



Yearly Status Report - 2019-2020

Part A

Data of the Institution

1. Name of the Institution	VIDYAVARDHINI'S COLLEGE OF ENGINEERING AND TECHNOLOGY
Name of the head of the Institution	Dr. Harish Vankudre
Designation	Principal
Does the Institution function from own campus	Yes
Phone no/Alternate Phone no.	02502350988
Mobile no.	8788661691
Registered Email	vcet_inbox@vcet.edu.in
Alternate Email	principal@vcet.edu.in
Address	K. T. Marg, Vasai Road (W), Dist. Palghar
City/Town	Vasai Virar Municipal Corporation
State/UT	Maharashtra
Pincode	401202

2. Institutional Status					
Affiliated / Constituent		Affiliated			
Type of Institution		Co-education			
Location		Rural			
Financial Status		Self financed			
Name of the IQAC co-ordinator/Director		Dr. Megha Trivedi			
Phone no/Alternate Phone no.		02502338234			
Mobile no.		9764197184			
Registered Email		iqac@vcet.edu.in			
Alternate Email		megha.trivedi@vcet.edu.in			
3. Website Address					
Web-link of the AQAR: (Previous Academic Year)		https://vcet.edu.in/committees/iqac-3/			
4. Whether Academic Calendar prepared during the year		Yes			
if yes,whether it is uploaded in the institutional website: Weblink :		https://vcet.edu.in/wp-content/uploads/2021/05/Academic-calender-even-sem-2019-20.pdf			
5. Accrediation Details					
Cycle	Grade	CGPA	Year of Accrediation	Validity	
				Period From	Period To
1	B+	2.69	2019	28-Mar-2019	27-Mar-2024
6. Date of Establishment of IQAC			10-Jul-2017		
7. Internal Quality Assurance System					
Quality initiatives by IQAC during the year for promoting quality culture					
Item /Title of the quality initiative by IQAC	Date & Duration		Number of participants/ beneficiaries		

Refresher Course for faculty (12 sessions on various quality aspects)	02-Jan-2020 11	400
Academic Audits of the Departments	01-Jul-2019 365	7
Regular Meeting of IQAC	26-Jul-2019 1	11
Regular Meeting of IQAC	18-Oct-2019 1	10
Regular Meeting of IQAC	27-Dec-2019 1	10
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8. Provide the list of funds by Central/ State Government- UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.

Institution/Department/Faculty	Scheme	Funding Agency	Year of award with duration	Amount
Mr. Vinay Patel, Assistant Professor, Department of Mechanical Engineering, VCET Vasai	Minor Research Proposal, University of Mumbai	University of Mumbai	2020 365	32000
Dr. Uday Aswalekar, Professor, Department of Mechanical Engineering, VCET Vasai	Minor Research Proposal, University of Mumbai	University of Mumbai	2020 365	20000
Mrs. Shaista Khan, Assistant Professor, Department of Electronics and Telecommunication Engineering, VCET Vasai	Minor Research Proposal, University of Mumbai	University of Mumbai	2020 365	30000
Mrs. Mugdha Salvi, Assistant Professor, Department of Instrumentation Engineering, VCET Vasai	Minor Research Proposal, University of Mumbai	University of Mumbai	2020 365	33000
Mrs. Trupti Mane Furia, Assistant	Minor Research Proposal, University of	University of Mumbai	2020 365	60000

Professor, Department of Instrumentation Engineering, VCET Vasai	Mumbai			
Mrs. Sangita Chaudhari, Assistant Professor, Department of Computer Engineering, VCET Vasai	Minor Research Proposal, University of Mumbai	University of Mumbai	2020 365	15000
Dr. Madhavi Waghmare, Assistant Professor, Department of Information Technology, VCET Vasai	Minor Research Proposal, University of Mumbai	University of Mumbai	2020 365	10000
Mr.Sainath Patil, Assistant Professor, Department of Information Technology, VCET Vasai	Minor Research Proposal, University of Mumbai	University of Mumbai	2020 365	30000
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9. Whether composition of IQAC as per latest NAAC guidelines:	Yes
Upload latest notification of formation of IQAC	View File
10. Number of IQAC meetings held during the year :	5
The minutes of IQAC meeting and compliances to the decisions have been uploaded on the institutional website	Yes
Upload the minutes of meeting and action taken report	View File
11. Whether IQAC received funding from any of the funding agency to support its activities during the year?	No
12. Significant contributions made by IQAC during the current year(maximum five bullets)	

Refresher Course for faculty (12 sessions on various quality aspects) was conducted for faculty. 400 participants were benefitted by these programmes

Academic audits of all the Departments was conducted by experienced educators from reputed Institutes

E-Yantra Robotics Laboratory was set-up in the Institute promote a multi-disciplinary approach encompassing embedded systems and Robotics for problem-solving with an emphasis on hands-on experiments

Application for NIRF ranking was filed on 04/02/2020

Application for NBA Accreditation was filed on 27/10/2020 for 5 Programmes

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13. Plan of action chalked out by the IQAC in the beginning of the academic year towards Quality Enhancement and outcome achieved by the end of the academic year

Plan of Action	Achievements/Outcomes
Organizing National Conference	Vidyavardhini's National Conference on Technical Advancements for Social Upliftment (VNC2020 TASU) was conducted on 27/06/2020. 163 papers in different emerging areas were presented during the conference. Selected papers were published in IJERT
Application for NIRF ranking	Application for NIRF ranking was filed on 04/02/2020
Application for NBA Accreditation	Application for NBA Accreditation Application for NBA Accreditation was filed on 27/10/2020 for 5 Programmes viz. Mechanical Engineering, Electronics and Telecommunication Engineering, Instrumentation Engineering, Computer Engineering and Information Technology. The peer team visit for the same is due
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14. Whether AQAR was placed before statutory body ?

Yes

Name of Statutory Body	Meeting Date
College Development Committee	04-May-2021

15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to

No

assess the functioning ?	
16. Whether institutional data submitted to AISHE:	Yes
Year of Submission	2020
Date of Submission	17-Jan-2020
17. Does the Institution have Management Information System ?	No

Part B

CRITERION I – CURRICULAR ASPECTS

1.1 – Curriculum Planning and Implementation

1.1.1 – Institution has the mechanism for well planned curriculum delivery and documentation. Explain in 500 words

Vidyavardhini's College of Engineering and Technology is affiliated with the University of Mumbai and approved by AICTE. It offers six undergraduate programs viz. Mechanical Engineering, Electronics and Telecommunication Engineering, Instrumentation Engineering, Computer Engineering, Information Technology, and Civil Engineering. Before commencement of every semester, the Principal conducts a meeting with the Head of Departments and all other functional heads to finalize the academic calendar. It is prepared in line with the guidelines provided by the University of Mumbai. It also includes all major co-curricular activities like Product Showcase, Project Showcase, Hackathon, etc., and extra-curricular activities like Sports, College Cultural Fest, etc. Academic Calendar is displayed on all notice boards and College Website. Head of Departments allocates workload to faculty members based on their expertise and subject preferences. Time table is proposed and approved by the Principal. All the faculty members prepare lesson plan and course file which includes syllabus, notes and University question papers, etc. The course booklet is maintained by individual faculty members which includes the lecture execution report, Course Outcomes, Course Outcome-Program Outcome mapping, etc. Project progress is monitored and evaluated by project guides along with a panel of members at various stages. Record of the same is maintained in a separate Project handbook. Effective curriculum delivery is ensured by classroom teaching, modern teaching-learning tools, tutorials, case studies, quizzes, assignments, internal assessment, mini-projects, industrial visits, internships, etc. Continuous assessment of each student is done throughout the semester. Student attendance is monitored monthly and the defaulter list is displayed on the notice board and parents are intimated thorough letters about the same by respective proctors. Online teaching feedback from students is taken twice a semester and reported to the authority for appropriate steps to be taken.

1.1.2 – Certificate/ Diploma Courses introduced during the academic year

Certificate	Diploma Courses	Dates of Introduction	Duration	Focus on employ ability/entrepreneurship	Skill Development
One day workshop on PLC HMI comm	Nil	28/09/2019	1	Employability	PLC HMI communication

unication						
Workshop on Basic programming for PLC S7 1200	Nil	17/08/2019	1	Employability	Basic programming for PLC S7 1200	
2-days Workshop (Case Studies) on Design and Manufacturing of Automotive Components.	Nil	21/07/2019	2	Employability	Design and Manufacturing of Automotive Components	
One-week Refresher course in Ansys, CFD, and MATLAB with Industrial Case Studies	Nil	13/07/2019	6	Employability	Ansys, CFD, and MATLAB	
AutoCAD Tool for Engineers	Nil	11/05/2020	5	Employability	AutoCAD	
AVEVA Training for Industry Professionals	Nil	30/06/2019	8	Employability	AVEVA	
Drone workshop	Nil	28/09/2019	2	Employability	Drone	
Aurdino Workshop	Nil	26/02/2020	2	Entrepreneurship	Aurdino	
Students Training on "Embedded System and IOT"	Nil	18/10/2019	5	Entrepreneurship and Employability	Embedded System and IOT	
SDP on Boot camp for Competitive Coding	Nil	08/06/2020	6	Employability	Competitive Coding	
SDP on Big Data Analytics	Nil	01/07/2019	5	Employability	Big Data Analytics	
Workshop on "Andriod App Development"	Nil	15/10/2019	1	Employability	Andriod App	
Workshop on "Embedded	Nil	05/12/2019	5	Employability	Embedded System and	

System Design IOT"					IOT
Workshop on "Cupcarbon, Cooja and Contiki"	Nil	08/02/2020	1	Employability	Cupcarbon, Cooja and Contiki"
Workshop on "Devops"	Nil	07/03/2020	1	Employability	Devops
National Level online two week SDP -"Parikshan-2020, Experiments on Click" using Virtual Laboratory	Nil	22/06/2020	15	Employability	Virtual Lab
5-Day Software training on Estimation and Costing Using Easy Bids	Nil	28/02/2020	5	Employability	Estimation and Costing Using Easy Bids
Training on Repairs. Rehabilitation on Retrofitting	Nil	17/01/2020	5	Employability	Repairs. Rehabilitation Retrofitting

1.2 – Academic Flexibility

1.2.1 – New programmes/courses introduced during the academic year

Programme/Course	Programme Specialization	Dates of Introduction
BE	Mechanical Engineering	01/08/2019
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1.2.2 – Programmes in which Choice Based Credit System (CBCS)/Elective course system implemented at the affiliated Colleges (if applicable) during the academic year.

Name of programmes adopting CBCS	Programme Specialization	Date of implementation of CBCS/Elective Course System
BE	Mechanical Engineering	13/07/2019
BE	Mechanical Engineering 2nd Shift	01/08/2019
BE	Mechanical Engineering (2nd Shift Direct Second Year Admission)	13/07/2019
BE	Electronics & Telecommunication Engineering	13/07/2019
BE	Instrumentation	13/07/2019

	Engineering	
BE	Computer Engineering	13/07/2019
BE	Information Technology	13/07/2019
BE	Civil Engineering	13/07/2019

1.2.3 – Students enrolled in Certificate/ Diploma Courses introduced during the year

	Certificate	Diploma Course
Number of Students	1257	Nil

1.3 – Curriculum Enrichment

1.3.1 – Value-added courses imparting transferable and life skills offered during the year

Value Added Courses	Date of Introduction	Number of Students Enrolled
German Language Training Program	03/01/2020	33
Competitive exams Aptitude Training for TE by Career Launcher	06/01/2020	163
Soft Skills (GD and PI) Training for TE by Career Launcher	22/07/2020	163
Refresher Course for technical interview preparation	19/08/2020	45
Career Planning and Preparation for Competitive Exam	17/05/2020	211
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1.3.2 – Field Projects / Internships under taken during the year

Project/Programme Title	Programme Specialization	No. of students enrolled for Field Projects / Internships
BE	Mechanical Engineering	165
BE	Electronics and Telecommunication Engineering	93
BE	Instrumentation Engineering	50
BE	Computer Engineering	102
BE	Information Technology	96
BE	Civil Engineering	63
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1.4 – Feedback System

1.4.1 – Whether structured feedback received from all the stakeholders.

Students	Yes
Teachers	Yes
Employers	Yes

Alumni	Yes
Parents	Yes

1.4.2 – How the feedback obtained is being analyzed and utilized for overall development of the institution?
(maximum 500 words)

Feedback Obtained

The Institute believes in imparting value-based education to students in order to develop their technical skills and professional competency in tune with industry requirements. Institute collects year-wise feedback from different stakeholders such as students, alumni, teachers, employers and parents. The primary goal of this policy is to provide a framework for obtaining, summarizing and documenting information on student and stakeholder perceptions of the quality and effectiveness of the Institute’s curriculum which can be used in program evaluation, accreditation and other academic quality assurance processes and activities. The scope of this policy covers all the programs run by Vidyavardhini College of Engineering and Technology, Vasai. This policy mainly focuses on providing: 1. Monitoring and improving the quality of students’ learning experiences through the timely collection, analysis and reporting of student feedback. 2. Providing students and stakeholders with the opportunity to actively participate in the continual improvement of programs. 3. Recognizing, documenting, supporting and extending good practices for effective implementations of curriculum provided by affiliating University. 4. Ensuring the provision of information to students and stakeholders regarding the consideration of feedback collected over time, including actions taken to address concerns raised in any feedback received. Feedback Coordinators are jointly responsible for the collection, analysis and reporting of stakeholder feedback relating to academic programs. Analysis is carried out from the ratings received on the basis of attributes such as modern teaching aids, industry-institute-interaction, laboratory facilities, library and reading room facility, University curriculum, etc. The inferences are drawn from qualitative remarks and suggestions on aspects like content delivery, value added and bridge courses, placements, projects, etc. Many beyond syllabus activities and skill development programmes are planned accordingly to match the recent industrial trends. The stakeholder’s feedback is analyzed by criteria coordinators and action plan is prepared and disseminated to each department for deployment. Student development programmes such as Certified Courses and Value Added Courses on recent trends like Embedded System IOT, Boot Camp for Competitive Coding, Drone Workshop, Ansys, CFD, MATLAB, Aurdino, Refresher Course for technical interview preparation, Career Planning and Preparation for Competitive Exam, German language training program etc were organized. As the Institute is affiliated to the University of Mumbai, feedback regarding updating curriculum is taken through various activities such as guest lectures in emerging areas by industry experts, focused industrial visits, linkages with industry and other research organizations through student projects and faculty programmes. Faculty Development Programmes such as “Use of ICT Tools” and “Virtual Lab Development”, Natural Language Processing and Deep learning, Hands-on Training on “IoT and Machine Learning etc were organized by the Institute for strengthening content delivery. Recommendations made from the feedback comprise recommendations to Board of studies for changes in the syllabus of the University and the suggestions made to management on procurement of facilities and equipment. Recommendations received from the heads are discussed in HODs meeting and forwarded to management for approval/sanctions. The objective of this policy is effective implementation of Curriculum for better learning and continuous improvement of the processes and practices.

CRITERION II – TEACHING- LEARNING AND EVALUATION

2.1 – Student Enrolment and Profile

2.1.1 – Demand Ratio during the year

Name of the Programme	Programme Specialization	Number of seats available	Number of Application received	Students Enrolled
BE	Mechanical Engineering	60	Nill	53
BE	Electronics & Telecommunication Engineering	60	Nill	58
BE	Instrumentation Engineering	60	Nill	30
BE	Computer Engineering	60	Nill	62
BE	Information Technology	60	Nill	64
BE	Civil Engineering	60	Nill	44
BE	Mechanical Engineering (2nd Shift)	60	Nill	48

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2.2 – Catering to Student Diversity

2.2.1 – Student - Full time teacher ratio (current year data)

Year	Number of students enrolled in the institution (UG)	Number of students enrolled in the institution (PG)	Number of fulltime teachers available in the institution teaching only UG courses	Number of fulltime teachers available in the institution teaching only PG courses	Number of teachers teaching both UG and PG courses
2019	1718	Nill	99	Nill	Nill

2.3 – Teaching - Learning Process

2.3.1 – Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc. (current year data)

Number of Teachers on Roll	Number of teachers using ICT (LMS, e-Resources)	ICT Tools and resources available	Number of ICT enabled Classrooms	Number of smart classrooms	E-resources and techniques used
99	99	14	22	6	12

[View File of ICT Tools and resources](#)

[View File of E-resources and techniques used](#)

2.3.2 – Students mentoring system available in the institution? Give details. (maximum 500 words)

A well-structured mentoring (proctor) system is established in the Institute. The faculty members are actively involved in mentoring the students with an objective of ensuring the holistic progress of the student. Mentors are assigned to the students at the time of joining the Institute. The main concept of mentoring is to guide students in taking right decision for their academic and personal growth. Mentoring also helps students with their morale and makes them aware of their learning abilities. Mentoring system is also meant to encourage healthy relationship between the students and the faculty. Respect, trust, and a mutually shared objective form the foundation of a Mentor – Mentee relationship. Process: 1. During the orientation program, the first year and direct second year

students are introduced to the mentoring system. Parents of the admitted students are also given orientation about the same. 2. Each proctor addresses approximately 15-20 students. These proctors counsel the students until their graduation. 3. The proctor maintains a record book which has personal and other details to observe academic, parent meeting records, extra and co-curricular performance of the mentee. 5. The proctor also communicates performance of the mentee with their parents/guardians. Along with academics, the mentor guides and encourage the mentee for participation in co-curricular and extra-curricular activities. This practice instils confidence in students to face the professional challenges. Exposure in inter-collegiate events, viz. group discussions, project competitions, technical paper presentations, and cultural programs develops an all-round personality. There have been various instances where the mentoring system has helped individuals to cope up with the highs and lows of college life. This system also helps to set students on the right track. Thus, the Mentoring system paves the way towards betterment and progress of the Mentees. In case the proctor identifies a psychological/emotional issue with the mentee, it is taken up with the class in charge, head of the department and parents. If required, the case is escalated to the professional counsellor available in the Institute. The proctor keeps a follow-up with the mentee, parents, and the counsellor. Efficacy of the mentoring system: • Good relationship between the proctor and the mentee helps in tracking the performance of the students and provide guidance at appropriate time. • Professional guidance by the mentors and related activities carried out in this direction, help the students to make right educational/career choices. • Career guidance by the Training and Placement Cell helps the students to acquire better placements offers and to build successful careers. • Academic issues of the students get identified at right time and necessary measures are taken. • Weak learners are greatly benefited through personal counseling and extra classes. • Bright learners get better prospects to nurture their skills. • The academic progress monitoring helps to achieve better results. • Encouragement by the proctor to participate in co-curricular and extra-curricular activities facilitates all-round development of the students. To maintain emotional and mental health, the Institute has appointed well qualified (M.A, Psychology) and experienced psychologist who visits the Institute.

Number of students enrolled in the institution	Number of fulltime teachers	Mentor : Mentee Ratio
1718	99	1:17

2.4 – Teacher Profile and Quality

2.4.1 – Number of full time teachers appointed during the year

No. of sanctioned positions	No. of filled positions	Vacant positions	Positions filled during the current year	No. of faculty with Ph.D
77	99	Nil	1	12

2.4.2 – Honours and recognition received by teachers (received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the year)

Year of Award	Name of full time teachers receiving awards from state level, national level, international level	Designation	Name of the award, fellowship, received from Government or recognized bodies
2019	Dr. Megha Trivedi	Associate Professor	Awarded Grade A for Task Based Training through eYantra Lab Setup Initiative of IIT Bombay
2019	Dr. Swapna Borde	Assistant Professor	Awarded Grade A for Task Based Training through eYantra Lab Setup Initiative of IIT Bombay
2019	Mrs. Madhavi Waghmare	Assistant Professor	Awarded Grade A for Task Based Training through eYantra Lab Setup

			Initiative of IIT Bombay
2019	Mrs. Vidya Patil	Assistant Professor	Awarded Grade A for Task Based Training through eYantra Lab Setup Initiative of IIT Bombay
2019	Dr.Ashish Chaudhari	Assistant Professor	IEEEES 11, SRM University, Tamilnadu
2020	Mrs. Shaista Khanam	Assistant Professor	VNC-2020 TASU, Best Paper Award Certificate, Vasai
2020	Mr. Vinay Patel	Assistant Professor	VNC-2020 TASU, Best Paper Award Certificate, Vasai
2020	Mr. Vishwas Palve	Assistant Professor	VNC-2020 TASU, Best Paper Award Certificate, Vasai
2020	Ms. Apurva Pendbhaje	Assistant Professor	VNC-2020 TASU, Best Paper Award Certificate, Vasai
2020	Mr. Swapnil Mane	Assistant Professor	VNC-2020 TASU, Best Paper Award Certificate, Vasai
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2.5 – Evaluation Process and Reforms

2.5.1 – Number of days from the date of semester-end/ year- end examination till the declaration of results during the year

Programme Name	Programme Code	Semester/ year	Last date of the last semester-end/ year-end examination	Date of declaration of results of semester-end/ year- end examination
BE	319461290	VIII/BE	17/10/2020	24/11/2020
BE	319419110	VIII/BE	17/10/2020	20/11/2020
BE	319424610	VIII/BE	17/10/2020	17/11/2020
BE	319424510	VIII/BE	17/10/2020	13/11/2020
BE	319446610	VIII/BE	17/10/2020	20/11/2020
BE	319437210	VIII/BE	17/10/2020	24/11/2020
BE	319461210	VIII/BE	17/10/2020	24/11/2020
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2.5.2 – Reforms initiated on Continuous Internal Evaluation(CIE) system at the institutional level (250 words)

A well-structured evaluation methodology exists in the Institute to enhance the Teaching-Learning process. As per guidelines from University of Mumbai, the Institute organizes centralized Internal Assessment twice in a semester. The syllabus of the same is informed in advance to the students. Every department in the Institute has an Internal Assessment Monitoring Committee (IAMC) for

assuring quality of the question papers. The IAMC is responsible for approval of the question paper pattern, ensuring that the appropriate percentage of syllabus is covered in the question paper, verifying if the questions are prepared based on Revised Blooms taxonomy verbs thus ensuring quality corresponding to CO and cognitive levels. Assessed papers are distributed to students, and answers along with evaluation schemes are discussed with students. The result is then displayed on the notice board. Practical / Tutorial / Workshop Practice / Assignment are conducted as per schedule and assessment is based on a rubric. The students are also made aware of the evaluation process. Sometimes challenging problems are given in the assignment. Quizzes mostly consist of objective questions related to the subject and its applications, are conducted on a regular basis. Our College has a Centralized Assessment Process (CAP) Center for Second- and Third-year university/final exams wherein answer sheets are coded, evaluated and moderated as per university norms. On-line assessment for First and Final year is carried out smoothly to assist declaration of results within stipulated time. Internal Assessment exams are conducted on a centralized level, twice in every semester as per university guidelines. The students are informed about the Internal Assessment dates in advance at the beginning of every semester. Every department in the institute has an Internal Assessment Monitoring Committee (IAMC) comprising of three senior faculty members of the dept and one faculty member from different departments (to get multidisciplinary input and to enrich the process) for assuring quality of the question papers. The IAMC is responsible for approval of the question paper pattern, ensuring that the appropriate percentage of syllabus is covered in the question paper, verifying if the questions are prepared based on Blooms taxonomy verbs which ensure quality corresponding CO and cognitive levels. Process:

- Syllabus for IA along with course outcomes covered in their respective subjects displayed on the notice board.
- The question paper covers questions of all learning levels whereas some questions are challenging and require critical thinking.
- Question paper with an evaluation scheme is submitted to the IAMC.
- In IAMC meeting, all necessary measures such as CO coverage, the difficulty level of question papers and the cognitive level covered.
- Changes are suggested if necessary, otherwise it is approved, printed, and submitted to the department Exam Coordinator.
- Assessed papers are distributed to students, question papers and answers along with evaluation schemes are discussed with students.
- The result is displayed on the notice board. For the students who score less than passing marks, additional guidance is provided so that they make up the difference in their second Internal Assessment.

2.5.3 – Academic calendar prepared and adhered for conduct of Examination and other related matters (250 words)

The academic calendar of the institute is prepared semester-wise. Institute's academic calendar is prepared in line with the university of Mumbai's academic calendar. For preparing institute academic calendar inputs are taken from HODS registrar, Examination in charge, Student council in charge, Training and Placement, etc. After discussing with all academic calendar is finally approved by Dean-Academic and Principal. The tentative academic calendar is disseminated to the students and faculty well in advance before the beginning of academic term by publishing on the college website. The major activities in the academic calendar like:

- Term starts and end dates.
- Internal assessment dates
- Declaration of Internal Assessment test results
- Online feedback (two times in a semester)
- Course and program exit surveys.
- Defaulter list and attendance track record by proctors and Head of Departments
- Major co-curricular and extracurricular activities
- Mention of public holidays declared by the University of Mumbai and Collector declared
- Commencements of theory /practical/viva exams etc. are strictly adhered to the schedule given by University of Mumbai. Also, a departmental activity calendar is published which

include • Department meeting • Proctor meeting • Placement activities • Events related to students' activities. Any need for a change in schedule is permitted after due deliberation in Head of Departments Meeting with Principal.

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 in website of the institution (to provide the weblink)

<https://docs.google.com/document/d/1dDv-XTF8xwJlOpARinIN9Y73E7zRU-51/edit?usp=sharing&ouid=100237075317348815462&rtpof=true&sd=true>

2.6.2 – Pass percentage of students

Programme Code	Programme Name	Programme Specialization	Number of students appeared in the final year examination	Number of students passed in final year examination	Pass Percentage
319461210	BE	Mechanical Engineering	65	65	100
319437210	BE	Electronics and Telecommunication Engineering	68	68	100
319446610	BE	Instrumentation Engineering	74	74	100
319424510	BE	Computer Engineering	72	72	100
319424610	BE	Information Technology	73	73	100
319419110	BE	Civil Engineering	69	69	100
319461290	BE	Mechanical Engineering-II	61	61	100

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2.7 – Student Satisfaction Survey

2.7.1 – Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design the questionnaire) (results and details be provided as weblink)

https://vcet.edu.in/wp-content/uploads/2021/08/SSS_Report-2019-20.pdf

CRITERION III – RESEARCH, INNOVATIONS AND EXTENSION

3.1 – Resource Mobilization for Research

3.1.1 – Research funds sanctioned and received from various agencies, industry and other organisations

Nature of the Project	Duration	Name of the funding agency	Total grant sanctioned	Amount received during the year
Minor Projects	365	University of Mumbai	0.32	0.09
Minor	365	University of	0.2	0.06

Projects		Mumbai		
Minor Projects	365	University of Mumbai	0.3	0.09
Minor Projects	365	University of Mumbai	0.33	0.09
Minor Projects	365	University of Mumbai	0.6	0.18
Minor Projects	365	University of Mumbai	0.15	0.45
Minor Projects	365	University of Mumbai	0.1	0.03
Minor Projects	365	University of Mumbai	0.3	0.09
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3.2 – Innovation Ecosystem

3.2.1 – Workshops/Seminars Conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the year

Title of workshop/seminar	Name of the Dept.	Date
Elixir Product showcase	Information Technology	19/09/2019
Hackathon coding competition Mr. Gaurav Purandare, Application development Analyst, Accenture, Mumbai, Mr. Mohit Shah, Founder Partner of Clarus Info Solutions, Virar, Mr. Arun Gupta, Senior Software Engineer HERE Technologies, Mumbai, Mr. Amey Rau	Information Technology	27/09/2019
Session on "Career Options for CS/IT students by Mr. Akash Shah, Fractal Analytics, UK.	Information Technology	19/05/2020
Alumni talk on "Utilizing Lockdown Period for Placement Preparation" by Chetan Manjeshwar, Google Inc, USA	Information Technology	18/05/2020
Seminar on "Recruitment Process" by Mr. Swapnil Karvir, CEO, S S Dias Works, Mumbai	Information Technology	07/02/2020
Seminar on "How to prepare for interviews" by Mr. Siddharth Suchak, Zeus Learning, Mumbai	Information Technology	18/09/2019
Seminar on "Career	Information Technology	09/07/2019

Guidance" by Mr. Pranav Dave, Managing Director, Innovative Creators, Vasai		
Workshop on "Android App Development" by Mr. YadneshZagade, CEO, TechCryptors, Mumbai	Information Technology	05/10/2019
Workshop on "Embedded System Design IOT" by Mr. B. A. Damahe, Head, C-TEA, LT Ltd., Mumbai	Information Technology	05/12/2019
Seminar on "Machine Learning" by Mr. Manish Kaushik, Microsoft student partner, Mr. Ali Mustufa Shaikh, Software innovator, Intel, Mr. Ganesh Tiwari, Microsoft student partner, M/s. Smita Jethwa Microsoft student partner, Mr. Pratik Pathak, Senior so	Information Technology	22/07/2019
HERE Map Creator Project Training by Mr. AbhiramAthavale, HERE solutions India Pvt. Ltd., Mumbai	Information Technology	22/08/2019
Workshop on "Devops" by Mr. Nileshkumar Challani, Devops Architect, TCS, Mumbai	Information Technology	07/03/2020
Webinar on Worldwide Climate Change Post Covid-19 by Dr. Atul Balwant Ayare , Principal, BLDEA's VP Dr. P.G Halakatti College of Engineering Technology, Vijaypur, Karnataka	Civil Engineering	06/06/2020
Webinar On Advance techniques in Concrete technology by Mr.SanjeevRaje,Vice President Navdeep Construction, Mumbai 2) Mr. Mahesh Tendukar, Mr. SadanandGovilkar	Civil Engineering	05/06/2020
5-Day Student Development Program on Career Planning and Preparation for Competitive Exam by Alumni of 2016-17, 2017-18 and 2018-19.	Civil Engineering	17/05/2020

5 Day-Webinar Lecture Series on Prominent Areas of Civil Engineering by 1) Er. KedarnathGhorpade, Former Chief Planner, MMRDA, Mumbai 2) Er. Mohd Hashim, Sr. Structural Engineer, Trojan Holding, UAE 3) Mr. Ratnakar Choudhary, Owner RB group of Comp	Civil Engineering	13/05/2020
5-Day Software training on Estimation and Costing Using Easy Bids by Er. Pralhad V. Rao, Owner Easy Bid Softwares, Mumbai	Civil Engineering	28/02/2020
Career Guidance Lecture by Er. ShreedharBehare, Sr. Manager Gammon India Ltd.Mumbai	Civil Engineering	07/02/2020
ISTE approved STTP on Repairs.Rehabilitation Retrofitting by 1) Mr. Santosh Gidh (Structural Auditor) 2) Prof. Dada Patil (AIKTC, Panvel) 3) Mr.Nagraj (NDT Consultant, Kandivali Mumbai) 4) Er. Ratnakar Choudhari (Owner Rb Group of Companies, Mu	Civil Engineering	17/01/2020
Expert Seminar on Software Applications in Various Aspects of Construction Industry by Er. Pralhad V Rao, Owner EasyBids Software, Mumbai	Civil Engineering	17/10/2019
Site Visit for Structural Audit of a G2 residential Building, Vasai by Shantadeep Cooperative Housing Society, vasai west	Civil Engineering	21/10/2019
IPR-Patenting and Copy Rights by Mr. Parvez Kudroli, Khurana and Khurana Advocates Pvt. Ltd., Mumbai	Mechanical Engineering	25/09/2019
One day workshop on PLC HMI communication by Mr.Prafulla Patil, SIEMENS Trainer	Mechanical Engineering	28/09/2019
Workshop on Basic	Mechanical Engineering	21/09/2019

programming for PLC S7 1200 by Mr. Vishal Pande, SIEMENS Trainer		
Expert session on Design and Manufacturing of Heat Exchanger by Mr.Yash Shah, M/s.Apollo Heat Exchanger Pvt. Ltd., Vasai	Mechanical Engineering	19/09/2019
Seminar on awareness of 3D printing, Industrial Perspective, and scope by M/s. Drashti Parikh, Ask Me Engineers, Mumbai	Mechanical Engineering	22/08/2019
2-days Workshop (Case Studies) on Design and Manufacturing of Automotive Components.by Mr. Deepak Shirsage, Mr. Rohan Sonawala, Mr. VatsalRaithatha, Imperial Society of Innovative Engineers, Noida, Uttar Pradesh	Mechanical Engineering	21/07/2019
One-week Refresher course in Ansys, CFD, and MATLAB with Industrial Case Studies by Mr. K Vijay, Indian Register of Shipping (IRClass), Powai, Mumbai	Mechanical Engineering	13/07/2019
Expert lecture and hands-on session on Exposure to Augmented Reality byDr. Rajesh Buktar, Dean Academics, SPCE, Mumbai	Mechanical Engineering	03/10/2019
Seminar on Design of Defence Components by Sachin Wagle,AGM, LT Defence, Mumbai (Alumni)	Mechanical Engineering	03/10/2019
MechExop Product showcase	Mechanical Engineering	19/09/2019
Seminar and Hands-on session to assemble Solar Study Lamp by Dr. Chetan Solanki, Energy Swaraj Foundation, Mumbai	Mechanical Engineering	02/10/2019
Seminar on Microwave Engineering by Dr. Harish Dixit,Asst.Prof. BITS Pilani(Hydrabad campus)	Electronics and Tele-communication Engineering	29/08/2019
Anveshan Product Showcase	Electronics and Tele-communication Engineering	19/09/2019
Drone workshop by Drona	Electronics and Tele-	28/09/2019

Aviation Pvt. Ltd., Thane Eduvance, Mumbai	communication Engineering	
Seminar on Pathways After Engineering by M/s. Swati Khedkar- Associate Business Consultant at Deflytics India Pvt. Ltd., Mumbai	Electronics and Tele- communication Engineering	24/01/2020
Seminar on Scope of VLSI by Mr. Chaitanya Amin-Sr. ASIC Engineer at Nvidia Graphics Pvt.Ltd., Mumbai	Electronics and Tele- communication Engineering	29/01/2019
Seminar on Importance of Research for Undergraduates, Dr B. Satyanarayana - Research Scientist at TIFR, Mumbai	Electronics and Tele- communication Engineering	06/02/2020
Webinar on Technological Advancements in the Field of Electronics and Telecommunication by 1. .Dr. Saurabh Mehta, Chief Academic Officer Professor in VIT, Mumbai. 2. R. Maneesh Singh, Sr. Embedded Software Engineer at Tesseract Imaging Pvt. Ltd., ,	Electronics and Tele- communication Engineering	05/05/2020
An Exhibition of the Engineering Products "Product Showcase -YANTRA 2019" by R. Ketan Dodia (Director, Ronak Switchgear and Automation, Mumbai), Mr. Dattatray Sawant (President, ISA Maharashtra Section) Mr. Rushikesh Bhagat, (Strategic Manager, Honey	Instrumentation Engineering	30/09/2019
A Seminar on "Scope of Instrumentation" by Mr. Shantanu Kelkar, Senior Offering Manager - Software and Integrated Services in Honeywell International	Instrumentation Engineering	04/10/2019
Automation Workshop by Mr. Rushikesh Bhagat, (Strategic Manager, Honeywell, India) Mr. Krishna Niranjana Bhise, (NB Engineers Control ,Thane) Mr. Kalpesh Kadam, (Kaizen	Instrumentation Engineering	18/10/2019

Automation, Bhiwandi)		
A seminar on "Digital Marketing - use of social media for professional sales and marketing" by Mrs. Jaanvi Hotwani, (Sales and business Development, Kaizen Automation, Bhiwandi)	Instrumentation Engineering	20/10/2019
TeckTalk 2020 - Interaction with Industry People regarding recent technologies by Mr. Lalit Bangera, (Process design Specialist, Siemens Pvt. Ltd., Mumbai) Mr. Omprakash Barure, (Principal Automation Trainer, Bageshree Instrumentation Trainer and Co	Instrumentation Engineering	13/05/2019
An online seminar on "New Applications in Automation" by Mr. Rishikesh Bhagat, (Strategic Manager, Honeywell Automation India Pvt.Ltd., Mumbai)	Instrumentation Engineering	08/06/2020
International Student Internship Program - "Automatus 2020 ISIP" by Mr. Vilas Chitnis, (CEO, Cietro Control Pvt. Ltd., LLP, Mumbai) Mr. Soju Sasindran, (Senior Product Trainer Education from Omron Automation India Pvt. Ltd., , Mumbai) Mr. Sunish Sure	Instrumentation Engineering	08/06/2020
Basic PLC S7 1200 HMI by Prof. Vishal Pande and Prof Prafulla Patil, SIEMENS Trainer	Instrumentation Engineering	30/12/2019
A talk on Transducers and signal conditioning circuits' by Mr. Shivang Desai, the Business Development Manager and HR, Process Precision Instruments, Vasai.	Instrumentation Engineering	11/03/2020
Seminar on Machine Learning by Mr. Mustafa Fatakawala Data Scientist, TCS, Mumbai.	Computer Engineering	30/01/2020

ISTE approved online STTP on Natural Language Processing Deep Learning by Mr. Gautam Shende , Software Engineer at Google Mr. Sameer pathan, Senior Software Developer at Shaadi.com Mr.Sampath Shetty, Machine Learning Developer at RxLogixCorporat	Computer Engineering	22/06/2020
Webinar on Blockchain Technology by Mr.Amey Tambe, Director, SoftTech Data Securities, Pune and Director, Alka Technology, Pune	Computer Engineering	21/05/2020
Webinar on Internet Of Things (IOT) by Mr.SachinSadre, DIgitalDojo, Mumbai	Computer Engineering	20/05/2020
Webinar on Gearing up for GATE by Utkarsh Joshi, NikhilAgrawal, Soumya Jain, IISc Bangalore	Computer Engineering	18/05/2020
SDP on Bootcamp for Competitive Coding by Ricardo Prins ,Github Expert Mr. Salman Chishti, Microsoft Intern as well as a Microsoft Student Partner Ali Mustufa Shaikh, Software Innovator @Intel , Google Certified Educator and Microsoft Student Par	Computer Engineering	08/06/2020
Seminar on Career Guidance by Mr. Pranav Dave, Mr. Ganesh Shinde, Founder Innovative Creator, Vasai	Computer Engineering	09/07/2019
One Week SDP on Big Data Analytics by Mr.Pranav Dave Mr.Ganesh Shinde Director at Innovatiive Creators, Vasai	Computer Engineering	01/07/2019
Seminar on Improving Coding Skills by M/s.NajibaHalim,Cimpress India Pvt.Ltd., Mumbai	Computer Engineering	28/11/2019
Seminar on Career Opportunities in Computer Science and Engineering by Mr. Manish Karnik,	Computer Engineering	25/10/2019

Service Delivery Manager, SUSE Software Solutions Pvt. Ltd., New Delhi		
Seminar on Project Presentation by Mr. Manish Karnik, Service Delivery Manager, SUSE Software Solutions Pvt. Ltd., New Delhi	Computer Engineering	25/10/2019
Seminar on Analog and Digital Circuits by Mr.Pratik Jain, PPI India Ltd., Vasai	Seminar on Analog and Digital Circuits by Mr.Pratik Jain, PPI India Ltd., Vasai	30/09/2019
Seminar on Artificial Intelligence by Mr.HemantTendolkar, TCS, Mumbai	Computer Engineering	07/10/2019
One week Student Development Program on Block Chain Technology by Mr.JetsoAnalin,FounderKub ixSquare,CodeX-SFIT, Mumbai	Computer Engineering	16/10/2019

3.2.2 – Awards for Innovation won by Institution/Teachers/Research scholars/Students during the year

Title of the innovation	Name of Awardee	Awarding Agency	Date of award	Category
Sensor Analytics Based Climate Resilient Agriculture Platform	Madurima Powale, Karan Poojary, Deep Panchal, Pratyush Shetty and Mugdha Salvi	Avishkar Research Convention 2019, University of Mumbai	26/12/2019	Agriculture and animal husbandry category
Study of Structural Behaviour of Earth Slab Panel Confined by GI Wire Mesh for Low Cost Housing	Kaushal Patel, Uttekar Siddhesh, Parmar Abhishek, Ghosalkar Shreya and Jaydeep Chougale	Avishkar Research Convention 2019, University of Mumbai	26/12/2019	Engineering and Technology category
Design And Manufacturing of Lower Limb Exoskeleton	Pabhu Praseeda, Prathamesh Pawar, Harshal Suthar, Sumit Pawar and Madhumita Dutta	Avishkar Research Convention 2019, University of Mumbai	26/12/2019	Medical and Pharmacy category
Skin Disease Prediction Using Machine Learning	Kirtika Rao, Pooja Yelkar, Omkar Pise and Swapna Borde	Avishkar Research Convention 2019, University of	26/12/2019	Medical and Pharmacy category

		Mumbai		
Design And Manufacturing of Lower Limb Exoskeleton	Pabhu Praseeda, Prathamesh Pawar, Harshal Suthar, Sumit Pawar and Madhumita Dutta	ANVESHAN RESEARCH CONVENTION 2019, University of Mumbai	13/03/2020	Medical and Pharmacy category
Automation in Conventional Drilling Machine to Multi Spindle Drilling SPM	Mahendra O.Choudhary, Rushikesh S. Bhosale, Sarvesh P. Wapilkar, Pranav P. Bhamare, Vinay D. Patel	Vidyavardhini's National Conference -NTASU2021, VCET Vasai	27/06/2020	Mechanical Engineering
Producer Gas Generation by Agricultural Waste	Parab Yogesh, Sondagar Varsha, Nijap Siddhesh, Borse Nikhil	Vidyavardhini's National Conference -NTASU2021, VCET Vasai	27/06/2020	Mechanical Engineering
Numerical Investigation of variable tube diameter helical coil heat exchanger	Vishwas M. Palve, Swapnil R. Mane, Parag S. Sarode	Vidyavardhini's National Conference -NTASU2021, VCET Vasai	27/06/2020	Mechanical Engineering
Design and Manufacturing of A Lower Limb Exoskeleton	Prathmesh Pawar, Sumit Pawar, Praseeda Prabhu, Harshal Suthar	Vidyavardhini's National Conference -NTASU2021, VCET Vasai	27/06/2020	Mechanical Engineering
A Step towards Sustainable Development using Neural Network	Sakshi Dhanmehar, Mital Dodiya, Saili Sakpal	Vidyavardhini's National Conference -NTASU2021, VCET Vasai	27/06/2020	Electronics and Telecommunication Engineering
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3.2.3 – No. of Incubation centre created, start-ups incubated on campus during the year

Incubation Center	Name	Sponsored By	Name of the Start-up	Nature of Start-up	Date of Commencement
NIL	Nil	Nil	Nil	Nil	Nil
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3.3 – Research Publications and Awards

3.3.1 – Incentive to the teachers who receive recognition/awards

State	National	International
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3.3.2 – Ph. Ds awarded during the year (applicable for PG College, Research Center)

Name of the Department	Number of PhD's Awarded
NA	Nil

3.3.3 – Research Publications in the Journals notified on UGC website during the year

Type	Department	Number of Publication	Average Impact Factor (if any)
International	Mechanical Engineering	1	1.3
International	Electronics and Telecommunication Engineering	1	0.46
International	Information Technology	2	5.38
International	Civil Engineering	1	0.09
View File			

3.3.4 – Books and Chapters in edited Volumes / Books published, and papers in National/International Conference Proceedings per Teacher during the year

Department	Number of Publication
Civil Engineering	6
Information Technology	12
Computer Engineering	18
Instrumentation Engineering	8
Electronics and Telecommunication Engineering	18
Mechanical Engineering	42
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3.3.5 – Bibliometrics of the publications during the last Academic year based on average citation index in Scopus/ Web of Science or PubMed/ Indian Citation Index

Title of the Paper	Name of Author	Title of journal	Year of publication	Citation Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self citation
Automatic Controlling of Electronic Devices and Power Consumption Analysis using IoT	Mr. Vikrant Agaskar	International Journal of Emerging Technologies and Innovative Research (JETIR)	2019	0	Vidyavar dhinis College of Engineering and Technology, Vasai	Nil
GSM GPS Vehicle Antitheft	Mr. Vishal Pande	International Journal of	2019	0	Vidyavar dhinis College of	Nil

Tracking System		Engineering Science and Computing			Engineering and Technology, Vasai	
Predictive Maintenance For Hydraulic System	Mr.Vishal Pande	International Journal of Engineering Science and Computing	2019	0	Vidyavardhinis College of Engineering and Technology, Vasai	Nil
Automation in Paper Cutting Machine	Mr.Prafulla Patil	International Journal of Engineering Science and Computing	2019	0	Vidyavardhinis College of Engineering and Technology, Vasai	Nil
A B-spline Global Optimization Algorithm for Optimal Power Flow Problem.	Dr. Deepak Gawali	WCGO 2019: Optimization of Complex Systems: Theory, Models, Algorithms and Application	2019	0	Vidyavardhinis College of Engineering and Technology, Vasai	6
Time shifted pilot signal transmission with pilot hopping to improve the uplink performance of massive MIMO system for next generation network	Mrs. Amrita Ruperee	KSII Transactions on Internet and Information Systems	2019	1	Usha Mittal Institute of Technology, Mumbai	13
Tri-variate copula modeling for spatially correlated observations in wireless sensor	Sunayana Jadhav	Journal of Communication	2019	0	VJTI Mumbai	8

networks						
Design and development of automatic lubrication system for bearing and gearbox	Siddhesh Penkar, Parth Rathod, Hardik Churi, Prathmesh Chaudhari, Dr. Ashish Chaudhari	Journal of Emerging Technologies and Innovative Research	2019	0	Vidyavardhinis College of Engineering and Technology, Vasai	33
Combined Impact of Compression Ratio and Re-circulated Exhaust Gas on the Performance of a Biogas Fueled Spark Ignition Engine	Chaudhari A., Sahoo N. and Kulkarni V.	Journal of Renewable and Sustainable Energy	2019	4	Indian Institute of Technology Guwahati	33
Effect of vertical location of the spark plug on the performance of a raw biogas fueled variable compression ratio spark ignition engine.	Chaudhari A., Hotta S., Sahoo N. and Kulkarni V.	Energy and Environment	2019	1	Indian Institute of Technology Guwahati	33
View File						

3.3.6 – h-Index of the Institutional Publications during the year. (based on Scopus/ Web of science)

Title of the Paper	Name of Author	Title of journal	Year of publication	h-index	Number of citations excluding self citation	Institutional affiliation as mentioned in the publication
Waste heat recovery from exhaust gas of an	Ganesh Wahile	Materials Today Proceeding	2020	1	Nil	Vidyavardhinis College of Engineering and Technology

engine by using a phase change material						Vasai
Enhancing Uplink/Downlink Performance of Massive MIMO System Using Time-Shifted Pilot signal Transmission with Pilot Hopping (TSPTPH)	Mrs. Amrita Ruperee	International Journal of wireless and mobile computing	2020	2	Nil	Usha Mittal Institute of Technology Mumbai
Ringling artifacts in wavelet based image fusion: Analysis, measurement and remedies	AshishV. Vanmali, Tushar Kataria, SamrudhaG.K elkar, Vikram M.Gadre	Information Fusion	2020	4	2	Indian Institute of Technology Bombay
Prediction of Coronavirus Covid 19 cases using Linear Regression and Support Vector Machine	Mr.YogeshPingle, Mrs. Puja Kadam	International Journal of Advanced Science and Technology	2020	Nil	Nil	Vidyavardhinis College of Engineering and Technology Vasai
View File						

3.3.7 – Faculty participation in Seminars/Conferences and Symposia during the year :

Number of Faculty	International	National	State	Local
Attended/Seminars/Workshops	Nil	67	Nil	Nil
Presented papers	7	50	Nil	Nil
Resource persons	5	12	Nil	Nil

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3.4 – Extension Activities

3.4.1 – Number of extension and outreach programmes conducted in collaboration with industry, community and Non- Government Organisations through NSS/NCC/Red cross/Youth Red Cross (YRC) etc., during the year

Title of the activities	Organising unit/agency/ collaborating agency	Number of teachers participated in such activities	Number of students participated in such activities
Rajodi Beach Cleaning, Vasai- Virar	VCET Vasai	2	25
Customer Vigilance Week- State Bank Of India (Awareness Programme)	State Bank of India ,Ambadi Road Branch	80	20
Solar ambassador workshop Village. Kelthan	Gram Panchayat Kelthaan office	5	50
Career guidance in secondary school Village. Kelthan	Gram Panchayat Kelthaan office	5	50
Water quality survey Village. Kelthan	Gram Panchayat Kelthaan office	5	50
Talent hunt for students Village. Kelthan	Gram Panchayat Kelthaan office	5	50
Rain water harvesting awareness Village. Kelthan	Gram Panchayat Kelthaan office	5	50
Street play on waste management Village. Kelthan	Gram Panchayat Kelthaan office	5	50
Rally-save girl child	Gram Panchayat Kelthaan office	5	50

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3.4.2 – Awards and recognition received for extension activities from Government and other recognized bodies during the year

Name of the activity	Award/Recognition	Awarding Bodies	Number of students Benefited
Government Primary School Teaching Activity	School Appreciation Letter	Government primary and Secondary School, At Village-Kelthan, Vajreshwari, Tal. Vasai	150
Government Secondary School competition: Drawing	School Appreciation Letter	Government primary and Secondary School, At Village-Kelthan,	125

		Vajreshwari, Tal. Vasai	
Government Secondary School competition: Handwriting	Government Secondary School competition: Handwriting	Government primary and Secondary School, At Village-Kelthan, Vajreshwari, Tal. Vasai	80
Government Secondary School competition: passing the parcel	School Appreciation Letter	Government primary and Secondary School, At Village-Kelthan, Vajreshwari, Tal. Vasai	130
Street play on waste management	Kelthan Village GrampnchayatKaryalay Letter	Kelthan Village Grampnchayat Karyalay Vajreshwari, Tal. Vasai	160
Rain water harvesting awareness	Kelthan Village GrampnchayatKaryalay Letter	Kelthan Village Grampnchayat Karyalay Vajreshwari, Tal. Vasai	150
Self-defense workshop	School Appreciation Letter	Government primary and Secondary School, At Village-Kelthan, Vajreshwari, Tal. Vasai	115
Women hygiene seminar	School Appreciation Letter	Government primary and Secondary School, At Village-Kelthan, Vajreshwari, Tal. Vasai7	122
Sports competition for secondary school	School Appreciation Letter	Government primary and Secondary School, At Village-Kelthan, Vajreshwari, Tal. Vasai	123
Talent hunt for students	School Appreciation Letter	Government primary and Secondary School, At Village-Kelthan, Vajreshwari, Tal. Vasai	117
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3.4.3 – Students participating in extension activities with Government Organisations, Non-Government Organisations and programmes such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the year

Name of the scheme	Organising unit/Agency/collaborating	Name of the activity	Number of teachers participated in such	Number of students participated in such
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	agency		activites	activites
Gender Equality	Women Empowerment Cell, VCET, Vasai	Seminar on "Women's Legal Rights" by M/s. Janaki Mishra , (Teaching Faculty in S.N.D.T. Women's University Law School since June, 2017)	47	35
Gender Equality	Women Empowerment Cell, VCET, Vasai	Workshop on "Self Defense" by Mr. B. K. Pawar , (Police officer, Mumbai Police)	50	148
Education Outreach	Government Primary School, Kelthan	MS-CIT computer workshop Village. Kelthan	5	130
Fitness Awareness	Government Primary School, Kelthan	Sports competition for secondary school Village. Kelthan	5	123
Health Awareness	Government Primary School, Kelthan	Women hygiene seminar Village. Kelthan	6	122
Social Outreach	Government Primary School, Kelthan	Self-defense workshop Village. Kelthan	5	115
Education Outreach	Government Primary School, Kelthan	Government Secondary School competition Village. Kelthan: passing the parcel	6	130
Education Outreach	Government Primary School, Kelthan	Government Secondary School Village. Kelthan competition: Handwriting	5	80
Education Outreach	Government Primary School, Kelthan	Government Secondary School Village. Kelthan	4	125

		competition: Drawing		
Education Outreach	Government Primary School, Kelthan	Government Primary School Teaching Activity	5	150
View File				

3.5 – Collaborations

3.5.1 – Number of Collaborative activities for research, faculty exchange, student exchange during the year

Nature of activity	Participant	Source of financial support	Duration
Research in field of material testing	TanujSurve, Shubham Madavkar, Yash Mhatre, Ronak Hadal and Prof. PritiVairagi	Utilization of lab resource of Material testing lab of Department of Mechanical Engineering IIT Bombay	13
Research, Experimental Investigation and Optimization of performance Parameters of domestic solar water	Prof. Swapnil R. Mane, Vidyavardhini's College of Engineering and Technology, Vasai	Utilization of lab of Rajiv Gandhi Institute of technology for PhD Research and association on self-finance basis.	366
Research, Investigating performance of massive MIMO system in the presence of pilot contamination for NGN	Prof. Amrita RupeeVidyavardhini's College of Engineering and Technology, Vasai	Utilization of research lab of Usha Mittal Institute of Technology, Mumbai for PhD research	366
Research, Investigations in Distributed Detection systems for Spatially Correlated Observations in Wireless Sensor Networks	Prof. Sunayana Jadhav Vidyavardhini's College of Engineering and Technology, Vasai	Utilization of research lab of VeermataJijabai Technological Institute, Mumbai for PhD research	366
Research, Artificial Intelligence	Prof. Anil Hingmi reVidyavardhini's College of Engineering and Technology, Vasai	Utilization of research lab of Sandip Institute of Engineering and Management for PhD research	366
Research, Image Processing: Syndrome Identification	Prof. Archana EkoteVidyavardhini's College of Engineering and Technology, Vasai	Utilization of laboratory of Government College of Engineering, Aurangabad for PhD research as	366

		bonafide full time research scholar	
Research, Enhancement of bandwidth for broad band communication by using photonic bandgap structure in optic fiber	Prof. Madhavi Waghmare Vidyavardhini's College of Engineering and Technology, Vasai	Utilization of research facility of Sardar Patel Institute of Technology, Mumbai for PhD research as research scholar	366
Research, cyber security	Prof. Vaishali Shirsath Vidyavardhini's College of Engineering and Technology, Vasai	Utilization of research lab of Veermata Jijabai Technological Institute, Mumbai for PhD research	366
Research, Prediction of An Early-Stage Construction Cost of Building Projects Using Artificial Intelligence Techniques	Prof. Viren Chandanshive Vidyavardhini's College of Engineering and Technology, Vasai	Utilization of research lab of Sardar Patel College of Engineering for PhD research	366
Research, Influence of Supplementary Cementitious Materials and M-Sand on Mechanical and Durability Properties of High Performance Concrete	Prof. Jaydeep Chougale Vidyavardhini's College of Engineering and Technology, Vasai	Utilization of research lab of Sardar Patel College of Engineering for PhD research	366
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3.5.2 – Linkages with institutions/industries for internship, on-the- job training, project work, sharing of research facilities etc. during the year

Nature of linkage	Title of the linkage	Name of the partnering institution/ industry /research lab with contact details	Duration From	Duration To	Participant
Training at SIEMENS Ltd.Mumbai	On-Job Training	Larsen Toubro - Corporate Training and Engineering Academy (CTEA)	05/12/2019	10/12/2019	Mr. Yogesh Pingle
Training at SIEMENS Ltd.Mumbai	On-Job Training	Larsen Toubro - Corporate Training	05/12/2019	10/12/2019	Mrs. Madhavi Waghmare

		ng and Engineering Academy (CTEA)			
Training at SIEMENS Ltd.Mumbai	On-Job Training	Larsen Toubro - Corporate Training and Engineering Academy (CTEA), Mumbai	05/12/2019	10/12/2019	Mrs. Trupti Shah
Training at SIEMENS Ltd.Mumbai	On-Job Training	SIEMENS Ltd., Mumbai	08/07/2019	12/07/2019	Mrs. Ekta Naik
Training at SIEMENS Ltd.Mumbai	On-Job Training	Larsen Toubro - Corporate Training and Engineering Academy (CTEA)	05/12/2019	10/12/2019	Mrs. Shaista Khan
Training at SIEMENS Ltd.Mumbai	On-Job Training	SIEMENS Ltd., Mumbai	08/07/2019	12/07/2019	Dr. Vikas Gupta
Training at SIEMENS Ltd.Mumbai	On-Job Training	SIEMENS Ltd., Mumbai	08/07/2019	12/07/2019	Mrs. Kanchan Sarmalkar
Training at SIEMENS Ltd.Mumbai	On-Job Training	SIEMENS Ltd., Mumbai	08/07/2019	12/07/2019	Mr.Vishal Pande
Training at SIEMENS Ltd.Mumbai	On-Job Training	SIEMENS Ltd., Mumbai	08/07/2019	12/07/2019	Mr.Prafulla Patil
Training at SIEMENS Ltd.Mumbai	On-Job Training	SIEMENS Ltd., Mumbai	08/07/2019	12/07/2019	Mr. Kamlesh Bachkar
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3.5.3 – MoUs signed with institutions of national, international importance, other universities, industries, corporate houses etc. during the year

Organisation	Date of MoU signed	Purpose/Activities	Number of students/teachers participated under MoUs
Aanuraj Fastners Pvt. Ltd., Vasai	01/07/2019	Design , Development and Fabrication of Industrial Oven with automation of input to the heater	5
Genesis Engineering Solution, Boisar	01/07/2019	Design Fabrication of Automatic feeding	5

		mechanism for a Punching machine	
Logiq Embedded Systems Pvt. Ltd., Vasai	19/07/2019	Internships	2
Oditronics Technology Pvt. Ltd., Vasai	19/07/2019	Internships	8
Allied Electricals, Vasai	02/09/2019	Guest Lecture, Visit, Internship, Training	65
Siemens Ltd., Mumbai	17/01/2020	Guest Lecture, Visit, Internship, Training	175
M/S ALOT Process Instruments Pvt. Ltd., Vapi	02/07/2020	Guest Lecture, Visit, Internship, Training	45
Indusoft (Cierto Control Pvt. Ltd., LLP, Mumbai)	01/01/2020	Guest Lecture, Visit, Internship, Training	35
M/s. Repute Engineering Works, Vasai	01/02/2020	Guest Lecture, Visit, Internship, Training	5
Sahu Technologies, Mumbai	01/07/2019	Internships	5
View File			

CRITERION IV – INFRASTRUCTURE AND LEARNING RESOURCES

4.1 – Physical Facilities

4.1.1 – Budget allocation, excluding salary for infrastructure augmentation during the year

Budget allocated for infrastructure augmentation	Budget utilized for infrastructure development
260	212.29

4.1.2 – Details of augmentation in infrastructure facilities during the year

Facilities	Existing or Newly Added
Value of the equipment purchased during the year (rs. in lakhs)	Newly Added
Number of important equipments purchased (Greater than 1-0 lakh) during the current year	Newly Added
Others	Newly Added
Classrooms with Wi-Fi OR LAN	Existing
Number of important equipments purchased (Greater than 1-0 lakh) during the current year	Existing
Value of the equipment purchased during the year (rs. in lakhs)	Existing
Video Centre	Existing

Seminar halls with ICT facilities	Existing
Classrooms with LCD facilities	Existing
Seminar Halls	Existing
Laboratories	Existing
Class rooms	Existing
Campus Area	Existing
View File	

4.2 – Library as a Learning Resource

4.2.1 – Library is automated {Integrated Library Management System (ILMS)}

Name of the ILMS software	Nature of automation (fully or partially)	Version	Year of automation
E Granthalaya	Partially	3.0	2013

4.2.2 – Library Services

Library Service Type	Existing		Newly Added		Total	
Text Books	31897	10726287	840	349685	32737	11075972
View File						

4.2.3 – E-content developed by teachers such as: e-PG- Pathshala, CEC (under e-PG- Pathshala CEC (Under Graduate) SWAYAM other MOOCs platform NPTEL/NMEICT/any other Government initiatives & institutional (Learning Management System (LMS) etc

Name of the Teacher	Name of the Module	Platform on which module is developed	Date of launching e-content
Mr. Anil Hingmire	System Programming Compiler Construction, Human Machine Interaction, Artificial Intelligence	https://anilhingmire.wordpress.com/	10/03/2019
Mr. Vikrant Agaskar	Object Oriented Programming, Mobile Computing and Communication, Human Machine Interaction, Project Management	https://profagaskar.wordpress.com/	23/07/2019
Mrs. Sweety Rupani	Open Source Tehcnology, Analysis of Algorithm	sweetyrupani.wordpress.com	15/03/2019
Mrs. Smita Jawale	Operating System, Advance Database Management System	https://operatingsystembysmitajawale.wordpress.com/	17/03/2019
Mrs. Sneha Mhatre	C Programming	https://www.youtube.com/channel/UCLY7ioETETQvH6rwU_5Cz8	17/03/2019

		A	
Dr. Megha Trivedi	Machine Learning, Robotics	https://www.youtube.com/channel/UCKRXFTJ8QESgSNCyQTfCvEg	01/05/2020
Mrs. Sweety Rupani	Data Structures	https://www.youtube.com/channel/UCQpMkRgW3K9icBKvtKizFZQ	29/03/2020
Mrs. Shaista Khanam	Digital VLSI Design	https://shaistakhanamvcet.wordpress.com/vlsi-design/	13/01/2020
Mrs. Shaista Khanam	Electronics devices and Circuit - II	https://shaistakhanamvcet.wordpress.com/electronics-devices-circuit-ii/	16/04/2020
Mrs. Shaista Khanam	Electronics devices and Circuit -I	https://shaistakhanamvcet.wordpress.com/electronics-devices-and-circuit-i/	13/05/2020
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4.3 – IT Infrastructure

4.3.1 – Technology Upgradation (overall)

Type	Total Computers	Computer Lab	Internet	Browsing centers	Computer Centers	Office	Departments	Available Bandwidth (MBPS/GBPS)	Others
Existing	803	536	0	0	119	36	28	100	84
Added	6	6	0	0	0	0	0	0	0
Total	809	542	0	0	119	36	28	100	84

4.3.2 – Bandwidth available of internet connection in the Institution (Leased line)

100 MBPS/ GBPS

4.3.3 – Facility for e-content

Name of the e-content development facility	Provide the link of the videos and media centre and recording facility
Digital Podium and Smart Classroom	https://docs.google.com/document/d/1H8I6GkPzazyny2LbjIgiWBddLZ6grmko/edit?usp=sharing&oid=100237075317348815462&rtpof=true&sd=true

4.4 – Maintenance of Campus Infrastructure

4.4.1 – Expenditure incurred on maintenance of physical facilities and academic support facilities, excluding salary component, during the year

Assigned Budget on academic facilities	Expenditure incurred on maintenance of academic facilities	Assigned budget on physical facilities	Expenditure incurred on maintenance of physical facilities

14410000

16010385

1475000

1143123

4.4.2 – Procedures and policies for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc. (maximum 500 words) (information to be available in institutional Website, provide link)

1. Academics: Laboratories, Computer and Internet facilities Maintenance: At the end of every semester dead stock is checked. Initially Lab technicians cater to repair the non-working equipment and those which are not repaired by lab-technicians are then sent to vendors for repairing. First, vendors are asked to visit our labs for checking the equipment/ instruments and then quote for the same. Then approval of the quotation is done from Principal/Management through HOD. After quotation is approved, Equipment is sent to the vendor and get repaired from them. Maintenance of Laboratories: 1. All the equipment in a laboratory undergoes periodic maintenance. 2. Minor repairs are carried out by the technical staff based on available resources and expertise. 3. Major repairs are outsourced by following the procedure of the Institute. 4. Dead stock, Consumable and Repair Registers are maintained. 5. Calibration of equipment is done regularly. 6. Equipment and systems under warranty period are serviced by seller/distributor/vendor either on campus or sent to concerned workshop. Maintenance of Computers: When the equipment related to computers or the networking instruments are not working, concern person register a complaint in the computer center register, then technician from computer center visits labs and repair the equipment not covered under warranty clause. Further quotations for repair works may be called if the need arises. PCs health cards are maintained in all laboratories. Software upgradation is done regularly, and all PCs are protected with antivirus. ICT infrastructure is maintained by computer center personnel. Library: College has appointed a Library committee which is headed by senior faculty member and one member from each department along with librarian. Library committee takes meeting for smooth functioning, Central Library to maintain books, Computers, library software, internet LAN system. Regular book binding is carried out for worn out books to increase their usage and life. Pre-laid procedure for the same is followed. Every year, the membership and subscription of all the faculty and student members are duly renewed to ensure uninterrupted services. Sports Facility: College has sports committee headed by Sports In charge and Faculty member from each department which takes necessary decisions for maintaining gymkhana at regular basis. 2. Physical and Support facilities: -Maintenance of other resources Annual Maintenance Contract are given every year wherein a team is assigned for maintaining and weekly cleaning of classrooms, drawing halls, laboratory, etc. under the supervision of the Admin Office. Cleanliness of toilet blocks and washroom is also done by house cleaning employees. College has appointed carpenter, electrician and plumber for Other maintenance related issues. lifts or any electrical maintenance of the Institute subject to the complaint are put in the complaint register. Water tank cleaning and A.C. servicing is done quarterly. Fire extinguisher is outsourced since refilling of the cylinder is done once in a year. Photocopy, scanning, and similar heads are contracted to personnel and maintained and serviced by them on timely basis. Lift, Fire extinguisher are under Annual maintenance Contract(AMC). Maintenance of CCTV is done by the in-house employee.

<https://vcet.edu.in/>

CRITERION V – STUDENT SUPPORT AND PROGRESSION

5.1 – Student Support

5.1.1 – Scholarships and Financial Support

	Name/Title of the scheme	Number of students	Amount in Rupees

Financial Support from institution	Scholarship	6	160808
Financial Support from Other Sources			
a) National	Nil	Nil	Nil
b) International	Nil	Nil	Nil
View File			

5.1.2 – Number of capability enhancement and development schemes such as Soft skill development, Remedial coaching, Language lab, Bridge courses, Yoga, Meditation, Personal Counselling and Mentoring etc.,

Name of the capability enhancement scheme	Date of implementation	Number of students enrolled	Agencies involved
Remedial Coaching	05/03/2020	25	Department of Instrumentation Engineering
Remedial Coaching	10/03/2020	10	Department of Civil Engineering
Soft Skill Development	05/10/2019	68	Techryptors, Dahisar
Soft Skill Development	09/08/2020	50	Placement and Training Cell
Soft Skill Development	09/08/2019	40	Mrs.Anagha Patil, A.P., IT, VCET and Mrs.Sneha Mhatre, A. P, COMP, VCET
Soft Skill Development	25/08/2019	60	Mock Interview conducted for BE Students by Departmental Faculties
Soft Skill Development	28/08/2020	56	Ms.Najiba Halim, Software Engineer at Cimpres
Soft Skill Development	28/09/2019	75	Workshop on PLC HMI communication, SIEMENS Trainer
Soft Skill Development	21/09/2019	70	Workshop on Basic programming for PLC S7 1200, SIEMENS Trainer
Soft Skill Development	25/09/2019	45	Seminar on IPR - Patenting and Copyrights, Khurana and Khurana Advocates, Mumbai.
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5.1.3 – Students benefited by guidance for competitive examinations and career counselling offered by the institution during the year

Year	Name of the	Number of	Number of	Number of	Number of
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	scheme	benefited students for competitive examination	benefited students by career counseling activities	students who have passed in the comp. exam	students placed
2019	Guidance for Competitive Exam and Career Counselling	638	962	48	255
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5.1.4 – Institutional mechanism for transparency, timely redressal of student grievances, Prevention of sexual harassment and ragging cases during the year

Total grievances received	Number of grievances redressed	Avg. number of days for grievance redressal
Nil	Nil	Nil

5.2 – Student Progression

5.2.1 – Details of campus placement during the year

On campus			Off campus		
Name of organizations visited	Number of students participated	Number of students placed	Name of organizations visited	Number of students participated	Number of students placed
Details listed in the Attachment	1291	236	Details listed in the Attachment	28	19
View File					

5.2.2 – Student progression to higher education in percentage during the year

Year	Number of students enrolling into higher education	Programme graduated from	Department graduated from	Name of institution joined	Name of programme admitted to
2020	1	BE	Computer Engineering	National College of Ireland	M.S.
2020	1	BE	Instrumentation Engineering	Stevens Institute of Technology	M.S.
2020	1	BE	Instrumentation Engineering	AMRITA Vishwa Vidya peetham, School of Engineering, Coimbatore	M. TECH
2020	1	BE	Instrumentation Engineering	SRH HAMM Germany	M.S.
2020	1	BE	Civil Engineering	Amity University,	MBA

				Mumbai	
2019	1	BE	Computer Engineering	UT Arllington univeristy	M.S.
2019	1	BE	Computer Engineering	New Jersey Institute of technology	MS
2019	1	BE	Computer Engineering	University of Buffalo	M.S.
2019	1	BE	Computer Engineering	Sardar Patel Institute of Technology	M.TECH.
2019	1	BE	Computer Engineering	Thakur College of Engineering and Technolgy, Mumbai University	M.E.
View File					

5.2.3 – Students qualifying in state/ national/ international level examinations during the year (eg:NET/SET/SLET/GATE/GMAT/CAT/GRE/TOFEL/Civil Services/State Government Services)

Items	Number of students selected/ qualifying
GATE	14
GMAT	1
CAT	1
Any Other	2
GRE	8
Any Other	3
TOFEL	6
Civil Services	1
Any Other	15
View File	

5.2.4 – Sports and cultural activities / competitions organised at the institution level during the year

Activity	Level	Number of Participants
FE Orientation	Institute	350
Fresher party	Institute	300
Teachers Day	Institute	80
Garba Night	Institute	300
Annual Sports - Avahan	Institute	856
Annual Cultural- ZEAL	Institute	537
Literary events- Extempore '2019-20	Institute	8
Literary events- Faceoff' 2019-20	Institute	27

Literary events- Lit Fest'2019-20	Institute	16
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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)

Year	Name of the award/medal	National/ Internaional	Number of awards for Sports	Number of awards for Cultural	Student ID number	Name of the student
2020	winner	National	1	Nil	171105059	ParthWai kul
2020	Winner	National	1	Nil	171101035	Raj Pandya
2020	Winner	National	1	Nil	180251201	ShriRaksha
2020	Runner up	National	1	Nil	10281609	SakshiDh anmeher
2020	Runner up	National	1	Nil	180251201	ShriRaksha
2020	Runner Up	National	Nil	1	6270687	Shubham Choudhari
2020	First	National	Nil	1	182946205	Gauravi Alave
2020	Runner Up	National	Nil	1	183356201	Riya Raut
2020	First	National	Nil	1	166101376	Sandesh Uttekar
2020	Runner Up	National	Nil	1	166101369	Leon Gonsalves
View File						

5.3.2 – Activity of Student Council & representation of students on academic & administrative bodies/committees of the institution (maximum 500 words)

- Activity of Student Council Students' Council looks out for all the student-oriented activities to promote cultural activities and provide the students with opportunities to develop leadership, social responsibility, citizenship, volunteerism, and employment experience. There are multiple student activities conducted starting right from orientation held for fresher students imparting with few tips and tricks to tackle both academics as well as extra-curricular. The fresher's are then welcomed to the Institute with a grand Fresher's Party. Along with such activities, equal importance is given to celebrating days like Teacher's Day or Independence Day involving students. All the students and staff gather together to play Garba festival and the positivity and energy exuberating out of the colourful costumes combined with the enthusiasm of dancing to the dandiya folk songs. Students' Council also hosts the cultural fest of the Institute known as ZEAL. During ZEAL, the Institute indulges into creativity, exciting activities, practicing for their performances and much more.
- Activity of Sports Committee The Institute sports committee manages and looks after the required sports equipment and upgrades the facility with new equipment annually. The Institute have Gymkhana, boys' common room, a playground and multipurpose court for volleyball, throwball, footvolley and

basketball which helps the sports committee to engage with the students through various sports. It organizes induction program for first-year students. They are encouraged to play various games and activities that help them know their peers better. Sports committee also celebrates National Sports Day. The Committee organizes the team selection process for various sports such as Overarm Cricket, Football, Kabaddi, Basketball, Volleyball, Badminton and other Indoor games in the first two months of the academic year. The selected students are trained hard to participate in various inter institute/ National sports festival and representing our institute. The Committee organizes a sports festival "AVAHAN- A call to the champions, a 11 day inter and intra institute sports saga. The event has enthusiastic participation from many institutes all over Mumbai. • Students Chapter/Technical Committee/NSS/Literati Committee Under the mentorship of the faculty advisors, local students chapters such as VMEA, ISHARE, CSI, IEEE. CESA, etc. organize various co-curricular events. The events of NSS are planned and executed by a team of students under the guidance of the faculty coordinator. Extracurricular events by the Literati Committee and the publishing of Annual Magazine are done by the student team in support of faculty incharges. • Students Representation on Administrative Bodies The representation of the students in the Internal Quality Assurance Committee (IQAC), College Development Committee (CDC), and Department Advisory Board (DAB) facilitates to enhance the academic as well as administrative growth of the Institution. Students also have a representation in Student Grievance Redressal Committee. • Other Students have active involvement in the activities of ECell, Placement and Training Cell, Women Empowerment Cell, etc. Apart from this, every class has a students class representative to assist in the coordination of various activities.

5.4 – Alumni Engagement

5.4.1 – Whether the institution has registered Alumni Association?

Yes

The VCET Alumni Association was established in the year 2003 to reconnect the alumni to their alma matter and contribute in its development through active involvement. The VCET alumni association is registered with The Assistant Registrar of Societies, Thane Region. The registration number is MAH/2133/2018/THANE The students register themselves as a member of VCET Alumni Association during the end of their final semester. An alumni meet is organized once in 2 years. Alumni are contacted through various social media like facebook, WhatsApp, etc. and also invited through personal emails. The date of the alumni meet is floated on the Institute website the alumni are appealed to register online for the same. The meet comprises a welcome program, Interaction, entertainment programs like singing, dancing followed by dinner. A feedback is also taken during this occasion. There is an interactive session between faculty and alumni wherein their views and suggestions are noted for betterment of the Institute. This interaction improves industry contacts for placement, project and internship. Distinguished alumni are invited as guest lecturers for seminars, workshops, etc. to share their experience about the latest trend in industry. It helps the current students to get acquainted with recent technologies through the expertise of the Alumni. They are also invited to serve as external project examiners for University examination.

5.4.2 – No. of enrolled Alumni:

490

5.4.3 – Alumni contribution during the year (in Rupees) :

0

5.4.4 – Meetings/activities organized by Alumni Association :

In the academic year 2018-19, the Alumni committee had organized 8 meetings on the date 10th June, 10th September, 15th October, 12th November, 12th December 2018, 18th December, 21st December and 24th December, 2019. Guest lectures on latest trends and technologies were organized by four departments, viz. Computer Engineering, Information Technology, Electronics and Telecommunication Engineering and Instrumentation Engineering. For Electronics and Telecommunication Engineering students, a Seminar on "Microwave Engineering" was conducted by Dr. Harish Dixit, Assistant Professor, Bits Pilani, Hyderabad. Ms. Swati Khedkar Business Consultant, Deflytics, Mumbai delivered a talk on "Pathways After Engineering". Seminar on "Career in Finance Management" was conducted by Ms. Aishwarya Mohol, Deputy Manager, Axis Bank, Mumbai. Alumni talk on "What After B.E.? (Placement, Higher studies, Entrepreneurship)" was delivered by Mr. Sourabh Kulkarni Software Developer, Blue Cross and Blue Shield Association, Florida Mr. Parth Shah, Assistant Manager, Upgrad, Mumbai and Mr. Jinesh Panchal, Deputy Manager, Reliance Jio Infocomm Ltd., Mumbai. For Instrumentation Engineering students, seminar on "Industrial Process Control, Industrial Automation" was conducted by Mr. Abhishek Tiwari, Engineering Specialists / Project Manager at Siemens, Greater New York. Industrial Visit was organized by Mr. Shivang Desai, Business Development Manager and HR, Process Precision Instruments Ltd., Vasai. A Seminar on "Scope of Instrumentation" was conducted by Mr. Shantanu Kelkar, Senior Offering Manager / Software and Integrated Services in Honeywell International. Mr. Ramji Prajapati, Project Manager, DL Automation and Control System conducted a seminar on "System Integration and Career Guidance". Seminar on "Transducers and signal conditioning circuits" was conducted by Mr. Arpit Bhayani, Business Development Executive, ALOT Process Instruments Pvt. Ltd, Vasai. For Computer Engineering students, Ms. Najiba Halim, Software Engineer at Cimpress conducted a seminar on "Improving Skills". Expert Talk on "Improving Coding skills for FE SE Students" was delivered by Ms. Najiba Halim, Cimpress India Pvt. Ltd. Career Guidance talk on "preparing for GATE examination" was delivered by Mr. Utkarsh Joshi, IISc Bangalore. For IT students, Mr. Siddharth Suchak, Zeus Learning conducted Seminar on "How to prepare for interviews". Seminar on "Recruitment Process" was conducted by Mr. Swapnil Karvir, CEO, SS Dias Works. Alumni talk on "Utilizing Lockdown Period for Placement Preparation" was delivered by Mr. Chetan Manjeshwar, Google Inc., USA. Mr. Akash Shah, Fractal Analytics, UK, delivered a session on "Career Options for CS/IT students". Through all these activities, total 1,136 students were benefited.

CRITERION VI – GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 – Institutional Vision and Leadership

6.1.1 – Mention two practices of decentralization and participative management during the last year (maximum 500 words)

The Institute has various committees at Institute and department level that include staff members which effectively manage the academic, administrative, co-curricular and extracurricular activities, and address the issues pertaining to the scope of their committee. The Principal is given authority to take financial decisions to a great extent for the prompt execution of the several academic and non-academic decisions. Provision of petty cash is available to the Head of the Departments for day-to-day/emergency expenditure. Faculty are actively involved in Institute's decision-making process. After the deliberate discussions done on the concerned issues/matters, the final opinions are conveyed to the Principal and subsequently to the management through the Principal. The management gives due weightage to the viewpoint of the faculty while taking the decisions regarding the college development. 1. Purchase at Department/Institute level The Institute prepares an annual budget based on the

infrastructure/equipment/furniture requirement obtained from the departments. The purchase process of equipments and consumables in the Institute is very transparent and decentralized and involves participation from staff to management in decision making process. • Staff /lab In-charges submit the requirement of equipment/consumables etc. considering the academic needs to the Head of the Department along with specifications. • The requirement of the furniture/consumable etc. with specification /recommendations is given to the Registrar by the Head of the Departments and Section In-charges. • The requirement regarding equipments/ IT infrastructure/ computers is proposed to the purchase scrutiny committee for approval. After the due approval, and further directed to the appropriate authority for purchase procedure. • Quotations from different vendors are invited for the same. • The comparative statement of the quotations received from the vendors for equipments along with the demo report, technical specification and remark/recommendation is submitted to the administrative office through the Head of the Department. • For the rest of the items, the Registrar compiles the requirements and finalizes the specifications in consultation with Head of the Departments and Section Heads. • The comparative statement (BID) based on cost, specification etc. of the quotations received from the vendors is prepared by the Registrar. • A meeting of Purchase Committee and vendors is then called upon to commercially negotiate and finalize terms and conditions. • The final purchase orders are then prepared after an approval from the Purchase Committee. • The equipment delivered to the Institute is thoroughly checked and tested. • The final payment is made to vendor after an endorsement made by the concerned authority.

2. Budget preparation, Allocation, and Utilization for students' activities • Every department is allocated a budget for organizing students' activities. • Each department then plans their own activities under different students' bodies and prepares the budget and allocates the fund for the activities. • The budget allocated for the activities is presented to the Principal for approval. Once the approval is given by the Principal the budget is utilized for students' activities.

6.1.2 – Does the institution have a Management Information System (MIS)?

No

6.2 – Strategy Development and Deployment

6.2.1 – Quality improvement strategies adopted by the institution for each of the following (with in 100 words each):

Strategy Type	Details
Admission of Students	Institute follows Centralized Admission Process conducted by the State Government and works as a Facilitation Center (FC). In addition to the guidelines of the Government, the Institute has Career Counselling Committee which organizes seminars on pre-admission awareness camps and seminars for making the students aware of the admission process rules, filling up the option form, availability of various types of seats, certificates required for admission, importance of engineering courses in various fields, etc.
Industry Interaction / Collaboration	Industry Institute Interaction Cell organizes experts talk by Industry professionals on recent domain-based

advancements and cutting edge technologies, research topics, latest software etc., arranges industrial visits, internships for students. To strengthen Industry academia interactions. IIIC organized an Industrial meet "Udyam Saman". 35 guests from different Industries from local Industrial area are actively participated and discussed on "Why Aptitude is so important in recruitment process Role of Cutting-Edge Technology." Apart from this, IIIC organised 60 seminars/workshops/expert talks, 435 internships and 26 industrial visits. Various activities were also conducted under 20 Memorandum of Understanding with industries.

Human Resource Management

The administrative office of the Institute holds responsible human resource management. Staff requirements are obtained from all Heads of Department and reviewed by the Principal. Approval is taken from the management. Advertisement in leading newspapers is given and uploaded on Institute website. Interviews are conducting by a panel which includes members from the Management. The selected candidates are then approved for appointment. The welfare measures of the faculty/staff such as gratuity, Employee's Provident Fund, Group Insurance for non-teaching staff, maternity leave, study leave for higher studies, etc. are also taken care of.

Library, ICT and Physical Infrastructure / Instrumentation

The Central library has an excellent collection of Books, National and International Journals and many other resources. 840 textbooks of various titles were purchased. Institute has purchased 36 e-Books from Pearson India Education Pvt. Ltd., and 277 e-Journals from Science Direct and IETE. Institute is registered with National digital library supported by MHRD through which access to many library networks in India and other countries is available. The Institute has Center of Excellence with SIEMENS and TEXAS Instruments which aims to strengthen collaborations/research linkages with industries. The Institute is equipped with internet with 100Mbps bandwidth.

Research and Development

The expert sessions on how to write journal paper and selection of most appropriate journal were organized by

the IPR Cell. Biennial Vidyavardhini's National Conference on technical advancement for social upliftment was organized wherein 163 research papers were presented by researchers. Eight minor research projects were approved for funding by University. four research projects achieved success in University's AVISHKAR research convention. Industry linkages are strengthened with SIEMENS Ltd,,Larsen Toubro - Corporate Training and Engineering Academy, Revati Industries, Soham Industries, etc. Research activities are strengthened by journal publications with IIT Bombay, VJTI. Institute level consultancy is provided to the nearby industries.

Examination and Evaluation

Institute follows the process of examination and evaluation as per University guidelines. Examination Cell has adequate manpower, IT resources and necessary security/surveillance systems. To assure the quality of internal assessment system, Internal Assessment Monitoring Committee approves the question paper, ensures the appropriate coverage of syllabus, and verifies the bloom's level of the questions. Model answers are prepared for Internal Assessment, end semester exams, assignments. Assessment of Internal Assessment is done at CAS centre. To maintain transparency in the evaluation, assessed papers are shown to the students. AICTE Exam Reforms policy is strengthened by incorporating the policy in conducting Internal Assessment.

Teaching and Learning

Outcome Based Education is practiced by faculty in many ways. They prepare a lesson plan for their course and execute it in a well-planned manner along with lab manuals, tutorials and assignments focusing on participative, collaborative, innovative and experiential learning. Faculty make use of smart classrooms for effective teaching learning. Faculty members attended FDP on Outcome Based Education, NPTEL courses on OBE, Teaching-Learning, and orientation programs for the newly introduced courses. For the final year students, Institute Level Optional Courses were offered based on their preferences.

Curriculum Development

The Institute follows the curriculum

prescribed by the University of Mumbai. Curriculum enrichment is attained by implementation of academic plan which is integrated with ICT enabled teaching and learning processes. All the departments regularly organize workshops, guest lectures, expert talks from industry personnel and alumni, student development programs which covers content beyond syllabus. Departments organize industrial visits for exposure to real time applications.

6.2.2 – Implementation of e-governance in areas of operations:

E-governance area	Details
<p>Planning and Development</p>	<p>Academic calendar comprising of planning of all the academic, co curricular and extra-curricular activities is prepared before the commencement of every semester and displayed on the Institute's website. In line with the Institute's academic calendar each department/committee prepares their activity calendar. The Institute uses ICT in planning various events and activities. The Institute uses personal emails. All the notices and important circulars and reports are circulated via emails. The procedures regarding development of Infrastructure, Laboratories are executed by the concerned committees.</p>
<p>Administration</p>	<p>The Institute has installed software from double infinity Technologies and Ediffy Communication Pvt. Ltd. for sending bulk SMS. The attendance muster is maintained by using Fingerprint Time attendance machine purchased from AVI Infitech. SpineHR software has been purchased and installed for the management of attendance and leave of the employees. The Institute uses an in-house developed inwards-outward software for keeping a record of inward/outward documents.</p>
<p>Finance and Accounts</p>	<p>The Institute has purchased Tally ERP accounting software package to record day to day transactions. Accounting activities carried out using Tally software are- Maintenance of Ledger, Cash book / Bank book maintenance, Cheque printing, Bank reconciliation statement, etc.</p>
<p>Student Admission and Support</p>	<p>Admission of the students is done through Centralized Admission Process (CAP) conducted by Directorate of</p>

	<p>Technical Education (DTE). CAP includes registration, document verification, application form confirmation, filling of option form and allotment of seat. All notices related to admission and examinations are uploaded on the Institute website. Information related to various scholarships is also uploaded on Institute websites.</p>
Examination	<p>The Institute conducts assessment/examination as per the guidance led down by University of Mumbai. Institute uses ICT facility for receiving question papers from university during end semester examination. Khushi software facilitates various activities for the smooth conduction of all examination related work. It supports in preparing eligibility list of the students, creation of seat number, preparation of Internal Assessment, Term work and oral/practical blank marksheet, Preparation of result and gazette of semester III, IV, V VI semester and preparation and printing of marksheet.</p>

6.3 – Faculty Empowerment Strategies

6.3.1 – Teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year

Year	Name of Teacher	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support
2019	Mrs. Swati Varma	Object Oriented Analysis and Design, SWAYAM NPTEL	Nil	1100
2020	Prof. Vishwas Palve	National Conference VNC2 020-TASU, VCET Vasai	Nil	1000
2020	Prof. Swapnil R. Mane	National Conference VNC2 020-TASU, VCET Vasai	Nil	1000
2019	Dr. Ashish J. Chaudhari	IEEEES-11, SRM University Chennai	Nil	3818
2020	Dr. Uday Aswalekar	National Conference VNC2 020-TASU, VCET Vasai	Nil	1000

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6.3.2 – Number of professional development / administrative training programmes organized by the College for teaching and non teaching staff during the year

Year	Title of the professional development programme organised for teaching staff	Title of the administrative training programme organised for non-teaching staff	From date	To Date	Number of participants (Teaching staff)	Number of participants (non-teaching staff)
2019	Energy Audit and Management	Nil	01/07/2019	06/07/2019	32	Nil
2019	Emerging Trends in Embedded System and DSP Applications	Nil	01/07/2019	06/07/2019	21	Nil
2020	Technological Advancements in the field of Electronics Telecommunication Engg	Nil	05/05/2020	05/09/2020	15	Nil
2020	Prayog-Experiments on Click	Nil	18/05/2020	27/05/2020	30	Nil
2020	Transaction Analysis in Education	Nil	26/05/2020	26/05/2020	400	Nil
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6.3.3 – No. of teachers attending professional development programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the year

Title of the professional development programme	Number of teachers who attended	From Date	To date	Duration
3 days online workshop on Education 4.0 Season II	1	28/05/2020	30/05/2020	2
Effective and efficient online teaching in the age of corona, A hands on workshop	3	17/05/2020	17/05/2020	1

FDP on Advances in Internet of Things	3	29/05/2020	02/06/2020	6
FDP on NBA Accreditation and Teaching Learning in Engineering	25	27/01/2020	20/04/2020	15
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6.3.4 – Faculty and Staff recruitment (no. for permanent recruitment):

Teaching		Non-teaching	
Permanent	Full Time	Permanent	Full Time
1	1	1	1

6.3.5 – Welfare schemes for

Teaching	Non-teaching	Students
Gratuity, Employees Provident Fund, Maternity leave, Study leave for MTech/PhD, Support for knowledge upgradation, Support for organizing Seminars/Workshops/STTP, Special Medical Leave, Staff Get-together, Funding for Women Cultural Activities, Counselling facility, Doctor on call, Fee Reimbursement for STTP/Workshop/Professional Membership/Paper Publications, EarlySalary payments duringfestivals	Gratuity, Employees Provident Fund, Maternity leave, Special Medical Leave, Staff Get-together, Counselling facility, Doctor on call, Special training for softskills, Uniform for class IV employees, EarlySalary payments duringfestivals	Emergency Service, CounsellingCentre, RecreationalActivities, SportsGymkhana, Parkingfacility for two wheelers

6.4 – Financial Management and Resource Mobilization

6.4.1 – Institution conducts internal and external financial audits regularly (with in 100 words each)

Vidyavardhini Trust has a transparent financial mechanism for all its institutions and has formulated a Finance Manual in June 2005. The Financial Manual elaborately describes the guidelines for the process of budget, expenditures, powers of the Principal, Head of the Department and Head of the Functionaries. The Trust has an effective mechanism of internal and external audit. These audits verify and certify all nature of income and expenditures along with all capital expenditure and deposits of the Institute in each financial year. Internal audit is a continuous process. A qualified Internal auditor from an external agency have been permanently appointed by the society who regularly examines all the records maintained by the accounts department. An external auditor appointed by the society to execute the statutory audit. This audit is conducted in two phases, one in the month of December/January and in the month of May/June every year. Finalization of accounts is completed in June/July and audited statement is prepared and duly signed by Principal/Secretary and Chartered Accountant. The Chartered Accountant submits

the Audit Report after completing the audit of all the Institutes and trust. The Audit Report does not have any major objections. The minor audit suggestions (if any) pointed by auditor are duly complied. These audited statements are then presented for approval in College Development Committee (formally Local Managing Committee) followed by Governing Council.

6.4.2 – Funds / Grants received from management, non-government bodies, individuals, philanthropies during the year(not covered in Criterion III)

Name of the non government funding agencies /individuals	Funds/ Grnats received in Rs.	Purpose
Tech Ustads Pro Learning, Union Bank of India, Sharp Tranding Co., Vasai Vikas Shakari Bank Wynaut Webventures Pvt. Ltd., Inversion LLP, Subhada Gadgil, Bassein Catholic Cooperative Bank Aswathi Industries Ltd, etc.	639636	Hackathon Event, Development and fabrication of Race Car, Development of Solar Electric Car
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6.4.3 – Total corpus fund generated

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6.5 – Internal Quality Assurance System

6.5.1 – Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	Yes	Experienced faculty from reputed Institutes	Yes	IAMC, PAQIC
Administrative	Yes	External Auditing Firms	Yes	Internal Auditors

6.5.2 – Activities and support from the Parent – Teacher Association (at least three)

<ul style="list-style-type: none"> • Parent representation in Department Advisory Board of all the Departments • Parents Teachers Meeting of SE, TE, BE students of all Departments followed by interaction between Proctors and Parents • Orientation Programme for FE students along with Parents • Feedback on design and review of syllabus from Parents • Regular communication with parents
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6.5.3 – Development programmes for support staff (at least three)

<ul style="list-style-type: none"> • Training on Spine HR software • Safety induction for laboratory equipment • Training on How to operate Digital Storage Oscilloscope(DSO) • Machine Safety and Maintenance • Workshop on Basic Programming for PLC S7 1200 • Workshop on Electrical wiring, protections, and electrical safety practices • Aurdino Workshop
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6.5.4 – Post Accreditation initiative(s) (mention at least three)

<ul style="list-style-type: none"> • Application for NBA Accreditation for 5 programmes • Application for NIRF ranking • Centralised Internal Assessment Evaluation • Formation of Centralised Data Management System • Internship for FE students • Set-up E-Yantra Robotics

6.5.5 – Internal Quality Assurance System Details

a) Submission of Data for AISHE portal	Yes
b) Participation in NIRF	Yes
c) ISO certification	No
d) NBA or any other quality audit	No

6.5.6 – Number of Quality Initiatives undertaken during the year

Year	Name of quality initiative by IQAC	Date of conducting IQAC	Duration From	Duration To	Number of participants
2020	Universal Human Values	02/01/2020	02/01/2020	02/01/2020	69
2020	Objectives of Induction Programme	02/01/2020	02/01/2020	02/01/2020	69
2020	Outcome based education videos (NPTEL) and discussions	03/01/2020	03/01/2020	03/01/2020	77
2020	Innovation in Teaching Learning	06/01/2020	06/01/2020	06/01/2020	64
2020	Attainment of Course and Program outcome	07/01/2020	07/01/2020	07/01/2021	70

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CRITERION VII – INSTITUTIONAL VALUES AND BEST PRACTICES

7.1 – Institutional Values and Social Responsibilities

7.1.1 – Gender Equity (Number of gender equity promotion programmes organized by the institution during the year)

Title of the programme	Period from	Period To	Number of Participants	
			Female	Male
Workshop on "Self Defense"	23/08/2019	23/08/2019	198	Nil
Seminar on "Women's Legal Rights"	26/09/2019	26/09/2019	82	Nil
Makarsankarti celebration	15/01/2020	15/01/2020	65	Nil
Awareness of Safety, Hygiene and Welfare of Women	28/02/2020	28/02/2020	80	Nil

(conducted for the students at Kelthan village)				
Seminar on "Awareness of Sexual Harassment and Assault"	11/03/2020	11/03/2020	135	Nil

7.1.2 – Environmental Consciousness and Sustainability/Alternate Energy initiatives such as:

Percentage of power requirement of the University met by the renewable energy sources
Renewable energy source by solar panels is increased from 50kW to 250kW and so the fans, tube lights, network switches and computer appliances are operated with this solar energy. Total power requirement of the campus is 267153kW. Percentage of power requirement of the College met by the renewable energy sources is 22.75 Rooftop rainwater harvesting A roof top rainwater harvesting structure is created within the institute campus to reduce ground water withdrawal and to recharge ground water.

7.1.3 – Differently abled (Divyangjan) friendliness

Item facilities	Yes/No	Number of beneficiaries
Physical facilities	Yes	5
Provision for lift	Yes	1
Ramp/Rails	Yes	1
Rest Rooms	Yes	1
Any other similar facility	Yes	5

7.1.4 – Inclusion and Situatedness

Year	Number of initiatives to address locational advantages and disadvantages	Number of initiatives taken to engage with and contribute to local community	Date	Duration	Name of initiative	Issues addressed	Number of participating students and staff
2019	1	Nil	07/07/2019	14	Facilitation Center Direct Second Year Admission	Admission Process	900
2019	1	1	10/01/2019	1	Seminar on "Communication Engineering: The Essence of Technology" for 10th and	Addressed the queries about telecommunication technology, basic ele	86

					12th standard students	Electronic components and circuits	
2019	Nil	1	11/01/2019	1	Career counselling at Raychem RPG Ltd. Vasai	Career counselling	25
2019	1	1	24/01/2019	1	Career counselling Virar school, BKS Vasai	Career counselling	60
2019	1	Nil	26/06/2019	30	Facilitation Center First Year Admission	Admission Process	2000

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7.1.5 – Human Values and Professional Ethics Code of conduct (handbooks) for various stakeholders

Title	Date of publication	Follow up(max 100 words)
Professional Code of Conduct Handbook	23/12/2019	https://www.vcet.edu.in/wp-content/uploads/2019/06/Code-of-Ethics-1.pdf

7.1.6 – Activities conducted for promotion of universal Values and Ethics

Activity	Duration From	Duration To	Number of participants
Movie Screening - Uri The Surgical Strike	23/07/2019	23/07/2019	220
Adivasi Diwas Celebration	09/08/2019	09/08/2019	200
Universal human values and activities	13/08/2019	13/08/2019	400
Independence Day	15/08/2019	15/08/2019	120
Rajodi Beach Cleaning, Vasai-Virar	25/08/2019	25/08/2019	25

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7.1.7 – Initiatives taken by the institution to make the campus eco-friendly (at least five)

Green Practices Bicycles and Public Transport: The Institute is located 3 minutes walking distance from Vasai Road suburban Station on Western Railways. Most of the students and staff members of the Institute stay in Western suburban area of greater Mumbai and the frequently used mode of transport in this area are Western Railway local suburban trains. **Plastic-free campus:** The Institute has taken initiative to spread the awareness of green living in the

campus. Posters showing awareness about plastic free campus has been displayed in the campus so that each person in the campus could follow initiative.

Paperless Office: Due to technological advancement Institute has taken many initiatives to build an eco-friendly environment where use of paper should be either minimal or paper less, faculties and students are prompted to use of electronic communication such as mail communication for the exchange of information, Institutes notices and other relevant information are regularly uploaded on the college website. **Green Landscaping with trees and plant:** The Institute is blessed with green campus through the nature itself each block of the building and playground are surrounded by green lawn and trees, in addition to the Institute ensure to strictly adhere plantation activity regularly.

Liquid waste treatment: Within the Institute campus, liquid waste created by laboratories, urinals, and other sources is processed. **Rooftop solar panel installation:** Solar energy is used as an alternative source of electricity by trapping it within solar panels on the Institutes roof. **Solid waste management:** Being an Educational Institute, hazardous waste or e-waste is not significantly generated. Adequate measures are in place to manage the solid waste.

Biodegradable wastes from the college canteen, dead leaves from the trees and a reasonably large amount of other solid waste generated in the Institute is managed thoughtfully. The green waste is collected centrally in the pit and used up in the composting of the campus. The output of this is used as manure for the plants in the gardens. Paper waste including shredded answer sheets are sold to licensed purchasers. Liquid waste management: Being a Technical Institute, hazardous waste from chemicals and acids are minimal in the Chemistry laboratory. However, utmost care is ensured to dilute the concentrated solutions before their disposal. Appropriate measures are taken to dispose of the toxic wastes. **E-waste management:** E-waste such as computers, printers, CPUs, UPS batteries, electrical and electronic assemblies, cathode ray tubes, PCBs, resistors, capacitors etc. collected from various departments are sorted and are either disposed in safe manner through the authorized vendor or exchanged during the new purchase. Almost all equipment is used to its fullest, by permitting usage of its parts in other suitable equipment or in student's projects.

7.2 – Best Practices

7.2.1 – Describe at least two institutional best practices

Best Practices - I

1. Title of the Practice Social Upliftment Through Community Services Objectives:
 - i. To help the needy and underprivileged in our society.
 - ii. To keep our institute neat and clean under Swachh Bharat Abhiyan.
 - iii. To spread the importance of education in society.
 - iv. To raise voice against injustice done to the girl child.
2. The Context Contextual features and challenges faced
 - i. This Institute is situated in a tribal region of Palghar district where most people are living below the poverty line. This has motivated various types of donations to help the same.
 - ii. Innovative minds can emerge from healthy bodies and these dwell in a clean atmosphere this sensitized a nationwide campaign "Swachh Bharat Abhiyan".
 - iii. Literacy rate is quite low in the tribal region of Palghar district where the Institute is situated and that is the cause which has stimulated the teaching campaigns.
 - iv. In the rural areas, the girl child is considered as a curse. People eradicate her before she comes into this world. This practice will diminish the generations to come. Wrong beliefs in the society have motivated us to conduct awareness programs.
3. The Practice Our Institute follows a unique practice of paying gratitude and handling responsibilities towards the society through the NSS and UDAAN committee. Apart from technical growth, important program outcomes of any technical education are to inculcate rich ethical values and basic social awareness, and our NSS and UDAAN committee targets towards achieving these goals.
 - i. Students who wish to aspire for higher studies were

enlightened by a seminar on "How to prepare for GATE exams". ii. The Committee organized the screening of the Movie "Uri- The Surgical Strike "for our students. iii. A beach cleaning drive was undertaken by our Committee. iv. Deprived of fresh air, oxygen, rainfall, and deforestation motivated the tree plantation drive. v. Committee organized a fit India movement vi. "Swachh Bharat Abhiyan" the cleanliness awareness program was conducted.. Not only college campus but also Vasai road railway station was also cleaned. Rally was organized to create awareness of Gandhiji 's thoughts. vii. One day Workshop was organized to educate on building solar lamps. viiii. Customers Vigilance Week- (Awareness Program) was organized by the State Bank of India for the faculty and students. ix. When world was facing a pandemic and there was anxiety and indecisiveness in the minds of the people regarding hazardous effects of Corona Virus. Our society was in a mental, social and economic crisis which led to mental stress among the villagers.NSS and UDAAN team decided to take this opportunity to help humans in a small way. A 07-day camp was planned for the same. x. We thought of social activities to be conducted for people of Kelthan, Akloli, and Vajreshwari villages by conducting Yoga and Meditation sessions . xi. A rally - "Save the Girl Child "was organized to educate the villagers. xii. To bring out the hidden talents we organized drawing competitions among the children. xiii. Our team used this platform to educate villagers on waste management and rainwater harvesting. xiv. Physical fitness and Self-defense should be imbibed in teenagers to counter such attacks.NSS and UDAAN team conducted workshops on self-defense, Zumba, and Aerobics. xv. A Solar ambassador workshop was conducted to stimulate young minds towards clean technologies for the future. xvi. A MS-CIT computer workshop was conducted to promote computer literacy 4. Evidence of Success.

Details of events organized by NSS/ UDAAN committee in A.Y. 2019-20. Sr. No Name of the event Place No of Students participated Period 1 Seminar on how to prepare for Gate Exam. Seminar Hall, VCET 58 19/7/2019 2 Movie Screening - "Uri- The Surgical Strike " K.T. Vision Theater, Vasai 220 23/7/2019 3 "Adivasi - Diwas" Celebration Seminar Hall, College Campus 200 9/8/2019 4 Beach Cleaning drive Rajodi, Vasai-Virar Rajodi Beach 25 25/08/2019 5 Tree Plantation drive Near Jeevdani Temple, Virar 46 26/8/2019 6 Fit India Movement Campaign Seminar Hall VCET 155 29/8/2019 7 Ganpati Visarjan Manikpur Lake, Vasai 15 12/9/2019 8 Gandhiji Jayanti Rally College to 100 Feet road back to College 350 2/10/2019 9 Swachh Bharat Abhiyan College Campus and Vasai Road Railway Station 105 2/10/2019 10 One day workshop on "Gandhi Global Solar Ambassador" College Campus 175 2/10/2019 11 Customer Vigilance Week - (Awareness Program) Seminar Hall, VCET 80 17/10/2019 12 National Unity Day Seminar Hall, VCET 250 31/10/2019 13 Sanvidhan Diwas Celebration Seminar Hall, VCET 200 26/11/2019 14 Beach Cleaning drive Navapur, Vasai-Virar Navapur Beach 22 21/12/2019 NSS Camp Activities Sr. No Name of the event Place No of Students participated Period 1 • Inauguration • Sightseeing Kelthan, Akloli, Vajreshwari 50 25/02/2020 2 • Rally-save girl child • Yoga activities • Socio-Economic survey • School Interaction Kelthan, Akloli, Vajreshwari 50 26/02/2020 3 • Meditation and yoga • School competition: Drawing, Handwriting • Street play on waste management • Rainwater harvesting awareness KelthanAkloli, Vajreshwari 61 27/02/2020 4 • Aerobics and Zumba • Self-defense workshop • Women hygiene seminar • Sports competition for secondary school • Talent hunt for students KelthanAkloli, Vajreshwari 76 28/02/2020 5 • Aerobics and Zumba • Water quality survey • Career guidance in secondary school • Socio-Economic survey • MS-CIT computer workshop KelthanAkloli, Vajreshwari 50 29/02/2020 6 • Yoga activities • Solar ambassador workshop • Water quality survey • Socio-Economic survey Kelthan Akloli, Vajreshwari 65 01/03/2020 7 • Meditation • Valedictory session and group photo Kelthan Akloli, Vajreshwari 50 02/03/2020 In the rural areas, the teaching campaign has benefitted nearly 350 children. 5. Problems encountered, and resources required. i. Budding Engineers need to systematically plan their schedule to execute the task of the NSS and UDDAN committee as they are busy

with academic activities all through the day. ii. Parents and their wards of villages need counseling from the committee members to execute the teaching campaigns as they do not consider education as a necessity. iii. Prior intimation to college authorities and parents is necessary as some activities or camps are executed for a span of few days or on Sundays or holidays. Best Practice II 1. Title: VNPS (Vidyavardhini's National Project Showcase). 2. Objectives of the Practice: • To provide a platform for the students to interact with the Industry experts and obtain their feedback • To build a healthy competitive environment • To be in pace with the latest trends in technology • To upgrade presentation skills of the students 3. Context: Contextual features and challenges faced • The project showcase as a measure to bridge the industry-curriculum gap. • The completion is organized with the intention to cultivate leadership qualities, professionalism, and teamwork culture amongst the students. • It is also a measure to remain in pace with the technological advancements and industry demands. • VNPS has led to an invariant platform for presentations and multidimensional growth. The Practice: The Institute organizes a annual national level project showcase named 'Vidyavardhini's National Project Showcase' (VNPS) wherein students from various technical institutes participate to display their projects. It comprises presentations in the form of posters and live demonstrations. Publicity of this event is done through posters and electronic media to register maximum. In the Academic year 2019-20, VNPS was planned, but was not organized due to pandemic. In that year we successfully organized Vidyavardhini's ONLINE National Conference on Technical Advancements for Social Upliftment (VNC-2020- TASU) on 27/06/2020. Technology has always been a potential tool for simplifying the way we do things. Present time demands directing the technological advancements towards addressing societal challenges such as improving health care, education environment sanitation, agriculture, smart city, etc., VNC 2020 TASU aims to provide an opportunity to researchers, academicians, Industrialist, and students to interact and share their ideologies and contributions made for social upliftment with the aid of technological advancements. There were different domains distributed in tracks in line with social upliftment: 1. Sustainable Computing 2. High Performance Computing 3. High Speed Networking and Information Security 4. Software Engineering and Emerging Technologies 5. Mathematical, Experimental, Computational and AI, IoT Techniques in Mechanical Engg. 6. Industrial Engg., ERP, MRP, SCM 7. Renewable Energy Technologies 8. Pollution Control and Waste Management 9. Advances in Structural engineering 10. Present geotechnical practices 11. Present practices in construction management 12. Recent developments in Instrumentation, Control, and Automation 13. Embedded Systems, IoT, and VLSI Design 14. Optical and Wireless Communication for NGN 15. Antenna and Microwave Devices etc. 5. Evidence of Success • Total 160 Papers were presented in VNC2020 TASU. • All papers presented in VNC2020 TASU were published by the International Journal of Engineering Research and Technology with ISSN Number 2278-0181. • All papers are available on the following link of IJERT journal. <https://www.ijert.org/ntasu-2020-volume-09-issue-03> • The print of conference proceeding is also available in the institute. 6. Problem Encountered: Young minds are less aware of research and development areas. At such instant faculty members interact with them and make aware of how research and development help society and the close association of engineering curriculum with research practice in different domains.

Upload details of two best practices successfully implemented by the institution as per NAAC format in your institution website, provide the link

https://vcet.edu.in/wp-content/uploads/2021/08/Best-Practices-and-Institutional-Distinctiveness-2019_20.pdf

7.3 – Institutional Distinctiveness

7.3.1 – Provide the details of the performance of the institution in one area distinctive to its vision, priority and thrust in not more than 500 words

The vision of the Institute is to be a premier institute of technical education always aiming and becoming a valuable resource for industry and society. In line with its vision, priority, and thrust, we at VCET have a unique practice of "Product Showcase" which would eventually sharpen the student's technical knowledge. Every year, "VCET Students Chapter of various professional bodies and technical committees" organizes technical product exhibition. The products are exhibited by students themselves. It is an event for the students, by the students. Various industries specifically industries which manufacture the electrical, electronic and mechanical products are approached. The product showcase titles and their respective departments are listed below: Sr. No.

Department Title of Productshow case activity
1 Department of Mechanical Engineering Mechexpo
2 Department of Electronics Telecommunication Engineering Anveshan
3 Department of Instrumentation Engineering Yantra
4 Department of Computer Engineering Abacus
5 Department of Information Technology Elixir
6 Department of Civil Engineering Nirmiti

Objectives: ? To strengthen Industry-Institute Interaction ? To bridge the gap between institute and industry. ? To learn about industrial practices ? To learn about work ethics ? To become aware of current market scenarios ? To gain indepth understanding of products and processes

The Process/Practice: A month prior to the product showcase student committee members contact the companies stating the objective of the event and its mutual benefits. Companies then send the consent and the list of products that they could provide for display. A fortnight prior to the event, the products are collected by the students from the company and they receive an orientation on the product by the concerned technical staff and receive brochures for the same. Small scale industries to multinational companies have been a part of this event. The event is publicized through the college website, banners, posters, and mouth publicity. On the day of the event, the students and faculty members from the college visit the stalls that are set up of these companies wherein the students give presentations and give a detailed explanation about the products on display. A competition for the best stall is organized and is judged according to presentation skills, technical knowledge, etc. To assure the safeguard of the products, an undertaking is signed between the companies and the respective departments giving the assurance of the repair in case of any damage. The products are returned to the company after the event. Since the students present these products to a large audience, it enhances not only their communication skills but improves overall personality. Students do these activities without affecting their academics, this way they also practice time management. Evidence of success: This event facilitates grooming of students like their communication skills, technical skills, team-building skills are polished which leads to their overall development. Apart from these benefits, they are also exposed to industrial work culture which certainly helps them after their graduation. Some facts and figures are listed below: i) No. of Companies visited: 90 ii) No. of students participated/visited: 1500

Provide the weblink of the institution

https://vcet.edu.in/wp-content/uploads/2021/08/Best-Practices-and-Institutional-Distinctiveness-2019_20.pdf

8.Future Plans of Actions for Next Academic Year

- Enhancing Academic Excellence Along with the core academics additional knowledge and application of knowledge that is not prescribed in the university curriculum need to be incorporated in the curriculum. The additional workshop and guest lectures will be organized for the students. At the same time, the need for advanced courses to staff will be identified and a policy decision of conduction

of faculty development shall be made. • All round development of students to make them responsible citizens Students all-around development is dependent on aptitude, HR skills, technical vertex as well as interpersonal skills and soft skills. Invited talks on these skill sets will be organized. • Enrichment of knowledge and giving research exposure to faculty Guidance sessions will be organized for updating the faculty in their chosen career path and acquiring domain expertise at the national and international level with patents. • Inculcating research culture in the institute Faculty and students should carry forward research in the chosen vertex. Faculty members will be encouraged to do research and publish it with a reputed publishing house with the objective of making it a part of the Institute culture. • Post graduate department and Research Centre To inculcate the research culture it is required to have a post graduate course in the respective department in the institute. We will introduce post graduate course in Computer Engineering, Mechanical and Electronics and Telecommunication • Promoting faculty to pursue PhD in relevant areas To upgrade the qualification of the faculty and to prepare them to develop expertise in the emerging areas, more number of faculty shall be promoted to pursue PhD in the relevant and upcoming areas. • Preparing the students for online examination Keeping in view of the online conduction of lectures and practical in online mode and change in the examination pattern due to Pandemic, the extensive use of ICT tools have to be done. Also, students have to be oriented for appearing for online exams by giving more focus on objective questions. • Coaching for GATE/other competitive exams preparation In order to encourage and support the students to appear for GATE/other competitive exams and seek better scores to get admitted to reputed institutes in India and abroad for Masters program, additional coaching shall be given to the students through the faculty experts. • Augmentation/Upgradation in IT infrastructure To meet the requirement of the upcoming areas in Computer/IT the planning for infrastructure excellence and upgradation of computing facility shall be done. • Procurement of ERP To implement e-governance for academic and administrative activities, ERP software shall be implemented.