skills on real-life situations.
- Project Based Learning(mini projects)
- Industry sponsored projects
- Field projects
- 1. **Use of ICT:** Emphasis is given on use of slides, images, videos, models and animations to enhance understanding of a topic.
- 2. Use of Modern Tools: Mechanical engineering students use Hyper-works and ZWCAD software for different design problems and FFT Analyzer for vibration analysis. Electrical and E&TC Engineering students use PLC and SCADA for the same. XYLINX, MATLAB, dSPACE, ANSYS MAXWELL and power analyzer are used by Electrical engineering students. Net simulator software is used to solve network design problems in computer engineering department. OTDR is used in E&TC department. Automation studio used to solve design problems in Electrical, Mechanical, E&TC and Civil Engineering students.
- 3. Exploratory learning: Students play different games; they piece together the parts of the jigsaw

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puzzle of all recent information making the brains active all the time.

- 4. **Problem-based learning**: Responsibilities for learning are shifted to students through problem-based learning. It improves self-directed learning; responsibility, decision-making skills, leadership skills.
- 5.**Peer- Lead Team Learning:** Students learn through explaining concepts to other students (ex. Mozilla CLUB).
- 6. **Technical Seminar as method of learning:** Students form a group, choose the topic of their interest and make use of resources beyond the classroom for investigating of open problems/new avenues.
- 7. Expert Talks and Motivational Talks for students
- 8. **Learning through Competitions:** Students are encouraged to participate in various Competitions like Programming and model building.
- 9. **Industrial Training**: 20 days industrial training in each semester for Third and Final year students of Mechanical, electrical, Electronics & Telecommunication and Civil Engineering students.
- 10. Participation in Conference, Seminars and workshops
- 11. **Learning through consultancy work**: Faculty members carry out various consultancy works and students help them in this work.
- 12. Skill development workshops
- 13. Faculty Development Programs: Faculties attend various Faculty development programs for domain knowledge and for learning new trends in education technology/pedagogy which make their teaching more innovative. Faculty presentations in departments enhance peer learning of teachers.
- 14. Faculty Participation in conferences/seminars
- 15. Industry Exposure/Interactions for Faculty:

Faculties Attending Industry Training

Industry Sponsored projects

Faculty Industry Visits

- 1. **Teachers Orientation Programs (TOPS) (Teaching Methods):** Since inception, the institute provides one week orientation to the staff members joining the institute. The senior faculties and emeritus professors provide training on innovative teaching methodologies and effective communication.
- 2. **Teachers Technical Orientation Programs (Internal faculty development):** During this program faculty members present topic of their interest and demonstrate expertise in the concerned field in presence of other faculty and technical staff members of the department.

File Description	Document
Any additional information	<u>View Document</u>

2.4 Teacher Profile and Quality

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

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Response: 83.66		
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: 8.74

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

2017-18	2016-17	2015-16	2014-15	2013-14
16	15	17	3	2

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	<u>View Document</u>

2.4.3 Teaching experience per full time teacher in number of years

Response: 51.88

2.4.3.1 Total experience of full-time teachers

Response: 6278

File Description	Document
Any additional information	View 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: 71.92

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

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2017-18	2016-17	2015-16	2014-15	2013-14
18	25	16	15	10

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: 2.55

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

2017-18	2016-17	2015-16	2014-15	2013-14
6	5	6	1	1

File Description	Document
List of full time teachers from other state and state from which qualifying degree was obtained	View Document
Any additional information	View Document

2.5 Evaluation Process and Reforms

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

Response:

Our institute makes reforms in Continuous Internal Evaluation system (CIE), in line with the reforms made by SPPU. Reforms in CIE update the students with up-to-date trends in technology to meet global standards and the need of the industry and society. The evaluation process is reformed time to time in order to fill the gaps in attainment of Program outcomes.

SPPU revised syllabus in 2012 and introduced online examinations as reform in CIE for FE(first year), SE(second year) and In-Semester examinations for TE(third year) and BE(final year) students.

Consequently in 2014 SPPU changed passing criteria and independent passing is now compulsory for both

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examinations. SPPU revised the evaluation scheme in Year 2015 and credit based evaluation system was implemented as per directions given by UGC.

In PG courses reforms of SPPU are included in internal assessment. In ME 2013 Pattern for theory subjects(courses) 50 marks internal assessment was introduced and external assessment of 50 marks in end-semester examination. Choice based credit system is introduced. All PG Courses follows different mode of in semester assessment and also variety of techniques prescribed by university guidelines.

Additional measures for reforms in CIE taken at the institute level are as follows:

- 1. To impart with our mission "value embedding for quality technical education", projects continuous assessment is done by the concern project guide and another staff member as a reviewer, the students meet the guide according to schedule i.e. monthly and project diary is maintained. As per the requirement every department has developed its process for project evaluation.
- 2. The T.E/B.E. Projects are evaluated by industry experts, and they provide inputs to the students.
- 3. As revision to CIE, Practical/online Mock tests are conducted. Assignments/Class tests are also conducted as a part of CIE.
- 4. Before 2017 departments were following different CIE methods. To maintain the quality of the practical assessment a progressive record of practical (Term work) is implemented. It is revised from 2017; uniform term work assessment is done in all departments. Term work marks are allotted by maintaining Continuous Assessment Sheet (CAS) by each teacher to evaluate performance of students during practical sessions. In this assessment Experiment wise record of marks is maintained in practical assessment report. Each experiment is assessed for 10 Marks in which Attendance is having 3 Marks, Performance of Practical 4 Marks and Journal completion and writing for 3 Marks.

Whereas computer engineering department follows guideline for CAS given by BOS computer engineering.

- 5. A mini- project, Seminars also follows CIE. Presentations are taken in semester to evaluate student's performance before final exams.
- 6. The aptitude test is introduced as part of CIE. The departments conduct aptitude tests to satisfy the needs for campus selection. In some departments, "Myexamo" online examination system is used for the same.
- 7. For M.E. courses Electrical engineering and Electronics departments has made Post graduate student's publication desirable from 2016.
- 8. Project poster presentations are desirable for M.E. Mechanical students as reform in CIE since 2016.

File Description	Document
Link for Additional Information	<u>View Document</u>

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

Response:

The Institute follows Savitribai Phule Pune University's guidelines for the internal assessment of the theory in-semester examination and term work.

Internal assessment Term Work for Practical

Internal assessment in college is transparent. Assessment is done in front of student for every practical on regular basis **i.e. weekly**. Experiment wise record of marks is maintained in practical assessment report.

Each experiment is assessed for 10 Marks in which distribution of marks is Attendance (3 Marks), Performance of Practical (4 Marks), and Journal completion and writing (3 Marks).

It is observed that the internal evaluation improves regularity and overall performance of students.

Class Tests/In semester examination

Class tests and In-semester exam, these two exams are conducted **once in semester**. After the test, the answer papers are evaluated. The assessed/corrected answer sheets of internal tests are shown to the students and performance is discussed by the concerned faculty member. Students having grievances with the internal evaluation process can discuss their doubts with respective faculty members, grievances are solved in the classroom. Corrected answer sheets of Unit tests are provided to students for further improvement.

Project Work/ Mini-Project/ Seminar Assessment

The project continuous assessment diary is maintained. Project progress assessment presentations are arranged frequently. The assessment is done by the concern project guide and one staff member as a reviewer, corrections or suggestions if any are immediately communicated to students. These project reviews presentations are arranged monthly basis **i.e. 4 times in each semester**. This review insists the students to follow deadlines, to be focused, improve presentation skills and communication.

Seminar assessment is done on similar basis. Transparency is maintained while giving marks to students.

Internal assessment for PG Courses

Internal assessment for PG students is meticulous. It consists of Continuous assessment (CA) for insemester 50 Marks for each theory subject. Every department has appointed PG Coordinator. PG Coordinator displays time tables before start of the semester and assessment scheme for in semester evaluation.

In Semester Internal assessments for PG course is based on at least two written tests, assignments and seminar presentations by students on subject related topics on continuous basis. All these evaluation methods carry suitable proportion of marks for calculation of final in-semester 50 marks in a subject.

Two class tests are conducted in a semester at interval of one month, and students can observe their

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performance on answer sheet and grievance if any can be raised and it is solved by the teachers. Assignments are given to the students after the class tests and followed by technical presentations. It makes **continuous assessment frequent**. In addition computer engineering department students study and submit report/ note on any Standard Journal Research Paper related to subject as part of internal continuous assessment (CA).

The end semester examination of elective subjects (only) for 50 marks is conducted and evaluated internally by the institute following norms of the university. For this, subject teacher submits two sets of end semester paper in University format to the Principal.

	File Description	Document
Link for Additional Information		<u>View Document</u>

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

Response:

Considering that the students are the foremost stakeholders in every educational institution, a mechanism is defined by SPPU. In our institute to get complete transparency in the evaluation the platform is made available for handling redressal of students grievances related to examinations and internal evaluation.

Our institute is following the transparent process for the evaluation approved by the SPPU. There is well defined mechanism for the grievance redressal for assessment by SPPU. To address all examination and evaluation related problems, institute has appointed CEO (college examination officer) as Single Point of Contact to handle grievances of University level and to have smooth communication.

A suffered student writes an application to CEO and he handles it as per the norms of SPPU. CEO categorizes it either as grievance related to institution level or University level external assessment.

In case of college level assessment related grievance, internal examination grievance committee of the concerned department takes care of it. Whenever the grievance is referred about the internal evaluation, the concerned HOD along with committee checks maintained CAS record and shows to the student and tries to resolve the grievance. The grievances regarding the Class test, mock test and TW assessment or project progress evaluation are also handled by the committee.

Redressal of Grievance for External Examination Assessment done by the University:

Online examinations:

Online Examination grievances are handled by Network administrator at runtime to avoid student's inconvenience at exam time. During on line examination, if a student identifies ambiguity in question, like given options are not correct, data given in question is insufficient or answer options are repeated, students can report it. Committee at university level takes cognizance and resolves the grievance. Institute strictly follows all instructions and deadlines given by University to solve the grievances.

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Theory examination:

To deal with the grievances relating to the University assessment, SPPU allows online application for the photocopy of the assessed answer-books. After application students receive demanded photo copy through email within 10 days.

1. If there is a mistake in evaluated answer sheet, like totaling of marks is incorrect. Then the students apply for verification i.e. correction. The students get corrected mark sheet in time bound and efficient manner.

Student can apply for revaluation of answer sheets within 10 days of receipt of photo copy. The students discuss with their subject teachers regarding correctness of their performance/answers in received photo copy of the answer sheet. Based on recommendations of teachers, they may go for further process with application of revaluation of the same. In case of revaluation, university reappoints examiner and the answer sheet are reevaluated. The result is communicated to Institute and to the student.

Students are also provided with copies of answer sheet after revaluation process. Students' term work is assessed in front of them and evaluation is done according to their performance.

File Description	Document	
Any additional information	View Document	

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

Response:

Academic year starts as per academic calendar prescribed by Savitribai Phule Pune University (SPPU). Institute adheres to the academic calendar of SPPU.

- 1. Departmental academic calendar is prepared by the Head of Department before the commencement of the semester. The calendar outlines schedule for semester class work, class test, in semester examination, external examination, university online schedules, conclusion of Theory/practical/Teamwork and extracurricular and co-curricular activities.
- 2. The faculty members prepare the lesson plan before the commencement of semester according to academic calendar. Teaching plan presents the topics to be covered lecture wise; it is approved by the head of the department.
- 3. Practical Continuous assessment system is implemented for assessment of laboratory work. The assessment is done on the continuous basis of as experiments are performed. The syllabus coverage report is compiled on monthly basis for theory and practical. If things are found to be lagging with reference to academic calendar, corrective efforts for compensating the losses are made.
- 4. The performance of the students is also assessed on a continuous basis by conducting Unit tests (by institute) and in-semester examination (question paper provided by University and evaluated by internal staff) according to academic calendar.
- 5. The continuous assessment of projects is done by the concern project guide and a committee member as a reviewer, the students meet the guide and reviewer according to schedule and diary is

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maintained.

6. In addition mock tests are also conducted the part of Continuous Internal Evaluation.

File Description	Document
Any additional information	View Document
Link for Additional Information	<u>View Document</u>

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:

Program Specific Outcomes (PSOs): PSOs are statements that explain what the graduates of a particular engineering program should be able to do.

The Course Outcomes (COs): They are the resulting knowledge skills the student acquires at the end of a course. It defines the cognitive processes a course provides.

Program Outcomes (POs): Represent the knowledge, skills and attitudes the students should have at the end of a four year engineering program in India.

Program specific outcomes (PSO) for every program along with course outcomes for every course are identified (using University syllabus). In addition outcomes defined according to input from stakeholders.

PSO and COs are made available to the students at the beginning of the semester. COs are also available in the syllabus. These are also published on the website of the college. Institute assists the teachers to achieve these by proper support systems. Course outcomes are communicated to students during lecture hours and in laboratories by each subject teacher. Discussions on PSOs and COs are done in departmental meetings. POs, PSOs and COs are mandatory part of course file prepared by course teacher

Program specific outcomes and course outcomes for all programs offered by the institution are displayed and disseminated through:

- 1. College website
- 2. HOD Cabins
- 3. Notice Boards of the department
- 4. Department Laboratories

File Description	Document
COs for all courses (exemplars from Glossary)	<u>View Document</u>
Any additional information	View Document
Link for Additional Information	View Document

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

Response:

As stated earlier the course outcomes for every course are identified in University syllabus. Additional course outcomes defined according to requirements from stakeholders. The 12 Graduate attributes are used in defining the Program outcomes (POs). The Program Outcomes are expected, achievable attributes of any engineering graduate. The program specific outcomes (PSO) specify what a graduate should be able to do after completing specific engineering program. PSO are also identified from feedback from stakeholders. The COs and PSOs may be modified after various feedbacks or surveys like Course End Survey, Alumni survey and employers survey. The CO to PO mapping is done.

Name of subjects of this mapping the following matrix is used to map attainment of POs in terms of Cos.

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	P11	PO12
CO1	3			3						1		
CO2		2						2				
CO3					2	V	1				1	
CO4												3

The attainment of COs with reference to PO is calculated. One of the ways is to confirm attainment of CO to satisfy various POs. The attainment of CO is validated based on Unit test, University exams, assignments, laboratory work and project work. The various value addition courses add to attainment of POs. The attainment is measured using likert scale based on weak or strong correlation between CO and POs and PSOs.

Direct and indirect methods are used to evaluate the CO attainment. Direct evaluation method consists of internal and external evaluation. Internal evaluation and external evaluation are having 30% and 60% weights respectively. Indirect evaluation method consists of Course exit survey which is having 10% weight.

The Program Specific Outcomes defined may be modified by the faculty as per stake-holders feedback. The PSOs are also modified after various feedbacks or surveys like Parent's Survey Alumni survey and employer's survey.

	Parent's Survey	Alumni Survey	Employers Survey
Target PSOs			

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File Description	Document
Link for Additional Information	<u>View Document</u>

2.6.3 Average pass percentage of Students

Response: 89.17

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

Response: 502

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

Response: 563

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

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response:

Criterion 3 - Research, Innovations and Extension

3.1 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: 10.43

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)

2017-18	2016-17	2015-16	2014-15	2013-14
4.675	1.675	1.050	1.950	1.082

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

3.1.2 Percentage of teachers recognised as research guides at present

Response: 4.13

3.1.2.1 Number of teachers recognised as research guides

Response: 5

File Description	Document
Any additional information	<u>View Document</u>

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

Response: 0.43

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

Response: 10

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

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Response: 117			
File Description	Document		
Supporting document from Funding Agency	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:

Institute has created an eco system for innovations in the form of creation/sharing of knowledge through

- NVIDIA CUDA Teaching Centre Programme,
- Industry-Institute-Interaction,
- Interdisciplinary live projects
- Project exhibition
- Student chapters of various professional bodies

NVIDIA's Academic Programs Team is dedicated towards empowerment of researchers and developing collaborations with professors and researchers. Our Institute has been selected as a **CUDA** Teaching Center based on our demonstrated commitment towards advancement of parallel education using CUDA C/C++ on 1st of August 2014. As a part of this award, the Institute has received CUDA Teaching kit consisting GPUs (One Tesla K20, Two Quadro 6000, One GTX 680) and two books and other training material. The Institute has utilized above fully configured development systems for hands-on labs and self-paced learning and have developed GPU-accelerated training cluster for students to learn how to use queue/sub workflow, MPI programming. This CUDA teaching center has been renewed on 8th March 2016 for next academic year. In addition to this the Institute has received two more GPU.

Institute has collaboration with various Industries around Nashik. Institute encourages students to get the Inplant Training during summer and winter vacations. In order to bridge the gap between institute and industry, the institute has formed a Industry Institute Interaction (**I-Cube**) Cell, and various activities like industrial training, in-plant training etc activities are conducted.

Institute organizes interdisciplinary working project exhibition, 'I- RISE' every year. The industry people and students of other institutes visit this exhibition and interact with the participants. Faculties of the Institute are invited to share their expertise to various Industries and Government bodies. Expert talks and guest lectures by eminent personalities from the industries on emerging trends and technology are arranged in association with student chapters of professional bodies like ISHREA, IPA. Faculty members are always encouraged to attend and to participate in reputed national and international conferences, workshops, seminars, FDPs; short term training programmes. These platforms provide the opportunities to interact with academicians and industry experts and motivation to carry out research and consultancy.

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Adequate flexibility is provided to the faculties involved in consultancy and testing work and the revenue generated through consultancy and testing work is shared. All the facilities like free Wi-Fi, high computing labs, well-furnished infrastructure with dedicated instruments/ equipment are available for research and consultancy work.

File Description	Document	
Link for 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: 86

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

2017-18	2016-17	2015-16	2014-15	2013-14
28	22	17	13	6

File Description	Document	
Report of the event	View Document	
List of workshops/seminars during the last 5 years	<u>View Document</u>	

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	<u>View Document</u>	
Any additional information	View Document	

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

Response: Yes

File Description	Document	
Any additional information	<u>View Document</u>	

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

Response: 1.25

3.3.3.1 How many Ph.Ds awarded within last five years

Response: 5

3.3.3.2 Number of teachers recognized as guides during the last five years

Response: 4

File Description	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: 1.09

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

2017-18	2016-17	2015-16	2014-15	2013-14
15	42	34	20	16

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: 0.57

3.3.5.1 Total number of books and chapters in edited volumes / books published, and papers in

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national/international conference-proceedings year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
13	26	10	10	08

File Description	Document
List books and chapters in edited volumes / books published	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:

Students of the institute are actively involved in several extension activities in the neighborhoods community in terms of impact and sensitising social issues and holistic development using platforms such as National Service Scheme (NSS), Student Welfare Department (SWD), Women Empowerment Cell (WEC) and the departments of institute individually.

- Various Government Schemes like "Unnat Bharat Yojana", is implemented every year. In this scheme, five villages are selected, and social awareness campaign is carried out.
- Under the regular activity of NSS, Swami Vivekananda's inspirational life related lectures for engineering students are arranged.
- Under the regular activity of NSS, Youth rally is arranged on every 14th Aug from *Hutatma Chowk* College road to CBS, Nashik in memories of great freedom fighters.
- Under Green Army and *Mahaforest Yojana*, various trees in our college campus are planted.
- Students from Civil engineering department has constructed 'Van Bhandhare' a series of Check Dams in association with 'Maharashtara Vanavasi Kalyan Ashram'. Students voluntarily constructed series of three check dams in a tribal area near village 'Kel Vihir' Taluka Peint, District Nashik.
- During Ganesh festival, on the day of immersion, students collected the Plaster of Paris 'GANESH IDOL' at different immersion points in association with 'Swapnapurti Foundation' a NGO. This helped in prevention of Godavari River pollution in Nashik city on large scale.
- "School Drop Student Survey" is carried out to gain information about non school going students in two separate wards in Nasik City.
- Students from Computer Department conducted "Cyber Security Awareness" Program at five different Schools in Nashik.
- As a part of Road safety Awareness Programme as an initiative taken by Nashik Traffic Police, students of the institute have organized seminars, rallies to provide information about road safety. Students & volunteers regularly take part in 'Traffic Awareness Campaign' held at "Traffic Park', located near Mumbai Naka, Nashik.
- After the introduction of 'International Yoga Day' every year institute celebrates the yoga day by

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- inviting yoga experts from 'Yog Vidhyadhaam" Nashik.
- Under the special activity of NSS, Annual Youth Camp was conducted at "Govardhan" village where volunteers enjoyed a Marathi Folk Song play commonly known as 'Bharud' at a 500 yrs old 'Govardhaneshwar' Temple.
- On 29/08/2014 "Sarva Jal Abhiyan" a rally was organised with the help of "Sakal" news paper group to spread message "Water is Wealth! Value It. Preserve It. Enhance It".
- Additionally, to enhance the technical knowledge of students, Institute provides and permits the students to participate in the various national and technical events and competitions such as SAE BAJA, SUPRA. Institute provides financial assistance to these activities.

File Description	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: 11

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

2017-18	2016-17	2015-16	2014-15	2013-14
2	2	3	2	2

File Description	Document
Number of awards for extension activities in last 5 years	View Document
e-copy of the award letters	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: 20

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

2017-18	2016-17	2015-16	2014-15	2013-14
6	4	6	4	0

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	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: 49.24

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

2017-18	2016-17	2015-16	2014-15	2013-14
1427	795	1235	965	400

File Description	Document
Report of the event	View Document
Average percentage of students participating in extension activities with Govt or NGO etc	<u>View Document</u>

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: 363

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

2017-18	2016-17	2015-16	2014-15	2013-14
67	80	98	66	52

File Description	Document
Number of Collaborative activities for research, faculty etc	View Document
Copies of collaboration	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: 95

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)

2017-18	2016-17	2015-16	2014-15	2013-14
34	31	29	0	1

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

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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 campus is spread across 10 acres of land with the built-up area is 14319 Sq. Mt. in the heart of the city which ensures a uniform and balanced distribution of space and resources to all categories and also to provide and maintain the necessary amenities to staff and students for better teaching-learning processes. Planning and designing of classrooms, laboratories etc. complying with the standards stipulated by AICTE, DTE, and SPPU.

The infrastructure required for each department is designed and placed in close proximity to ensure efficient teaching-learning process.

The campus has the Main building, Library building, Central Workshop, and Boys and Girls Hostel.

Class Rooms

The institute has 21 classrooms for UG, 6 classrooms for PG. Classrooms are spacious, well-ventilated with natural light and adequate electrical facilities. Well-designed furniture, teaching aids like LCD etc. are used in teaching - learning process. The institute has provided LAN/Wi-Fi facility for some of the classrooms. The tutorial rooms are also defined for each department to conduct the sessions.

Laboratories

The institute has 51 laboratories including separate Research Lab, Computer Center and Language Lab. All laboratories are well equipped with latest machinery, hardware and software to cater the need of industry as well as curriculum requirements. Every department is having its own Computer Lab with the specialized and latest software.

Workshop

The institute has a spacious workshop with different sections like Fitting, Carpentry, Welding, a machine shop with CNC turner and milling machine etc.

Seminar Hall

To organize workshop, seminar, webinars, the institute has 6 seminar halls. The college has a centralized air-conditioned seminar hall equipped with modern LCD projector, computer workstation, and audio-visual facilities.

Library

The ultimate objective of a library is to fulfil the information needs of its stakeholders such as faculty

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members, students, research scholars as well as support staff with the predominant sources of information and services. Our spacious and separate library building gives adequate space for all. The digital library caters the need of e-journals and e-resources available on the globe. The access to the Library software OPAC is made available Intranet-based and Internet-based as well.

Computing Facilities

The institute has high-end computing facilities with 4 IBM servers and with 664 computers with latest configurations. All computers are connected with LAN with internet facilities. The network is managed by Manageable Switches for any network related troubleshooting and it is secured with hardware firewall by Cyberoam (650 concurrent users). The institute has internet leased line (ILL) of 54 Mbps and 20 Mbps of bundled Broadband connections from NMEICT, MHRD, New Delhi to use all types of e-resources.

An energetic learning experience is not about attending classroom sessions but instead involving in Guest lectures, webinars, seminars, conferences and symposium. This helps the students to get new ideas and insights where knowledge sharing kick starts.

File Description	Document
Any 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:

- Keeping in view with the mission of the Institute as "To develop the holistic personality of the learners", the Institute has not only having adequate facilities for teaching-learning but also having a spacious area of 30562 Sq. Mt. for the sports, games, gymnasium and cultural activities which makes the students versatile.
- This area is not only used for specific activities but many activities like basketball, football, Cricket, Volleyball, Table Tennis, Badminton, Kho-Kho, Kabaddi, Health-related physical fitness activities like running, jogging, walking, Yogic Asanas.
- Physical Education is a part of extra-curricular, the practice is also carried out in our college campus. Students also participate in Intercollegiate and inter-university sports tournaments for which they practice in the campus itself within available sports facilities.
- These facilities not only use for sports events but also used for inter-college competitions, technical events like "ASHWAMECH", "IGNITRA", "ANVIT", "ELECTRO-SPARK" and "GESTRONICA" and "Robo-Race".
- Students of each department celebrate various activities like Teacher's day, Guru Purnima Day, Engineer's Day, and Women's day by conducting Seminar, cultural programmes etc.
- During Annual Social Day 'Resonance', students perform Skit play on Social issues for awareness among the society.
- 'Resonance' an Annual Social Day conducted every year by Student council members which included various activities such as Cultural night, Art gallery, Rangoli, Annual Prize distribution, Sports events etc.

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- Every year the institute organizes a mega event for cricket lovers named as 'Gokhale Inter Engineering Colleges T-20 Tournament' where teams from various engineering colleges participated.
- Physical fitness examination is conducted for First Year (UG) students as per the University guidelines.

File Description	Document
Any additional information	View Document

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

Response: 66.67

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 22

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

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

Response: 48.72

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

2017-18	2016-17	2015-16	2014-15	2013-14
90	115	95	150	115

File Description	Document
Details of budget allocation, excluding salary during the last five years	View Document
Audited utilization statements	<u>View Document</u>
Any additional information	View Document

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4.2 Library as a Learning Resource

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

Response:

Institute has a well-stocked Central Library has a collection of Books, National and International Journals, Project, Dissertations, Audio-Video Material and e-resources. The library is partially automated using commercial software Soul 2.0 (Software for University Libraries 2.0) from 2013 onwards. Software for University Libraries (SOUL) is state-of-the-art integrated library management software designed and developed by the INFLIBNET Centre based on requirements of college and university libraries. It is user-friendly software developed to work in a client-server environment. The library is also automated with barcode technology for circulation and patron's entry. The library has excellent infrastructure to meet its requirements, most of the library operation is computerized using upgraded software of version Soul 2.0.14.

Library collection and member status can be browsed/ searched on an intranet using SOUL 2.0 OPAC and also user can access library collection through WebOpac from anywhere. http://114.79.175.109/webopac/home.html The library maintains a separate Special Reference collection consisting of Encyclopedias, Dictionaries, Projects, Dissertation, and Handbooks as well as Competitive exam books. Books are classified using the Dewey Decimal Classification Scheme.

The Institution has a central Library. This section provides detailed information about the central library.

Particulars/Year	2017-18	2016-17	2015-16	2014-15	2013-14
Books	1090	556	1077	2649	1241
Volumes	15857	14767	14211	13134	10485
Journals	92	91	90	81	78
e-Journals	NA	6	8	6	10

Initiatives Taken By Library to Achieve Its Objectives:

- Library Orientation is conducted to first-year engineering students to make aware the library facility and services.
- Library Automation: For smooth functioning of library and to be focused more users centric, Central Library has purchased SOUL Software from INFLIBNET centre which is an autonomous centre of UGC. Library Automation is carried out by SOUL Software where circulation, cataloguing and OPAC modules are being successfully run.
- Book Bank Facility: Books bank facility is available to SC and ST Students and economically weak students.
- Current Awareness Service: such as newspaper clippings display, Document Delivery service through e-mail such as scanning the content pages of periodicals, regular updates from a library.
- WEBOPAC Facility: WEBOPAC (Web-based Online Public Access Catalogue) is introduced to avail the library facility at the doorstep to its users. Library Resources such as printed and digital collection is accessible. All the subscribed E-Resources, as well as some additional useful

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informative open access resources, are integrated to WEBOPAC so that users get access at one place with very less time.

- Online I-card System with the help of ERP Software: Central Library facilitates Online I-Card system with the help of ERP Software to staff and students.
- E-Resources: Central Library sends the student and staff to SPPU Sub-Center which provides access to e-resources for ex. (IEEE, Springer, Science Direct, Wiley Blackwell etc.). In addition to that library has a subscription to Springer e-books (1890) for students and staff.
- Library Membership: Library is also having the Institutional Membership of National Digital Library which provides a source of information such as e-book, journals, conference proceeding, video lectures etc.

File Description	Document
Any additional information	<u>View Document</u>

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

Response:

Enrichment can mean education in the largest sense. Enrichment through education is any act or experience that has a formative effect on the mind, character, or physical ability of an individual. Technically, enrichment through education is the process by which society deliberately transmits its accumulated knowledge, skills and values from one generation to another.

To achieve this Institute Central Library is enriched with many collections of rare books, special reports and other knowledge resources. The Rare book from rare book Society of India (RBSI) is linked on Library WebOpac SOUL 2.0 site for maximum utilization http://114.79.175.109/webopac/home.html .It includes Rare Manuscripts, Photographs, Sculptures, Maps, Essays, Books & Videos on various titles such as History, Yoga, Philosophy, Economics, Geographical, Literature, and Empire etc.

The central library also serves the Student and Staff with 155 Special Reference books which include International publication books for ex. Springer, Wiley, Taylor & Francis, CRC Press, Britannica, McGraw hill etc. Library also has a good collection of 112 Handbooks and 31 Dictionaries for knowledge enrichment.

The library is well stocked with **205** competitive examination books useful for GRE, TOFEL, Government exam, Technical & Non-Technical, MPSC, and UPSC exams.

File Description	Document
Any additional information	View Document

4.2.3 Does the institution have the following:

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- 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

Response: B. Any 3 of the above

File Description	Document
Details of subscriptions like e-journals,e- ShodhSindhu,Shodhganga Membership etc	View Document
Any additional information	<u>View Document</u>

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

Response: 19.87

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

2017-18	2016-17	2015-16	2014-15	2013-14
7.57	20.73	22.81	25.39	22.85

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
Any additional information	View Document

4.2.6 Percentage per day usage of library by teachers and students

Response: 6.6

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

Response: 148

File Description	Document
Any additional information	View Document

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

Response:

In this digital era, online learning is playing a vital role in the Teaching-Learning process. Therefore, the institute is prompt in upgrading the IT facilities frequently with high-computing hardware, latest software, and Internet Security.

- The institute has adequate IT infrastructure with well connected LAN cables and Wi-Fi channels.
- The institute has four higher-end servers which are capable to handle the load incurred during network activities such as Online examination, Code competition etc.
- Currently, the institute has Internet Leased Line (ILL) with 54 Mbps line and 20 Mbps of Broadband connection, which fulfils the requirement of online examination, MOOC lectures, NPTEL videos, campus placement training etc.
- Our servers are well equipped with rack and manageable switches. The servers are installed network server OS such as Windows Server, Red Hat Server, Ubuntu Server and CentOS.
- All laboratories are having a backup with uninterrupted power supply (UPS).
- Every year the Institute upgrades the IT infrastructure as per the need for technologies and computing power. Therefore we have an upgraded system from Core2Duo to i3, then i3 to i5 and now i5 to i7. In addition to it, the institute has isolated GPU based lab to fulfil the requirements of high-performance computing.
- The institute always promotes open source software such as Ubuntu, Open Office, MySQL etc., however, the institute has more than 400 Microsoft Licensed copies which serves the purpose of AICTE norms and industry as well.
- The application software such as MATLAB, Altair Hyper Works, DSpace, ANSYS, Studio MAX, NetSim which caters the need of industries demands.
- IT services and its maintenance is managed by the Department of Computer Engineering and help from third-party vendors is taken when the problems are related to hardware.
- IT infrastructure is well-equipped to conduct all types of online examination.

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IT Security

- The institute has a Cyberoam firewall for 650 concurrent users and has well-defined rules to restrict the users from accessing the unwanted and unrelated sites and to protect it from outside attack.
- Internal security is managed by Quick Heal anti-virus which is installed on all machines and is centrally managed with Admin console.

File Description	Document
Any additional information	<u>View Document</u>

4.3.2 Student - Computer ratio

Response: 3.2

File Description Document

Any additional information View Document

4.3.3 Available bandwidth of internet connection in the Institution (Lease line)

>=50 MBPS

35-50 MBPS

20-35 MBPS

5-20 MBPS

Response: >=50 MBPS

File Description	Document
Any additional information	View Document

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

Response: No

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

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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: 99.97

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)

2017-18	2016-17	2015-16	2014-15	2013-14
234.29	194.6	268.9	271.73	206.6

File Description	Document
Details about assigned budget and expenditure on physical facilities and academic facilities	View Document
Audited statements of accounts.	View Document
Any additional information	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 institute adopts the established systems and procedure for maintaining and utilizing physical, academic and support facilities.

- The Institute outsources the maintenance of the infrastructure facility like campus premises, elevator, water cooling/purification system, housekeeping to external agencies.
- Repair and maintenance of civil work are done based on the requirement and complaints received from individual departments.
- IT related issues are maintained and rectified in-house and if it is related to hardware, sent those to the external agencies.
- The equipment of the laboratories is supervised by respective Lab In-charge and if any issues related to equipment are forwarded to the Head of the Department for further action. The movement register is also maintained for the movement of equipment for project work if any.
- A budget is allocated to the respective department for maintaining and purchasing of the equipment.
- The housekeeping work of laboratories, classrooms, library, and institute are taken care by an external agency.
- The gardening of premises is assigned to the external agency by the Society.
- The external agency is appointed by the Institute for the security purpose.
- The CCTV has been installed at all prominent location such as parking, entrance gate, corridor,

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laboratories, classrooms, canteen, office and more importantly at Examination centre.

- The EPABX system and Programmable Bell System are installed and maintained by the Electronics and Telecommunication department.
- The renewal licenses and technical support for various software like HyperWorks, Unigraphics, DSpace, ANSYS MAXWELL, Automation Studio etc done on yearly basis for getting updates/patches.
- The calibrations of the equipment/instruments are done on regular basis by the concerned supplier or company.
- A fire extinguisher is refilled and checked before the due date of expiry. And training for how to use firefighting equipment in an emergency is also given.
- Emergency exits and fire fighting system are provided for any kind of natural or man-made disasters.
- AMC is deployed for lift, generator etc.
- RO and purifier system situated on the terrace for drinking water.
- The Institute also has electricity backup with diesel generators.
- All computer laboratories are having uninterrupted power supply with a rate ranging from 2 KVA 16 KVA.
- Considering the need of an hour for the non-conventional energy sources, the college is equipped with PV Solar system with 30 KW + 10 KW.
- The minor repairing and fabrication of furniture items, metal fixture and electrical issues are handled by the designated person from the respective department as on required.
- The Library has a spacious hall for reading along with separate digital room to access e-journals and other e-resources and at the same time, they are available from any networked computer in the institute.
- The sports facilities are monitored by our physical director and he also ensures that these facilities are made available to all the students.

File Description	Document
Any additional information	<u>View Document</u>

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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: 54.09

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

2017-18	2016-17	2015-16	2014-15	2013-14
894	1210	1072	987	986

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: 1.11

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

2017-18	2016-17	2015-16	2014-15	2013-14
23	24	17	21	21

File Description	Document	
Any additional information	View Document	

5.1.3 Number of capability enhancement and development schemes –

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- 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

File Description	Document
Details of capability enhancement and development schemes	<u>View Document</u>
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: 8.44

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

2017-18	2016-17	2015-16	2014-15	2013-14
288	208	147	76	107

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

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

Response: 0.01

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

2017-18	2016-17	2015-16	2014-15	2013-14
00	00	00	00	01

File Description	Document
Details of the students benifitted by VET	View Document
Any additional information	<u>View Document</u>

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	View Document
Details of student grievances including sexual harassment and ragging cases	View Document

5.2 Student Progression

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

Response: 34.37

5.2.1.1 Number of outgoing students placed year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
264	195	142	73	101

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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 Document

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

Response: 3.69

5.2.2.1 Number of outgoing students progressing to higher education

Response: 19

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: 10.78

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

2017-18	2016-17	2015-16	2014-15	2013-14
25	13	05	03	06

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

2017-18	2016-17	2015-16	2014-15	2013-14
197	110	185	45	30

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File Description	Document
Upload supporting data for the same	<u>View Document</u>
Number of students qualifying in state/ national/ international level examinations during the last five years	View Document
Any additional information	View Document

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: 44

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

2017-18	2016-17	2015-16	2014-15	2013-14
27	10	06	00	01

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	<u>View Document</u>
Any additional information	<u>View Document</u>

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

Response:

The aim of forming Student Council is to involve the students in academic, co-curricular & extracurricular activities. Through these activities Student Council members learn planning, organization, analysis, estimation and execution along with trouble shooting. From each class of all departments, class representatives are selected. Amongst all class representatives, election of General Secretary is done by confidential voting process. The student having second number of vote is to be selected as a cultural secretary. The student council is supervised by a committee of faculty members headed by the Principal of the college. The student council is sub-divided into various committees as follows.

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- 1. *Students' Council*: Under section 40(3) of Maharashtra Universities act, 1994, this council is established every year in the Institute and it performs its duties prescribed.
- 2. *Student Grievance:* This committee addresses student grievances and maintains harmony and discipline among the students.
- 3. *Ant-Ragging:* This committee ensures zero ragging incidents in the Institute and also spreads awareness among students against any type of ragging activities.
- 4. *Cultural:* This committee co-ordinates various cultural activities and events throughout the year. "Resonance" is annual social gathering which showcases cultural talent of students.
- 5. *Sport:* This Committee organizes "Gokhale Inter Engineering College T-20 invitational cricket tournament. Our students actively participate in various sports in intercollegiate, interuniversity, state, national and International level.
- 6. *Magazine*: 'Resonance' is our annual magazine based on theme published by Magazine committee. Students express their talent in the form of articles, poetry, interviews of eminent personalities etc. This exercise imbibes societal values in students. *The Best Magazine award is received to our college magazine* "Resonance" in the academic year 2013-14, 2014-15, respectively.
- 7. *Technical Activities:* Every Department's active Student's chapters conduct various programs such as Expert lectures; Industrial visits etc. Inter society "Project Competition" known as "I-Rise", is organized during Annual Social gathering event "Resonance". Institute organizes technical events in which each department participates and conducts the event like ASHWAMECH, ELECTROSPARK, ANVIT, IGNITRA, G-ESTRONICA INNOVISION etc. The various technical competitions such as Paper Presentation, Technical Quiz, Treasure hunt, Bridge Model Making, Lathe war, Bike Mania, CAD War, Robo War, Circuit making competition, Poster Presentation, Counter Strike, Blind coding, etc are conducted. These events are organized to motivate the students to take enhance their technical ability. The students are also taking participation in national programs such as BAJA, SUPRA, Hackethon, Tech-fest etc.
- 8. *Extension Activities:* Any education is incomplete without social awareness. "NSS Committee" is active in carrying out different activities such as Blood donation Camp, Swachha Bharat Abhiyan, Yoga day, Tree plantation, collection of Ganesha idol on Ganapativisarjan etc. "NSS Committee" also organizes residential winter camp known as "SHRAM-SANSKAR" in rural area to enhance social awareness and personality development of students. In this camp, students perform Swachha Gram Abhiyan, Public awareness program like Pathnatya, Prabhatpheri etc. to educate the students from rural areas. Computer engineering students are taking the awareness programs on cyber security sponsored by Quickheal foundation. Under this scheme, eighteen thousands students are benefited in the academic year 2017-18.

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File Description	Document	
Any additional information	<u>View Document</u>	
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: 10.8

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

2017-18	2016-17	2015-16	2014-15	2013-14
12	12	11	10	09

File Description	Document
Report of the event	<u>View Document</u>
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 college alumni association is functional and contributing significantly to the development of institution through non-financial means. The main objectives of alumni association includes promoting and fostering mutually beneficial interaction between the alumni and the present students of the institute and also between the alumni themselves, encouraging them to take an active part in the work and progress of the institute.

The main objectives of association are:

- 1.To promote and foster mutually beneficial interaction between Alumni and the Institute.
- 2.To encourage the Alumni to take abiding interest in the process and development of Institute.

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- 3. To arrange and support in placement activities for the students of Institute.
- 4.To encourage the students of the Institute and members of the Association for research &development work in various fields like electrical engineering, computer engineering etc.
- 5.To mentor the students of the Institute for higher education, development of character and being GOOD citizens.
- 6.To provide scholarships to deserving students and ex-students of the Institute for the purpose of education and sports.
- 7.To encourage and guide the students of the Institute on self-employment to become entrepreneurs.
- 8.To guide students of the Institute on various professional avenues available and support them through various activities such as expert advice, seminars, visit etc.
- 9. Promote the Industry-Institute interaction to bridge the gap between industry requirements and education offered and enhance students' employability.
- 10.To help and promote other regional bodies for training programs in entrepreneurship development, with resources available with association.
- 11. To motivate and support students of the Institute in sports, cultural and extra-curricular activities.
- 12.To promote computer and internet literacy among the society.
- 13.To help and guide students and ex-students of the Institute from anti-drug, anti-ragging, and any other anti-social activities.
- 14. To organize yearly alumina meets.

Sighting the above objectives of Alumni Association our alumni contributes in many ways for the development and betterment of our Institute. Our students and Institute are benefited in various fields such as student placement, training, expert lectures, career guidance sessions, Industrial visits and mentoring.

The alumni of Institute is guiding and nurturing our students to become engineering professionals.

File Description	Document
Link for Additional Information	View Document

5.4.2 Alumni contribution during the last five years(INR in Lakhs)

? 5 Lakhs

4 Lakhs - 5 Lakhs

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3 Lakhs - 4 Lakhs

1 Lakh - 3 Lakhs

Response: <1 Lakh

File Description	Document
Alumni association audited statements	<u>View Document</u>

5.4.3 Number of Alumni Association / Chapters meetings held during the last five years

Response: 2

5.4.3.1 Number of Alumni Association /Chapters meetings held year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
00	01	01	00	00

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	f the institution	is reflective	of an e	effective l	eadership i	in tune v	vith th	e vision
and n	nission of the insti	tution							

Resp	onse:
------	-------

Response:

Vision

- To Produce World class Engineers for converting global challenges into Opportunities through "Value Embedded Quality Technical Education".
- To develop this College as an Academy of Higher Learning in the field of Engineering & Technology.

Mission

- To Impart Technical Education through effective Teaching-learning process,
- To Nurture Creativity & Critical thinking in applying Engineering skills to face the fast growing globalization,
- To Develop Holistic Personality of the learners,
- To make this Institute as a Lead Centre of Research.

The institute's mission is to produce competent and responsible Engineering graduates where they will face industrial challenges arising out of fast growing globalization through academic excellence so as to accomplish need of society for betterment of the human life without hampering green environment. In addition, the students are made acquainted with the latest technological needs of the industry.

The Gokhale Education Society has a legacy of veteran and enthusiastic faculty members. The faculty members and students of the institute are committed to perform research activities, publish papers in reputed journals and conferences, and become member of editorial boards, review articles of various journals and conferences, offer guidance to research scholars through their valuable expertise. Many government funded research projects are currently being executed in various departments of this Institute. The faculty members are continuously promoted for attending training programs and conferences across India in the view of upgrading technical knowledge. The Institute is also aware about societal challenges. In this view, NSS activity is promoted to make the students responsible towards society, environmental, global issues and to help them to become responsible and holistic person.

The Institute boosts significant on-campus placements, many of our graduates are being accepted by reputed universities for higher studies and researches in India and abroad. The Career Guidance Cell (CGC) under T& P has been established and always aims to develop the soft skills of the students to enhance their employability. The conducive and creative learning environment in the Institute boosts the critical thinking of the students. In addition, various Memorandum of Understanding (MOUs) are signed between the Institute and Industries to promote Industry-Institute Interaction (III).

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File Description	Document
Link for Additional Information	View Document

6.1.2 The institution practices decentralization and participative management

Response:

Response:

The Management recognizes the need for decentralization for the growth of the institute and accords autonomy commensurate with the level of management. Coordinators and Heads are appointed who are given autonomy for efficient governance.

The roles and responsibilities of administrators / decision makers for various assigned jobs listed below clearly depict the delegation of authority, providing operational autonomy leading to a decentralized governance system.

Principal - To implement and monitor the education system to cater to the Institute's vision and mission.

Head of the department - Is responsible for the academic and administrative functions of the department.

In addition, Registrar, Accounts Officer, Librarian, Workshop Superintendent takes care of office related activities, finance related issues, library resources and workshop related activities respectively. Other support functions are handled by NAAC Coordinator, College Examination Officer, Industry Institute Interaction Cell Coordinator, Academic & Research Coordinator (BCUD), NSS program officer etc.

At the department level: Each program has UG and PG coordinators.

Preparation of academic calendar based on time frame set by the University for planning and organizing of activities is done by Time Table Coordinator.

Along with head of department, each department has academic coordinator who, in consultation with the faculty teaching the subject, sets course objectives/outcomes, prepares the teaching plan for the semester, conducts meetings with faculty members regularly to monitor and review course completion and attainment of course outcomes and submits a report of the same to the Principal and head of department.

Class teachers are assigned for all classes. The college has always promoted participative management as a form of democratic governance as it believes it would result in creating an ambience favorable for overall growth of the Institute. This is achieved by encouraging faculty, staff and students to contribute through participation.

Strategic Level:

GB, IQAC, LMC bodies involving representations from the management, faculty, and other stakeholders formulate policies aligned with the Institute's vision and mission.

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Principal, through periodic meetings with the Heads plans and enables implementation of the same at functional/operational level.

Faculty and staff participate in the decision making and implementation at the department level.

Heads of the departments, along with faculty, plan academic and other activities to be conducted in the department.

Faculties are involved in the implementation of teaching-learning process for ensuring quality.

The teaching learning process is regularly monitored by respective heads for effective implementation to ensure smooth and systematic functioning of the Institute.

Each class has a class representative who participates in the decision making for student related issues. Along with the head and they ensure the effective implementation of true decision. Students also participate in decision making through representation in Student's Council and take active part in curricular and extracurricular activities.

Students participate in the learning process and are involved in the functioning of the Institute.

Department and office staff provides the necessary support services for effective functioning of the institute.

File Description	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:

Response:

The strategic plan was developed by Governing body: Gokhale Education Society devised a strategic plan, with the view of future roadmap to receive quality education, employability enhancement, to receive 'Industry Standard Advanced Technology' and consequently to improve comprehensive organizational development. The Project Director, Principal along with the Board of Directors reviews progress periodically and updates the plan annually if needed. These meetings provide valuable guidance and decisions. The staff members execute the planning process and provide important support to analysis and to complete these plans effectively.

The mission is:

To Impart Value Embedded Quality Technical Education through effective Teaching-learning process.

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To Nurture Creativity & Critical thinking in applying Engineering skills to face the fast growing globalization.

To Develop Holistic Personality of the learners.

To make this Institute as a Lead Centre of Research.

The Project Director along with the Board of Directors envisioned post graduate courses in Engineering to meet ever demanding industrial standards with employable students having cutting edge skills like industrial automation, advanced controls and Industrial Internet of Things. In turn, Post graduate courses with higher educational policy goals and performance measures have been implemented. The courses are as follows:

Computer Engineering : M.E. (Computer Engineering)

Electronics and Telecommunication Engineering: M.E. Electronics(Digital Systems)

Electrical Engineering: M.E. Electrical(Power Electronics & Drives)

Mechanical Engineering: M.E. Mechanical(Design)

Keeping the employability and skill development of students in mind, latest technology softwares for post graduate courses are purchased.

eg. ETAB for Civil Department.

Intelligent hardware and software equipments mentioned below have been purchased; these softwares are taught beyond the syllabus looking towards high industrial demand.

Automation Studio (AS)

Programmable Logic Controller (PLC)

Fast Fourier Transform Analyzer (FFT)

Optical Time Domain Reflector (OPTDR)

This will enable our students to have academic knowledge; proficient and aware of industrial training to ensure increase their employability in industries.

Also as per industrial requirements, the intake is increased in Computer Engineering, Mechanical Engineering and Electrical Engineering.

Academy strategy plan is devised for the benefit of students to face challenges in ever changing industrial

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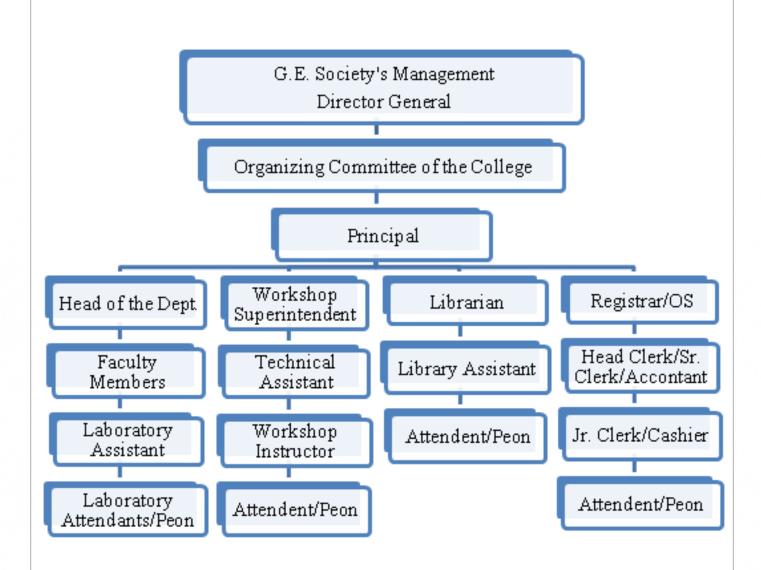
scenario. E&TC department conducted workshops on 'PCB boards designing' in academic year 2013 for S.E. As a result, students developed their own customized PCB boards for their B.E. projects in 2015. Computer department also started in-house training programs for students in python, java and android to make them ready for ever changing technology advancements in the field of computers. BE computer students secured 1st rank all over India in Smart India Hackathon 2017 by Ministry of Ayush of Government of India. From academic year 2013 onwards, implant training was introduced for TE students under the initiative of III.

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

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

Organizational structure of the institution:

Response:



All the departments of the institute have departmental committees coordinated by faculty members and monitored by Head of the Department for smooth conduction of academic and administrative activities. The institute has constituted committees as per the norms and also additional committees are constituted for internal coordination and monitoring of the activities.

The institute is represented by Principal on various committees at Society level.

Service rules procedures:

Statutes Governing Terms and Condition of different services like Professors/Associate Professors/Assistant Professors have been appointed in the institute under the guidance of (as per) UGC, AICTE, SPPU rules and regulations Under Section 42 and /or 73 of the Poona University Act, 1974.

Recruitment:

- Load Calculation Department Level
- · Approval from Concerned Authorities
- · Advertisement in Printmedia, College Website
- Scrutiny of Applications Received
- Interviews Conduction
- · Submission of selection reports to the University
- Information from the University regarding Approvals
- Appointment Order
- Joining Letter

Promotional policies: Employees' promotional policies are depicted as bellow

- Consider all applications equally, based on their predetermined requirements.
- Determine whether an internal candidate has the skills and eligibility to perform the job
- Examine recent performance evaluations of internal candidates
- · Interview qualified internal candidates if necessary
- Personal motivation and willingness for accepting additional responsibilities
- Discuss the promotion (Salary/Designation/Resposibilities) with committee which constitutes Project Director, Principal, Management representative, Department head to receive approval
- Keep records of the application review process and note the criteria with which they promoted an internal candidate

Grievance redressal mechanism:

- Assess:Review Allegation & open case
- Investigate: Form appropriate committee, gather & review data
- Conduct Investigation
- Make findings, investigation summary
- Review findings & summary
- Implement recommendations, close case

File Description	Document	
Any additional information	<u>View Document</u>	
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: B. Any 4 of the above

File Description	Dogument	
File Description	Document	
Screen shots of user interfaces	<u>View Document</u>	
Details of implementation of e-governance in areas of operation Planning and Development, Administration etc	View Document	

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

Response:

Response:

Case: Sanitary Napkin Vending Machine Issue

A notice of general meeting of women's grievance redressal cell and counseling cell was issued on 29/09/2016 and was held on 30/9/2016 at 4.00pm in Instrumentation & Control lab at fourth floor. The meeting was presided by Principal Dr. P. C. Kulkarni and coordinated by Prof. Mrs. S. G. Khadilkar. The agenda of meeting included review of last meeting, status of defective machine from ladies washroom(as discussed in last meeting), issues regarding women and arranging some guest lectures for women's health issues. Nine out of Thirteen members of the cell attended the meeting.

During review meeting conducted on effective use of machine placed at ladies washroom was discussed. It was observed that there was lot of issues regarding operation of machine. So it was decided to display warning on the machine. Also it was decided to check feasibility of use of similar machines at girl's hostel. Mrs. Anuja Joshi was assigned to maintain record of machine maintenance.

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:
Response:

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Employee welfare includes the schemes that benefit the employees working in the institute. Although it is a costly procedure for the institute yet it is needed as it helps in the overall development of the employees.

Following welfare scheme are designed by institute in order to increase the working efficiency of employee, to boost up the morale of employee, to get timely result, to improved industrial institute relations, this motivates them to do better for the institute.

- 1. Staff and Principal Quarters are provided to employees as per requirements.
- 2. Uniform for employees:

Institute offer uniform to all employees mat free of cost.

3. Study Leave(Deputation):

Institute encourage, motivates the employee to upgrade their qualification by enrolling to Ph.D programs at reputed Institutes/Universities for them a study leave (max. upto 6 months with full pay) are provided. Employees are encouraged to attend various FDP's, Workshop and Seminar; for which expenses are given, facilitates by the institute.

4. Provident Fund:

Institute has a provision of providing EPF facility to all employees on pay roll. PF Benefits the employee in terms of Pension to Member, Pension to Family (on death of member), Scheme Certificate, such PF supports are provided to employee by institute

5. Group Gratuity:

Group Gratuity Scheme is available as per Government norms. Therefor all eligible employees from the institute have been benefited by group gratuity scheme.

6. Group Insurance Scheme :

The life insurance policy can be issued to individual as well as to groups. Institute has group insurance policy of about 151 employees which help them in their needy time.

7. Maternity Leave:

This facility provided to all female staff working in the organization.

8. Doctor on call:

This facility is available for all staff and students. Doctor is available as and when required.

Advance in case of need of employee.

File Description	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: 45.2

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

2017-18	2016-17	2015-16	2014-15	2013-14
56	48	57	47	55

File Description	Document
Details of teachers provided with financial support to attend conferences, workshops etc during the last five years	View Document
Any additional information	<u>View Document</u>

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: 3.6

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

2017-18	2016-17	2015-16	2014-15	2013-14
08	04	03	02	01

File Description	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

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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: 27.22

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

2017-18	2016-17	2015-16	2014-15	2013-14
37	31	24	26	39

File Description	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:

Response:

The institute carries out performance appraisal process for both teaching and non-teaching staff. The institute observed three tier structures for performance assessment.

- 1. Self-Assessment
- 2. HOD Assessment
- 3. Principal Assessment

While self-assessment the individual staff make teaching learning evaluation, curricular, co-curricular activity, Research activity and Institutional assignments evaluation.

The Head of the program evaluate the self-assessment given by individual staff and after quantitative and Qualitative analysis the remark is assign in writing.

Subsequently the appraisal form is forwarded to the head of the institution for necessary action.

Based on the evaluation made by individual staff and subsequent remark given by head of the program, the faculty/staff is called for interaction before the head of the institution.

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The final course of an appropriate action is decided collectively by the principal and the Management. The staffs are encouraged while those lacks with expectation are counseled and guided for improvements.

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:

Response:

Institution conducts internal and external financial audits regularly

The auditors are appointed by the parent trust. The institution is having qualified practicing Charted Accountant as an auditor who audit the accounts annually. After the audit, the report is sent to the management for review.

No major audit objections were raised is previous five years reports.

Details of Last External audit:

External Audit				Last Audit	Details of Compliance
Auditor : ACCOUNTANT	S.V.GINDE S,MUMBAI	&	CO.CHARTED	31/03/2018	No suggestions received

External Audit Details

Sr. No.	Academic Year	Date of Audit	Audited Expenditure	Auditor Details	Details Compliance
			(Ruppes)		
1.	2017-18	31/03/2018	176,421,492.95/-	S.V.GINDE CO.CHARTED ACCO NTANTS,MUMBAI	&No Suggestion Ureceived
2.	2016-17	31/03/2017	163,621,028.00/-	S.V.GINDE CO.CHARTED ACCO	& No Suggestion Ureceived

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				NTANTS,MUMBAI
3.	2015-16	31/03/2016	155,796,235.00/-	S.V.GINDE &No Suggestions CO.CHARTED ACCOUreceived NTANTS,MUMBAI
4.	2014-15	31/03/2015	137,421,634.00/-	S.V.GINDE &No Suggestions CO.CHARTED ACCOUreceived NTANTS,MUMBAI
5.	2013-14	31/03/2014	110,099,620.85/-	S.V.GINDE &No Suggestions CO.CHARTED ACCOUreceived NTANTS,MUMBAI

Additional Funding and utilization

• Grants from University for BCUD Research Project For Principal Investigator (P.I.) **Dr.Prashant Nehe (Case Study)**

SPPU BCUD Audit:

Sr.No.	Academic Year	Principal Investigator	Audited Amount (Rupees)	Auditor Details
1	2016-17	Dr. Prashant Nehe	, ,	PRATIK PARNERKAR & ASSOCIATES,Nashik

Grants received from the University for the purpose NATIOANL SERVICE SCHEME arranged by the

institution.

NSS Audit:

Sr.No.	Academic Year	Audited Ex	penditure	Auditor Details
		(Rupees)		
		Regular	Special Camp	
		Activity		
1	2017-18	22100/-	33540/-	M N GURRAM & CO.
				CHARTED ACCOUNTANTS,Pun
2	2016-17	21510/-	31671/-	M N GURRAM & CO.
				CHARTED ACCOUNTANTS,Pun
3	2015-16	21170/-	31374/-	M N GURRAM & CO.
				CHARTED ACCOUNTANTS,Pun
4	2014-15	21342/-	30032/-	M N GURRAM & CO.
				CHARTED ACCOUNTANTS,Pun
5	2013-14	21135/-	29507/-	M N GURRAM & CO.
				CHARTED ACCOUNTANTS,Pun

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: 2

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

2017-18	2016-17	2015-16	2014-15	2013-14
0.96	0	0	0.76	0.28

File Description	Document	
Details of Funds / Grants received from non- government bodies during the last five years	View Document	
Any additional information	View Document	

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

Response:

Response:

Student's fees are the major source of Institutional funding. This fund amount is deposited in bank through which all bank transaction process/expenses incur. For the optimal utilization of Institutional funding, Principal looks after that funds are to be used in correlation with budget, with due attention to transparency, economy and efficiency.

The Institute has a well-defined policy and procedure to monitor effective, efficient and optimal utilization of available financial resources for institute development.

Policy and Procedure includes:

Annual budget for institute is prepared at the beginning of academic year, considering potential income and expenditures (recurring and non-recurring) involved for the year.

All the Departments of the Institute prepare their annual budget considering required funds for the particular academic year.

The departmental budget for apparatus, equipments, instruments, consumables, semi-consumables items and miscellaneous is prepared by Head of the Department and scrutinized by Principal of the Institute. The consent is sought from the Management.

All the bills/ invoices/ vouchers and purchase order of expenses against sanctioned budget for particular head are scrutinized by the Stores and accountant.

In the final stage, accountant forwards the payment process through Principal to Management and issues the cheque to vendor duly signed by Society Authority.

By conducting different exams and other activities like JEE, DINFO, PET,FE CAP & CSI activity etc. Institute resources are utilized and revenue is generated.

The deficit in budget is managed by Society through reserve fund, if required.

File Description		Document	
Link for Additional Information	Vi	iew Document	

6.5 Internal Quality Assurance System

6.5.1 Internal Quality Assurance Cell (IQAC)	has contributed significantly for institutionalizing th
quality assurance strategies and processes	

Response:

Response:

The Institute has formed an Internal Quality Assurance Cell (IQAC). The sole objective of this committee is to improve the overall quality of academic and administrative functioning and activities of the Institute in accordance with vision and mission.

IQAC committee will reviews the outcome of various academic and administrative committees. This committee will contribute significantly in strategizing, formulating, standardizing and implementing various quality policies, initiatives and related processes in future.

File Description	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:

Response:

IQAC is recently formed but the institute is regularly monitoring the quality of teaching learning process, structures and methodologies of operations and learning outcomes at periodic intervals during its meetings and verify the obtained outcomes are as per the decided objectives. In every meeting it includes to discuss the learning outcomes in agenda in each semester. The IQAC takes care to maintain the quality in the process of teaching learning and evaluation.

Two Examples of Institutional Reviews and Implementation of Teaching, Learning Reforms facilitated by the IQAC:

- 1. Examination Reforms: Online mock examination through Myexamo platform
- 2. Online feedback collection from students on Teacher Efficiency and administrative mechanism.

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	3.	The institute is	s following ISO	2015:9001	standard and is ISO	certified since	10/01/2018.
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6.5.3 Average number of quality initiatives by IQAC for promoting quality culture per year

Response: 0.2

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

2017-18	2016-17	2015-16	2014-15	2013-14
01	0	0	0	0

File Description	Document
Number of quality initiatives by IQAC per year for promoting quality culture	View Document
IQAC link	View Document

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: D. Any 1 of the above

File Description	Document
e-copies of the accreditations and certifications	<u>View Document</u>
Details of Quality assurance initiatives of the 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:

The institute is always keen on improving the academics. The institute has started two new PG courses i.e. M.E. Computer Engineering and M.E. Mechanical Design in 2013-14 and started M.E. Digital Systems and M.E. Power Electronics in 2014-15.

The college has established an ISO 9001 Cell for its Quality Management Systems. All the systems and procedures of all academic departments, administration, examination, physical education, library, placement and training, purchase and stores are established, completely documented and maintained as per requirements of International Standard ISO 9001: 2015 Quality Management Systems. The institute isISO certified since 10/01/2018. The Institute has developed quality manual system and prepared process manual to follow. Principal with the assistance of Management Representative plans and organizes periodic internal quality audits and management review meetings. Internal quality audits are cross functional audit and Principal deputes trained auditors to various departments for doing the audits as per a schedule. Periodic inputs are obtained from the departments for discussion in management review meetings. The management review meetings and internal quality audits are scheduled once in six months. The meetings are chaired by Principal and attended by Management Representative, HODs, Departmental ISO 9001 Coordinators and Internal Quality Auditors. HODs and departmental ISO 9001 Coordinators ensures that all systems and procedures in the departments along with the corresponding documents and records are maintained as per the requirements of ISO 9001, and are produced for verification for external and internal quality audits. Continuous improvement is an ongoing process. The audit findings are rectified, suitable decisions are taken for the issues related to achievement of objectives and periodic revisions of documented procedures are also carried out.

IQAC is recently formed and the institute is regularly monitoring the quality of teaching learning process, structures and methodologies of operations and learning outcomes at periodic intervals during its meetings and verify the obtained outcomes are as per the decided objectives. In every meeting the learning outcomes are disucussed. The IQAC takes care to maintain the quality in the process of teaching learning and evaluation. Institutional Reviews and Implementation of Teaching, Learning Reforms facilitated by the IQAC are Examination Reforms, revised feedback system.

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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: 8

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

2017-18	2016-17	2015-16	2014-15	2013-14
01	01	04	01	01

File Description	Document
Report of the event	View Document
List of gender equity promotion programs organized by the institution	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:- All persons entering the institute undergo strict security checks. It is mandatory for students as well as the staff to carry their I-cards during working hours in the institute campus. 139 CCTV Cameras are operative at different locations in the institute such as main gate, institute entrance, Principal's Office, library, reading rooms, class rooms, all laboratories, workshop, parking lots, corridors and Computer Centre etc. All laboratories are equipped with fire extinguishers. Male security guards are available for twenty four hours at the entrance. Lady security guards have also been appointed in the institute. The contact numbers of nearby police station and toll free help line numbers are displayed on notice boards displayed at strategic locations.

Counselling: - The objective of counselling is to help the students not only in teaching learning process but also in addressing their social and emotional problems. This activity is carried out through Mentor mentee scheme. The faculty members are assigned as a Mentor for 20 students. They conduct meetings with the mentee students periodically and interact with them personally to understand their academic and non academic problems. They try to resolve the issues in their capacities by giving suggestions or taking actions if necessary. This scheme proves to be effective for First year and (FE) and Second year (SE)

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students in adapting themselves in the new institute or in new department.

Common rooms:- Separate common rooms are available for girls as well as boys.

File Description	Document
Any additional information	<u>View Document</u>

7.1.3 Alternate Energy initiatives such as:

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

Response: 27.17

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

Response: 33246

7.1.3.2 Total annual power requirement (in KWH)

Response: 122381

File Description	Document
Details of power requirement of the Institution met by renewable energy sources	View Document
Link for Additional Information	View Document

7.1.4 Percentage of annual lighting power requirements met through LED bulbs

Response: 11.64

7.1.4.1 Annual lighting power requirement met through LED bulbs (in KWH)

Response: 8736

7.1.4.2 Annual lighting power requirement (in KWH)

Response: 75033.6

File Description	Document
Details of lighting power requirements met through LED bulbs	View Document
Any additional information	View Document

7.1.5 Waste Management steps including:

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

Response:

Solid waste management

The key to solid waste management in the college campus is onsite segregation of waste, generated from various sources. The paper waste shares the major portion of the solid waste. It is collected from all departments regularly, stored for temporary period and handed over for recycling. A heavy duty shredder helps in reducing volume of paper waste significantly.

Dry and wet wastes from canteen, mess and hostel are collected separately and hand over to municipal solid waste handling facility regularly. A biogas plant has been installed to treat the food waste generated from hostel mess.

The yard waste from all the campus is collected and a good quality compost is prepared using aerobic composting method. The compost plant is located at Shram Chintan Bag in Science College campus.

Two incinerators are operative (Girls' hostel and ladies washroom in main building) for proper and safe disposal of sanitary napkins.

Liquid waste management

Management of wastewater starts with optimum use of water with minimum wastage. The sanitary wastewater is collected from the sources (lavotary areas, dining facilities, hostels etc) through proper plumbing system and discharged into municipal sewer for further treatment and disposal.

E-waste management

The electronic waste is generated mainly from computer, Electronics and Electrical department in marginal quantities. The miscellaneous E-waste including CDs, batteries, PCBs and nonfunctioning electronic components, cables etc is collected in separately for safe disposal. The obsolete PCs are donated to the primary and secondary schools through the Society office.

File Description	Document
Link for Additional Information	View Document

7.1.6 Rain water harvesting structures and utilization in the campus

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Response:

Institute has rainwater harvesting system in our premises to collect the rainwater. The catchment area is the roof of institute building. Rooftop rain water collected on the terrace of institute building is collected through adequate pipe system from different parts of the terrace. All the rain water thus collected is diverted to common channel and conveyed for storage in an underground storage tank. The underground tank has capacity to store **36,000 liters** of rainwater during monsoon season. This helps to recharge the tubewell dug in the campus as well as the ground water. It will increase the ground water table of the surrounding premises.

File Description	Document
Link for 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 are being implemented in the institute to encourage pro-environmental behavior among the staff and the students.

1. Bicycles - Yes,

Being located at the heart of the city, students from nearby areas prefer bicycles as mode of transport. Some students use Hexi smart cycles launched under Public Cycle Sharing Project. Rahul Thakare (Civil Department), has successfuly completed Nashik to Pandharpur Wari (13 to 16 July, 2018) under the banner of Nashik Cyclist Foundation. The expedition was carried out to spread the "Go-Green" message.

2. Public Transport –Yes,

Majority (Nearly 40%) of students and some of staff members use public transport like Buses, Trains etc.

3. Pedistrian Friendly roads- Yes,

The institute building, parking areas, college library, boys and girls hostel and Gymkhana are connected by paved internal roads which are lined with plants and well maintained. The internal roads are pedestrian friendly.

Paperless office

As a step towards paperless office, reuse of paper is carried out for office work and for departmental documentation. Notices are communicated through mails and other mass comunication applications. Class tests are also conducted using online applications and softwares. Computer and E&TC department conduct clall tests using My examo modules. One sided print papers are used for departmental activities such as class test question papers, notices etc. Google forms are used to receive Student feedbacks every semester to save papers.

Plastic free campus

Use of plastic bags is strictly prohibited in the Institute campus. Paper bags are preferred for packing food items in canteen.

Green landscaping with trees and plants- Yes,

Maintaining green belt in and around the college campus is one of the main attributes towards sustainability. Plantation of various native species is being carried out regularly in and around the college campus. As a trilateral bond between the institute, society and environment, tree plantation is carried out in the college campus under the banner of National Service Scheme(NSS). We assure a good survival rate of the newly planted sapllings by periodic monitoring.

Gardening staff has been appointed to take care of the green belt in the campus. The trees are nourished with a good quality compost every 3 months. A dose of organic pesticide (Neem leaves and salt water) is also provided monthly. Gardens are cleaned daily and cutting and pruning is carried out fortnightly by the gardening staff.

A plantation drive was carried out in collaboration with Samsonite South Asia Pvt. ltd on August 19, 2018. Students from department of Civil engineering planted 721 sapllings at Dhondegaon site near kasyapi dam.

A 'Non vehicle day' was followed on the Earth Day 22nd April. The staff and the students were appealed to prefer public transport over personal vehicles. On September 21, 2018 'zero emission day' was celebrated as a small contribution towards reduction of green house gases.

File Description	Document
Link for 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: 0.86

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

2017-18	2016-17	2015-16	2014-15	2013-14
2.9503	1.68230	1.60570	1.49200	2.13732

File Description	Document
Details of expenditure on green initiatives and waste management during the last five years	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)

A. 7 and more of the above

B. At least 6 of the above

C. At least 4 of the above

D. At least 2 of the above

Response: C. At least 4 of the above

File Description	Document
Resources available in the institution for Divyangjan	<u>View Document</u>
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

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Response: 11

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

2017-18	2016-17	2015-16	2014-15	2013-14
04	03	01	02	01

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: 9

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

2017-18	2016-17	2015-16	2014-15	2013-14
04	02	01	01	01

File Description	Document
Report of the event	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: Yes

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

7.1.13 Display of core values in the institution and on its website		
Response: Yes		
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

professional ethics on Institutional website

institution functions as per professional code

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

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 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 View Document

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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: 12

7.1.17.1 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 year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
03	02	02	02	03

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:

Institution organizes various National Festivals and birth anniversaries of the great Indian personalities every year . The details are as follows:

Republic Day and Independence Day -

Republic Day and Independence Day are celebrated in the Institute with a great pomp. All the Office Bearers, faculty members and students from various Institutes in the campus gather at the Central Gymkhana. The program starts with Flag Hosting at the hands of Chief Guest followed by National Anthem. Patriotic songs, various acts and skills are presented to the gathering by the school students.

Mahatma Gandhi Jayanti

The birth anniversary of Mahatma Gandhi, the father of the Nation, who devoted his whole life preaching Truth and following Ahinsa. The students and staff took an oath in accordance with the Prime Ministers' urge for 'Swaachh Bharat Abhiyaan'. They volunteer themselves to clean the college campus.

Shivaji Maharaj Jayanti

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Shivaji Maharaj, the great Maratha warrior and administrator, is indeed a legendary figure and inspirational personality for all. The Institute celebrates Shiv-Jayanti every year on 19 February to tribute our respect towards Maharaj.

Teachers Day

Dr. Sarvepalli Radhakhrishnan, a great teacher and a staunch believer of education, known for his contribution towards the education system in India. In his memory, 5th September is observed as Teacher's Day. Teachers are noble contributors to the society to mould and nurture responsible citizens to the Nation. At departmental level, students organize programs to honor the faculty of the department. The program begins with the Prayer, followed by significance of celebrating Teacher's Day. The chief guest addresses the gathering and emphasizes the role of teachers in everyone's life. Senior students play role of teachers and conduct classes for the junior students

Engineers Day

15th September is celebrated as Engineers Day in honour of Bharat Ratna Mokshagundam Visvesvaraya, an eminent Engineer. A blood donation camp is organized by NSS students on Engineers day every year. Guest lectures are also arranged at every department.

File Description	Document	
Any additional information	<u>View Document</u>	

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

Response:

The institute maintains complete transparency in its financial, academic, administrative and auxiliary functions.

Majority decisions are taken by the Principal during the HOD meets. HOD meetings are conducted frequently for the smooth and timely execution of the academics. Decisions taken during the HOD meetings are communicated to the faculty members through proper channel.

The financial budgets of every department are submitted to the management in a common format. The budget provision is made for technical event like Engineering Today, Guest Lecture etc. and also for cultural activities like Resonance, the annual gathering. The institute also provides budget for inter institute sports and cultural activities like T-20 Cricket match and others. All the funds are utilized for the student welfare. Institute provides financial transparency by conducting third party financial audit every year.

Academic Calendar is prepared by all department heads in consultation with the stff members by planning the semester activities and it is approved by the Principal and the Director. The academic calendar is communicated to the students at the commencement of the semester. The training programs, technical events, visits and guest lectures are conducted accorng to the academic calender. Responsibilities of

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various activities are assigned prior to commencement of academic year. The Academic transparency is maintained through Enterprise Resource Planning (ERP) system. This system has been developed inhouse, by the faculty of Computer department. Students can access their profile and see their attendance for teaching and practical sessions with the help of ERP Login ID. The defaulter list is displayed on the notice board periodically. Continuous assessment is done and communicated to the students montly. Term work marks are also displayed on Notice Boards. Faculty share assignments, Lab Manuals, MCQs and Question banks with the students through ICT facility.

File Description	Document
Any additional information	<u>View Document</u>

7.2 Best Practices

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

Response:

Title of the practice: Industry Institute Interaction and Skill Development

Objectives of the practice:

- 1. To instil inquisitiveness amongst the students to acquire advanced technical skills.
- 2. To cater the need for interaction and exchange of ideas between the industry and institution.
- 3. To impart industry specific skill sets.
- 4. To expose the students to occupational challenges.
- 5. To develop teamwork culture to enhance practical skills of students and improve presentation and soft skills.
- 6. To motivate the students for learning new technologies, promote creativity and sharing of new ideas
- 7. To implement innovative, interdisciplinary projects and solve live problems concerned to industry or useful to the society.

The Context:

The institute is student centric, the focal point being the overall development of students. We urge our graduates to add social commitment and social responsibilities to their aspirations in the life ahead, with the aim of giving back to society. We try to balance the market with job seekers as well as job creators. We

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try to improve the employability as well as entrepreneurship.

We believe in making an Engineer and not a Degree holder!

We ensure that the student masters technical skills along with problem solving approach. We observed the working of various industries closely and shortlisted few qualities which are must to become a good engineer. These qualities are broadly classified into communication skills, observation skills, analytical skills and measurement skills.

To encompass all these skills and contribute meaningfully to the industries, we have initiated the **Industry Institute Interaction and Skill Development Program.**

The Practice:

The desired skill sets are arranged in the form of regular activities in which the students participate actively.

- **Bridge course**: At the first year level "Bridge course" is arranged for the newly admitted students. It is planned to highlight how engineering knowledge can be applied in solving the problems of mankind or creating something useful for society. The schematic track of content of curriculum and its interdisciplinary application areas are introduced so that the student should understand importance of engineering at their beginning stage.
- Student Seminars: At Second year level, students' understanding is enhanced by giving them an insight on various domains in their respective branches. Students are asked to form teams and select a domain of their interest. Students refer various books, e-journals, research papers to read about the latest topic. They prepare presentation of any advanced topic in that domain under guidance of allotted faculty member and present it in front of all other students and staff. These presentations are evaluated and suggestions are given to the students at the same time.
- Workshops: At third year level, technical hands on workshops like PCB layout designing and PCB fabrication, Arduino Application development, Analog and digital Circuit Design and Testing, Software tools for Modelling and Analysis of Civil structures, Programming using C, C++, PHP, Python, Android Application development etc.are designed and implemented to enhance the practical and application oriented expertise. Most of these workshops are conducted free of cost. Theme based lecture series of industry experts are arranged for the students.
- **In-plant Training**: Our students along with the staff members spend few days in industries and understand the basic process flow of that industry. We encourage the students to go through the problem solving loop at least once which consists of five major blocks.

Identify the problem-->Detail analysis of Problem--->Technical solution and support--->implementation of proposed solution--->Monitoring and maintainence

As the students sharpen their observation and analytical skills through a real life (live) problem, it boosts

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the confidence of students to deal with other problems. This practice helps the students to broaden the horizon for critical thinking, which is an imperative quality of an Engineer.

• **Project Exhibition I-RISE:** For all students of final year, soft skills training is provided along with practice sessions like group discussions and mock interviews. Institute level project exhibition "I-RISE" and department level project exhibitions are arranged to showcase the innovative projects implemented by students to the industry experts. Students interact with the industry experts and refine their projects to appropriate level. Interdisciplinary projects are encouraged.

Problems encountered and resources required:

- 1. Sometimes students are from rural background and do not open up and hesitate to practice and communicate in English
- 2. Faculty has to spare time and prepare course structures and all arrangements for hands on workshop while doing their regular work.
- 3. Third year students have to continue the In-plant training just after their exams so they get very short or no break between the semesters.

Evidences of success:

- 1. Skill development workshops, mock interviews and group discussion sessions conducted for students are appreciated by students and industry experts visiting the campus.
- 2. Number of students implementing Interdisciplinary Projects is increasing.
- 3. Placement count is increasing as the students are possessing some skills according to industry requirements
- 4. Increased participation of students is observed in technical competitions.
- 5. Increased industrial involvement in assigning problems to the students for finding feasible solutions.
- 6. Students become confident while facing the interviews as per the feedback given by students after facing placement interviews.
- 7. Overall personality development of students is observed.
- 8. Increase in the number of Memorandum of Understanding.
- 9. Students are encouraged for starting their own start-up firms.

Title of the Practice: Motivation For Research

Objectives of the practice:

- 1. To identify the research areas.
- 2. To motivate the faculty and student to conduct research activities.
- 3. To build the awareness about various funding schemes and to motivate the faculty to write good research proposals.
- 4. To inspire the staff to pursue higher studies specially Ph.D.
- 5. To organize conference, workshop, seminar and departmental technical events to create awareness among faculty and students.
- 6. To organize the visits to research centres and industries.
- 7. To encourage for the consultancy services in related areas.
- 8. To motivate the faculty to present/publish the research paper at reputed conference/journals.
- 9. To develop research culture in institute and lifelong learning skills among students.
- 10. To established innovation centre, research centre in the institute.

The Context:

Our Gokhale Education Society is the society totally managed by teachers and has always believed in empowerment and development of teachers. World-wide engineering standards require involving participation of faculty and students in the planning and implementation process. Encouraging faculty to do research improves the reasoning skill of students in classrooms and awareness among the students about recent technological development in society, which in turn make the students one of the best engineers. By cultivating research culture among faculty and students, teaching- learning process can be implemented innovatively. There is better conceptual understanding of the subject among students. The research and industry based practices helps to develop practical exposure to the students.

The Practice:

It is necessary to inculcate research culture among faculty and student so as to develop a high quality engineers of global standards, however following mentioned practices are followed by our institute:

1. Eminent speakers from industries, Researchers and Scientists are invited to guide the faculty and

students for developing good research culture and activities.

- 2. Institute sponsors and deputes the faculty for attending FDP, STTP, QIP workshops, symposium, national/international conferences etc.
- 3. Institute encourages industry and research centre's visits and motivates for sponsored or industry based projects.
- 4. The experts from Universities, Industries and Autonomous institutes and eminent scientists have visited the institute and interacted with the faculty and students and created awareness about the research scope.
- 5. Institute organizes departmental symposium and provides platform for students to enrich their talents through various activities such as paper presentation, projects, mathematical quiz, poster competition, gaming and robotics competitions etc.
- 6. Institute faculties are motivated for doing Ph.D. at various universities and reputed institutes developing research culture, this improves contribution in research by publications.
- 7. Students are also motivated to participate in university, zonal and state level technical competition.

Problems encountered and resources required:

- 1.Limited funding agencies are available due to non-accredited status.
- 2. Numerous books, journals and e-books are available in library as resources.

Evidences of success:

- 1. Faculty members are motivated for research work and some faculty members have applied for research grants.
- 2. Number of Publications in reputed journals and conferences by the students and faculty members has been improved.
- 3.Students are motivated for implementing innovative projects.
- 4.Increase in number of students achieving success in various technical competitions.
- 5. Success in achieving better placements for students.

File Description	Document	
Link for Additional Information	<u>View Document</u>	

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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:

As per our vision of Producing World class Engineers for converting global challenges into Opportunities through "Value Embedded Quality Technical Education", institute has stepped up efforts to achieve employability enhancement and entrepreneurship development. This is the targeted outcome of our mission to impart Technical Education through effective Teaching-learning process.

1. Employability Enhancement

Industries are increasingly turning to recruiting qualified candidates having innovative capabilities. Considering these aspects, our institute has developed a powerful placement pool in collaboration with other institutes and various engineering industries and companies. We facilitate the students for development of skills desirable for placement, specifically;

- Communication / Presentation Skills.
- Problem-Solving and analytical ability.
- Team Work.
- Leadership Skills.

Students who have undertaken engineering degrees with internships can be productive and contribute from day one. During vacations, our institute in collaboration with local industries organizes In Plant Trainings to prepare the students for future employment. Main objective is students should get employed in any capacity including production, quality control, process analysis, plant maintenance, design or research.

Considering these aspects and though internship is not mandatory; our institute fully supports internships/in plant trainings and other related activities to increase the employability of students. Placement Data Analytics of successive five years has proven that our efforts are highly supporting for the future of students.

Year wise Placement

S. No.	Academic Year	No of Students Selected	No of Eligible Students	Percent Students Sel
1	2013-2014	101	268	37.69
2	2014-2015	73	320	22.81
3	2015-2016	142	412	34.47

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4	2016-2017	195	416	46.88	
5	2017-2018	264	483	54.66	

1. Entrepreneurship Development

An entrepreneur is an individual who develops own venture or business. They are innovators who understand how to capitalize on opportunity. Entrepreneurship is an important part of being an engineer; many of our students have started their own companies as a result of an idea sparked by creative thinking. It fulfills our mission To Nurture Creativity & Critical thinking in applying Engineering skills to face the fast growing globalization. Institute has identified the modules necessary for the field of entrepreneurship as:

- Team Building
- Opportunity Recognition
- Financing
- Customer Acquisition

Start-Ups

We always endeavor for Industry-Institute-Interaction for the enhancement of academic knowledge and technical skills. Students are consistently encouraged to practice what they have learned and to develop their professional attribute, corporate philosophy and true human potential. Uptill now, 12 startups are established by our students. Development of in-house mentor pool on innovations and entrepreneurship at institute level inspires the students and faculty for startups and technical consultancies. Fruitful outcome of these activities can be revealed as **student driven startups**.

1. Research Orientation

Capacity building refers to establishing resources required to fulfill a mission or achieve a goal. Institute consider it as a process of developing and strengthening the skills, instincts, abilities and resources that one need to survive, adapt and thrive in the fast changing world of technology.

Building a functional human capacity involves education and training designed to provide the individuals with knowledge, skills and attitudes. Our Institute supports the capacity building for faculty by adapting the Research Environment, Industrial Training and Consultancy Services.

Research Environment:

It can enhance the performance of both faculty and students. Major objectives are:

- Research orientation based education.
- Research as a basis for innovation.
- Inter disciplinary approach.
- Share/exchange ideas to change minds/share knowledge.

Industrial Training:

Institute facilitates industrial trainings to the faculty and students. It aims to build up in-house advisers to inspire students for startups. Major objectives are:

- Acquisition and development of skills, competencies and attitudes
- Hands-on learning; research/evidence based, and instructional strategies that are aligned to industry skills.
- Determine best practices in technical education program for students' capacity building.
- Supervisory support and organizational support for students' career development.
- Sustainable development.

Consultancy Services:

Institute strives to develop knowledge, expertise and abilities to support sustainable development. By completing few consultancies, we started progressing towards capacity building by acquiring competency. Major objectives are:

- Technical assistance to developing industries and companies.
- Funds generation.
- Opportunity to get technical problems for projects / placement of the students.

1. Future Plans of Entrepreneurship Development/Incubation Center

Institute trusts that when individuals of different skills collaborate to pursue a common goal, the team can be entrepreneurial. With the globalization of business and the uncertain economy, there are plenty of opportunities. Recognizing these opportunities within constrained timeframes; are challenges for students. Our vision is to help the students to handle it more easily.

We already have MoU with Maharashtra Entrepreneur and Startup Federation (MESF). Major objective is to encourage the students, for entrepreneurship as a preferred career. Institute aspires to:

- Help in creating larger no of student driven innovative start ups in diversified fields
- Develop in-house mentor pool and customized training for incubation activities.
- Conduct various interactive seminars, workshops and conferences.
- Arrange study tours and industrial visits, awareness programs about government policies for rural start ups.
- To inspire young entrepreneurs for micro start-ups.

Under Inter-Institutional Partnership between MESF and our institute; entrepreneurship and startup development programs will be conducted as "Certification in Entrepreneurship and Startup Administration (CESA)" for which total 13 students from different departments of our college has been enrolled.

To fulfill our vision of developing this College as an Academy of Higher Learning in the field of Engineering & Technology and mission to make this Institute as a Lead Centre of Research; we are planning for Incubation center. Various industrial trainings, workshops and consultancy services are the

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steps towards this objective.				
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5. CONCLUSION

Additional Information:

The institute has adequate infrastructure, supporting academic facilities, state of the art laboratories with well qualified and experienced faculty members with good retention ratio. The institute gives highest priority to teaching-learning process. Emphasis is given on curricular, co-curricular and extracurricular activities for holistic development of students. The attempts are made to deliver the best quality in Teaching-Learning and overall development of our students. Empowered of Faculty and staff members are achieved through various initiatives as elaborated in this report. Various student chapters carryout interdisciplinary projects which has received prestigious awards at National (Smart India Hackothan) and State level competitions. Extention activities like entrepreneurship cell, innovation center and research have started to shape up which will be the focus areas in near future. The formation of this institute is one of the dream project of Gokhale Education Society while marching towards the centenary decade. Esteemed dignitories have visited and contributed by their presence, guidance, suggestions and good wishes from time to time. Thus Institute has made a niche in techinical education in India within a short span of time.

Concluding Remarks:

Institute has well framed vision and mission, considering the needs of the society. Academic flexibility, professional competence and societal change are three paradigms of the institute. The attempts are directed towards achieving overall excellence. The institute executes well established strategic planning from time to time for producing quality engineers. The institute believes in promoting a culture of delegation of authorities through strategic policies. Decisions are made in team working culture with involving all. Institute has well established organizational structure to execute smooth functioning of administrative and academic processes by ensuring better academic planning and monitoring. Institute promotes quality initiatives and implemented ISO 9001:2015. Green practises and initiatives towards cleaner and healthy environment are established in the campus. Use of solar power, rain harvesting, waste recycling are some of them. Certainly this accreditation will be a step forward on the quality path of "Value Embedded Quality Technical Education at an affordable cost".

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