YEARLY STATUS REPORT - 2020-2021

Part A	
Data of the Institution	
1.Name of the Institution	Pillai HOC College of Engineering and Technology
• Name of the Head of the institution	Dr. Jagdish Bakal
• Designation	Principal
• Does the institution function from its own campus?	Yes
• Phone no./Alternate phone no.	02192669000
• Mobile no	9820723812
• Registered e-mail	principal.phcet@mes.ac.in
• Alternate e-mail	jwbakal@mes.ac.in
• Address	Pillai HOCL Eucational Campus
• City/Town	Raigad, Via Panvel, Rasayani, Taluka – Khalapur
• State/UT	Maharashtra
• Pin Code	410207
2.Institutional status	
• Affiliated /Constituent	Affiliated
• Type of Institution	Co-education
• Location	Urban

• Financial Status	**Self-financing**
• Name of the Affiliating University	**University of Mumbai**
• Name of the IQAC Coordinator	**Dr. Mansi Subhedar**
• Phone No.	**02192669001**
• Alternate phone No.	**02192669002**
• Mobile	**9867967304**
• IQAC e-mail address	**iqac.phcet@mes.ac.in**
• Alternate Email address	**msubhedar@mes.ac.in**
3.Website address (Web link of the AQAR (Previous Academic Year)	https://phcet.ac.in/iqac/iqac-phcet/
4.Whether Academic Calendar prepared during the year?	**Yes**
• if yes, whether it is uploaded in the Institutional website Web link:	https://phcet.ac.in/students/academic-calendar/term-calendar/

5.Accreditation Details

Cycle	Grade	CGPA	Year of Accreditation	Validity from	Validity to
Cycle 1	**A**	**3.03**	**2019**	**28/03/2019**	**27/03/2024**

6.Date of Establishment of IQAC	**02/07/2018**

7.Provide the list of funds by Central / State Government UGC/CSIR/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.,

Institutional/Department /Faculty	Scheme	Funding Agency	Year of award with duration	Amount
NA	**NA**	**NA**	**NA**	**Nil**

8.Whether composition of IQAC as per latest NAAC guidelines	**Yes**
• Upload latest notification of formation of IQAC	View File

9.No. of IQAC meetings held during the year	03	
• Were the minutes of IQAC meeting(s) and compliance to the decisions have been uploaded on the institutional website?	Yes	
• If No, please upload the minutes of the meeting(s) and Action Taken Report	No File Uploaded	
10.Whether IQAC received funding from any of the funding agency to support its activities during the year?	No	
• If yes, mention the amount		

11.Significant contributions made by IQAC during the current year (maximum five bullets)

1. Formation of Institute Innovation Council (IIC), 2. Formation of NISP, 3. Online Campus Essentials subscription by edX to offer free international certifications to students, faculty and staff, 4. Formation of Nodal Centre for Virtual Labs, an An Initiative of Ministry of Education

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

Plan of Action	Achievements/Outcomes
Formation of Institute Innovation Council (IIC) to strengthen innovation, incubation and entrepreneurship activities	IIC was established as per the norms of Innovation Cell, Ministry of Education, Govt. of India during IIC Calendar year 2020-21. Several activities were conducted under IIC.
Implementation of NISP	NISP team was identified and NISP was implemented. Awareness sessions were conducted for students and faculty.
To make remote lab facility available for students and faculty to perform practical's remotely during the pandemic due to Covid 19	PHCET became Virtual Lab Nodal center and students and faculty actively performed practical's remotely.

To help students to strengthen employability skills, technical knowledge and skill set	PHCET had done tie up with Coursera and EDX Online Campus essentials to provide MOOC facility
To enhance IT infrastructure for online teaching learning process	PHCET upgraded Internet bandwidth to 300 mbps and purchased Zoom License and upgraded G suite for conducting various activities in online mode.
To help faculty and staff to remain safe during pandemic	PHCET conducted free Vaccination drives for faculty and staff
To train faculty for innovative ICT tools for effective online teaching learning methods	PHCET conducted various webinars and handson workshops for faculty to gain expertise in innovative ICT tools
To participate in NIRF	PHCET Participated in NIRF. Details are available at https://phcet.ac.in/accreditation/nirf
To conduct ISO surveillance audit	PHCET is ISO 9001:2015 certified. A surveillance audit was conducted and satisfactory outcome was obtained. The details are available at https://phcet.ac.in/about/awards-and-achievements/
To participate in ARIIA	PHCET participated in ARIIA. Details are available at https://phcet.ac.in/accreditation/atal-ranking-of-institutions-on-innovation-achievements-ariia/

13.Whether the AQAR was placed before statutory body?	**Yes**

- Name of the statutory body

Name	Date of meeting(s)
IQAC	04/10/2021

14.Whether institutional data submitted to AISHE

Year	Date of Submission
2020-21	05/02/2022

15.Multidisciplinary / interdisciplinary

16.Academic bank of credits (ABC):

17.Skill development:

18.Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course)

19.Focus on Outcome based education (OBE):Focus on Outcome based education (OBE):

20.Distance education/online education:

Extended Profile

1.Programme

1.1   **519**

Number of courses offered by the institution across all programs during the year

File Description	Documents
Data Template	[View File](#)

2.Student

2.1   **2525**

Number of students during the year

File Description	Documents
Institutional Data in Prescribed Format	View File

2.2   **142**

Number of seats earmarked for reserved category as per GOI/ State
Govt. rule during the year

File Description	Documents
Data Template	View File

2.3   **895**

Number of outgoing/ final year students during the year

File Description	Documents
Data Template	View File

3.Academic

3.1   **144**

Number of full time teachers during the year

File Description	Documents
Data Template	No File Uploaded

3.2   **144**

Number of sanctioned posts during the year

Extended Profile

1.Programme

1.1 Number of courses offered by the institution across all programs during the year	**519**

File Description	Documents
Data Template	[View File]

2.Student

2.1 Number of students during the year	**2525**

File Description	Documents
Institutional Data in Prescribed Format	[View File]

2.2 Number of seats earmarked for reserved category as per GOI/ State Govt. rule during the year	**142**

File Description	Documents
Data Template	[View File]

2.3 Number of outgoing/ final year students during the year	**895**

File Description	Documents
Data Template	[View File]

3.Academic

3.1 Number of full time teachers during the year	**144**

File Description	Documents
Data Template	No File Uploaded

3.2 Number of sanctioned posts during the year	**144**

File Description	Documents
Data Template	<u>View File</u>

4.Institution

4.1 Total number of Classrooms and Seminar halls	**59**
4.2 Total expenditure excluding salary during the year (INR in lakhs)	**621.72**
4.3 Total number of computers on campus for academic purposes	**1007**

Part B

CURRICULAR ASPECTS

1.1 - Curricular Planning and Implementation

1.1.1 - The Institution ensures effective curriculum delivery through a well planned and documented process

PHCET is affiliated with the University of Mumbai. PHCET follows the curriculum given by the university and curricular aspects of the courses taught are governed by the University of Mumbai Ordinance and guidelines. Before the commencement of every semester, an academic calendar as per guidelines given by the university is prepared. The departments allocate subjects to teachers and prepare a timetable. For the newly introduced Choice Based Credit and Grading System (CBCGS) scheme, the principal and heads of the department along with timetable coordinators decide the department level optional courses and institute level optional courses to be offered to students. The process of teaching-learning is carried out with careful planning and effective delivery of lectures / practical/ tutorial through online lectures using the open-source zoom software as per Institute and University academic calendar and semester plan is ensured. PHCET is recognized as a nodal center for the virtual lab in collaboration with India's premier institutes like IITs.

Experiments of major courses were conducted through these virtual labs. Performance assessment of each student is monitored continuously and actions are taken accordingly for improvisation if required. Google classrooms were formed and the study material, assignments, question bank, and video of recorded lectures were provided to the students.

File Description	Documents
Upload relevant supporting document	[View File](#)
Link for Additional information	https://e-classroom.phcet.ac.in/

1.1.2 - The institution adheres to the academic calendar including for the conduct of Continuous Internal Evaluation (CIE)

The Institute academic calendar is prepared by the Principal and Department Heads based on the University's term calendar. A thorough overview of all curricular and extracurricular activities and assessment dates are included in this document. Each semester, the institute's calendar is posted on the institute's website, notice boards, staff rooms, laboratories, and Examination Section. According to the Institute academic calendar, each department designs its own academic calendar to reflect PBL evaluation, BE project presentations, seminars and workshops. Continuous Internal Evaluation (CIE) is important for continuously reforming the process for academic excellence. Mini-projects, Assignments, Unit tests, and Oral/Practical exams are used to refer for CIE. When it comes to CIE, the academic calendar of the Institute is efficiently employed. There are two components to the evaluation approach used by the Institute. 1. The Internal Assessment (IA). 2. The End Semester Examination. Both examinations were conducted online due to pandemics. The weightage is 20% for IA and 80% for the end-semester examination. As per the guidelines of UoM, two unit tests are conducted per semester for each course.

The academic calendar is also extremely useful for students as well as faculty members. A senior faculty member, department head and Principal periodically monitors progress of activities planned in the academic schedule.

File Description	Documents
Upload relevant supporting document	View File
Link for Additional information	https://phcet.ac.in/students/academic-calendar/term-calendar/

1.1.3 - Teachers of the Institution participate in following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the year. Academic council/BoS of Affiliating University Setting of question papers for UG/PG programs Design and Development of Curriculum for Add on/ certificate/ Diploma Courses Assessment /evaluation process of the affiliating University

A. All of the above

File Description	Documents
Details of participation of teachers in various bodies/activities provided as a response to the metric	View File
Any additional information	View File

1.2 - Academic Flexibility

1.2.1 - Number of Programmes in which Choice Based Credit System (CBCS)/ elective course system has been implemented

1.2.1.1 - Number of Programmes in which CBCS/ Elective course system implemented

11

File Description	Documents
Any additional information	View File
Minutes of relevant Academic Council/ BOS meetings	View File
Institutional data in prescribed format (Data Template)	View File

1.2.2 - Number of Add on /Certificate programs offered during the year

1.2.2.1 - How many Add on /Certificate programs are added during the year. Data requirement for year: (As per Data Template)

27

File Description	Documents
Any additional information	View File
Brochure or any other document relating to Add on /Certificate programs	View File
List of Add on /Certificate programs (Data Template)	View File

1.2.3 - Number of students enrolled in Certificate/ Add-on programs as against the total number of students during the year

1301

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

1.3 - Curriculum Enrichment

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

PHCET focuses on imparting strong ethical values and moral consciousness among students by sensitizing students over Gender, Human Values, Professional Ethics, Environment, and Sustainability. Events such as Expert lectures; National Service Scheme (NSS) programs, the establishment of Committees like the Anti-Ragging Committee and Women's Development Cell incorporates professional values. Human Values, Pollution, and Professional Ethics are taught through subjects like professional practice and Environmental studies alongside various extended activities like Workshops, seminars/webinars, Industry visits, and Guest lectures.

The NSS team organizes camps in the rural areas to assistthe underprivileged, conducts Blood Donation & Health Care Camps, and Tree Plantation activities to foster the sense of Human values and environment. The Women's Development cell aims to spread awareness on Women's issues by conducting Workshops, Motivation speeches,

and Competitions on Women's Empowerment.

Guest lectures conducted on Interpersonal skills develop the Professional attitude of the students. Industry tours help students to gain practical perspectives. The college conducts events to perceive the value of the environment to promote sustainable development among students.

Anti-Ragging Committee is formed to supervise Ragging and Harassment issues in the Institute. The issues are carefully handled and the confidentialities of the issues are well-maintained by the committee.

File Description	Documents
Any additional information	View File
Upload the list and description of courses which address the Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum.	View File

1.3.2 - Number of courses that include experiential learning through project work/field work/internship during the year

193

File Description	Documents
Any additional information	View File
Programme / Curriculum/ Syllabus of the courses	View File
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	View File
MoU's with relevant organizations for these courses, if any	View File
Institutional Data in Prescribed Format	View File

1.3.3 - Number of students undertaking project work/field work/ internships

508

File Description	Documents
Any additional information	View File
List of programmes and number of students undertaking project work/field work/ /internships (Data Template)	View File

1.4 - Feedback System

1.4.1 - Institution obtains feedback on the syllabus and its transaction at the institution from the following stakeholders Students Teachers Employers Alumni

A. All of the above

File Description	Documents
URL for stakeholder feedback report	https://phcet.ac.in/feedback/
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management	View File
Any additional information	View File

1.4.2 - Feedback process of the Institution may be classified as follows

A. Feedback collected, analyzed and action taken and feedback available on website

File Description	Documents
Upload any additional information	View File
URL for feedback report	https://phcet.ac.in/feedback/

TEACHING-LEARNING AND EVALUATION

2.1 - Student Enrollment and Profile

2.1.1 - Enrolment Number Number of students admitted during the year

2.1.1.1 - Number of students admitted during the year

300

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

2.1.2 - Number of seats filled against seats reserved for various categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy during the year (exclusive of supernumerary seats)

2.1.2.1 - Number of actual students admitted from the reserved categories during the year

142

File Description	Documents
Any additional information	View File
Number of seats filled against seats reserved (Data Template)	View File

2.2 - Catering to Student Diversity

2.2.1 - The institution assesses the learning levels of the students and organizes special Programmes for advanced learners and slow learners

To assess the learning level of the students, various direct and indirect methods are followed in the PHCET. Indirect methods, the student's knowledge, and skills are assessed from their performance in the internal assessment, oral/practical examination, end semester examination, etc. Monitoring students' attention in the classroom discussion, question-answer sessions, and students' interaction with mentors and teachers helps to identify students learning to leave indirectly. Academic growth of the advanced and slow learner is ensured by taking various measures.

To keep slow-learner in the mainstream remedial classes, extra lab sessions, additional tutorials, problem-solving sessions, and timely tests are conducted. Motivating them for reading books, watching subject-related videos helped them to understand the subject well. To boost confidence in slow learner mentor and teachers regularly interact with them and are encouraged to discuss their problems.

Advanced learners are motivated to learn more than the regular academic subjects. Various workshops, webinars on the latest technologies, higher studies helped them to explore various

carrier options. Advanced learners having high academic track records are encouraged to achieve university ranks and take up competitive examinations like GATE during their final year. The bright students having an orientation towards research are encouraged to present their work at various platforms and competitions.

File Description	Documents
Paste link for additional information	https://phcet.ac.in/students/student-activities/student-events/
Upload any additional information	View File

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

Number of Students	Number of Teachers
2525	144

File Description	Documents
Any additional information	View File

2.3 - Teaching- Learning Process

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

PHCET aims at imparting knowledge through student centric method. Faculty use innovative and ICT enabled methods of teaching. The regular teaching learning process is enhanced with E-learning technology through light board studio recording, Google Classroom, NPTEL videos, IIT tutorials, Virtual labs, and digital library to access study material. The Institute has subscription of Coursera, Edx and ISRO outreach centre to provide free online certification courses in technical fields, including engineering and soft skill courses.

Students and faculty are involved in field projects, project-based learning which make learning more experimental. Seminars, workshops and guest lectures are arranged regularly to make students understand the needs of industry. Under MOU's with reputed industries industrial visit, internships, guest lectures, training courses are offered to students to enhance experiential learning. Students are encouraged to participate in project

competition like Hackathon, Avishkar to boost their confidence and participatory learning. To achieve course outcome, Course exit survey is taken at the end of each semester which helps in sharpening the skills.

Under professional student chapters and student council various activities like poster competition, guest lectures, essay competitions, social events are conducted.https://phcet.ac.in/students/student-activities/student-centric-methods/

File Description	Documents
Upload any additional information	[View File](View%20File)
Link for additional information	https://phcet.ac.in/students/student-activities/student-centric-methods/

2.3.2 - Teachers use ICT enabled tools for effective teaching-learning process. Write description in maximum of 200 words

In PHCET, divergent ICT tools are used by the faculty members to enhance the teaching and learning process. It helped to support, enhance, and optimize the delivery of education specifically during online learning due to the covid-19 pandemic. Following tools and resources were used to enhance the experience of teaching-learning process students and teachers:

1. PPTs, videos, and audio clips to improve the teaching experience
2. Google classroom to share study material, assignments, keeps a record of each students' performance.
3. online platforms such as Google Meet and Zoom to conduct lecture, practical and other activities
4. Online exams conducted using Google forms
5. Virtual Labs provided by the various IITs and other standard institutes helped students to perform online practicals.
6. Coursera and Edx Online Campus Essentials subscription for National and international MOOC Certifications by faculty and students
7. Video lectures are prepared using an In-house developed Lecture recording system - Lightboard and made available on the institute's YouTube channel.
8. Library space - Digital Learning Repository of Course wise study material, question banks, video lectures, and sample question papers were developed for remote access to PHCET

students and faculty.

File Description	Documents
Upload any additional information	View File
Provide link for webpage describing the ICT enabled tools for effective teaching-learning process	View File

2.3.3 - Ratio of mentor to students for academic and other related issues (Data for the latest completed academic year)

2.3.3.1 - Number of mentors

144

File Description	Documents
Upload, number of students enrolled and full time teachers on roll	View File
Circulars pertaining to assigning mentors to mentees	View File
Mentor/mentee ratio	View File

2.4 - Teacher Profile and Quality

2.4.1 - Number of full time teachers against sanctioned posts during the year

144

File Description	Documents
Full time teachers and sanctioned posts for year (Data Template)	View File
Any additional information	View File
List of the faculty members authenticated by the Head of HEI	View File

2.4.2 - Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.B Superspeciality / D.Sc. / D.Litt. during the year (consider only highest degree for count)

2.4.2.1 - Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.C Superspeciality / D.Sc. / D.Litt. during the year

20

File Description	Documents
Any additional information	View File
List of number of full time teachers with Ph. D. / D.M. / M.Ch./ D.N.B Super specialty / D.Sc. / D.Litt. and number of full time teachers for year (Data Template)	View File

2.4.3 - Number of years of teaching experience of full time teachers in the same institution (Data for the latest completed academic year)

2.4.3.1 - Total experience of full-time teachers

930

File Description	Documents
Any additional information	View File
List of Teachers including their PAN, designation, dept. and experience details(Data Template)	View File

2.5 - Evaluation Process and Reforms

2.5.1 - Mechanism of internal assessment is transparent and robust in terms of frequency and mode. Write description within 200 words.

Institute's Academic calendar provides planned dates of internal assessment, projects, and term work submission. The academic calendar is made available well before the commencement of the semester through the college website, notice boards, and lab displays. Internal assessment comprises of term work assessment and internal tests as per the syllabus scheme prescribed by the University of Mumbai. Internal assessment is carried out periodically over the entire semester.

The evaluation of the term work is done for 25 marks in the majority of the subjects and 50 marks in a few subjects. The assessment of term work is based on the performance and evaluation of assignments, case studies, project-based learning, and experiments regularly. Concerned students are also aware of their grades/marks obtained in a particular assignment experiment or case study as the marks are awarded in front of the students. Two

internal tests are conducted each of 20 marks and an average is considered as 20% of the total weightage in each theory subject along with an end semester examination of 80 marks. The first test is conducted within 45 days of college reopening in such a way that at least 40% syllabus is covered in the class and the second test is scheduled after the next 40 % is covered.

The solution of the test along with a question-wise marking scheme is discussed with students to maintain transparency and uniformity in the assessment of the internal tests. After the assessment, answer sheets are shown to students, and performance is discussed. In mid of every semester, a parent-teacher meeting is conducted to update the parents about their ward's attendance and performance in the internal assessment of all subjects, and feedback is also sought from parents.

The internal assessments are routinely monitored by Heads of Department to ensure that they meet the learning outcomes outlined in the course syllabus. With these systems in place, PHCET very well exhibits transparency in the mechanism of internal assessment and robustness in terms of frequency and mode.

File Description	Documents
Any additional information	View File
Link for additional information	https://phcet.ac.in/students/examination/examination-notices/

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

A transparent, time-bound and efficient method is being followed in PHCET in terms of dealing with internal examination related grievances. Various internal examinations are being performed throughout the semester. Some of them are – IA 1, IA2, assignments, lab continuous evaluation, project evaluations, etc.

Internal Assessments (IA 1 and IA2):

The faculty evaluates the papers within a week of conduction of test. The evaluated answer sheets are shown to students in class and faculty undertakes individual grievances with a student on the paper if required by the student. At the end of the semester the average marks of both the assessments is calculated and verified with the students. If any discrepancies are reported by the

students, then they are resolved by the faculty immediately.

Assignments:

Faculty evaluates assignments based on the rubric which is also shared with the students. The rubric consists of criteria- timely submission, clarity, neatness, etc. The evaluated assignments are given back to students thus maintaining the transparency of the marks assigned and to resolve grievances is any.

Laboratory Experiments:

The experiment performed in lab by the student is immediately evaluated by the faculty and the performance marks are assigned based on the lab rubric designed by the faculty. The lab rubric is given in the lab manual which is shared with the students well in advance before the lab is conducted. The lab submissions are taken in LMS, e.g. Google classroom, and the marks given by the faculty are available to the students immediately, this providing a transparent way for students to reflect on their strengths and areas of improvements.

Project Evaluation:

In a semester two internal evaluations of the project is conducted in front of the panel consisting of group of faculties. The rubric is designed for these two presentations having criteria- quality of problem formulation, literature analysis, presentation, team work, etc. With these systems in place, PHCET very well exhibits transparency in the mechanism of dealing with grievances related to the internal assessment.

File Description	Documents
Any additional information	[View File]()
Link for additional information	[https://phcet.ac.in/about/grievance-redressal-mechanism/]()

2.6 - Student Performance and Learning Outcomes

2.6.1 - Programme and course outcomes for all Programmes offered by the institution are stated and displayed on website and communicated to teachers and students.

Institute follows the guidelines of Outcome-Based Education (OBE) and accordingly strict measures are taken to ensure the

dissemination and awareness ofProgram Outcomes (POs), Program Specific Outcomes (PSOs), and Course Outcomes (COs). COs are predefined in the syllabus. These COs are refined at the department level after rigorous discussion among the faculty members if required. Following methods are followed by the institution to widely publicize COs and POs among the teachers, students, and other stakeholders.

- Display on Website:
- http://www.phcet.ac.in/departments/computerengineering.asp
- Institute website
- Displayed in Department Notice Boards, Faculty Rooms, Class Rooms, HoD Cabin, Laboratories and Library
- Printed on students' journals
- Discussed during Faculty Meeting
- Disseminated during Parent- Teacher Meeting
- Awareness is created among Alumni during Alumni Meetings

Awareness about POs, PSOs, and COs is created in students by HoD in the student orientation program. Subject in-charges, class coordinators, mentors, faculty members also emphasize creating consciousness among students about COs and POs and PSOs and the need for its attainment. Subject In-charge introduces students to all the COs of the course in the first lecture. Before starting a new module, COs related to that topic are revised.

POs are published on the institute website, Institute Brochure, students' journals. Displayed at various places in the campus such as notice boards, classrooms, faculty rooms, etc. These are also discussed with faculty members and parents during meetings. Students are made responsive towards the same by conveying them during the orientation program.

File Description	Documents
Upload any additional information	View File
Paste link for Additional information	https://phcet.ac.in/academics/bachelors/electrical-engineering/program-overview/
Upload COs for all Programmes (exemplars from Glossary)	View File

2.6.2 - Attainment of Programme outcomes and course outcomes are evaluated by the institution.

PHCET practices outcome-based education from the last six years.

The attainment was measured as per NBA (Washington Accord) guidelines. The direct and indirect assessment methods were considered for calculating the attainment of course outcomes and program outcomes. The direct assessment method includes assessment of assignments, practical and oral examination, final year projects, experiments, internal assessment, and the end semester examination, while the indirect method was based on a course exit survey.

Initially set the target value of marks for each subject by considering the difficulty level of the subject. Based on the university curriculum weightage was given to each head. For individual subject, criteria for level selection (level-1,2,3) was decided by the subject teacher through analysis of previous years' university examination results. The final level for each head was decided by comparing level criteria and percentage of students at and the above-set target value of marks. The course attainment was calculated by multiplying the final level by weight percentage.

Mapping of each course outcome with end semester examination questions, assignments, practical and internal assessment questions was carried out.

Indirect assessments include a course exit survey. Course exit survey forms were shared with students to map course outcomes on a scale of 1 to 5. Total attainment was calculated by giving 80% weightage to the direct assessment method and 20% weightage to the indirect assessment method.

The PO's were mapped with CO's on the scale of 0, 0.33 (Low), 0.66 (Medium), and 1 (High). Final program attainment was calculated by multiplying total attainment with PO and CO mapping scale. The same procedure was followed to calculate PSO attainment.

File Description	Documents
Upload any additional information	[View File](#)
Paste link for Additional information	https://phcet.ac.in/academics/bachelors/mechanical-engineering/program-overview/

2.6.3 - Pass percentage of Students during the year

2.6.3.1 - Total number of final year students who passed the university examination during the year

892

File Description	Documents
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	View File
Upload any additional information	View File
Paste link for the annual report	https://phcet.ac.in/students/examination/examination-notices/

2.7 - Student Satisfaction Survey

2.7.1 - Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design its own questionnaire) (results and details need to be provided as a weblink)

https://phcet.ac.in/iqac/student-satisfaction-survey/

RESEARCH, INNOVATIONS AND EXTENSION

3.1 - Resource Mobilization for Research

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

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

2.99

File Description	Documents
Any additional information	View File
e-copies of the grant award letters for sponsored research projects /endowments	View File
List of endowments / projects with details of grants(Data Template)	View File

3.1.2 - Number of teachers recognized as research guides (latest completed academic year)

3.1.2.1 - Number of teachers recognized as research guides

4

File Description	Documents
Any additional information	[View File](#)
Institutional data in prescribed format	[View File](#)

3.1.3 - Number of departments having Research projects funded by government and non government agencies during the year

3.1.3.1 - Number of departments having Research projects funded by government and non-government agencies during the year

1

File Description	Documents
List of research projects and funding details (Data Template)	[View File](#)
Any additional information	[View File](#)
Supporting document from Funding Agency	[View File](#)
Paste link to funding agency website	https://www.aicte-india.org/atal

3.2 - Innovation Ecosystem

3.2.1 - Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge

PHCET is having well established Research, Incubation, and Innovation Centre with state-of-the-art lab facilities, computer lab, and IPR cell. Faculty prepares research proposals regularly to the University of Mumbai, DST, and AICTE. In the academic year 2020-2, to promote innovation activities and provide an ecosystem for innovation, PHCET has established Institution's Innovation Council (IIC) as per the guidelines of MoE's Innovation Cell (MIC) in the academic year 2020-21. The initiative was to create a vibrant local innovation ecosystem, start-up supporting mechanism, establish a functioning ecosystem for scouting ideas and pre-incubation of ideas, and to develop the better cognitive ability for technology students. PHCET, IIC is actively involved in organizing and conducting various seminars, workshops, Idea competitions, Hackathon for school children's, etc. for its students and faculties. The details of the resolution, minutes of meetings, and activities conducted under IIC are available at https://phcet.ac.in/iic/. A hands-on workshop is conducted for

writing patents and copyrights. Many faculty have identified topics for the same and are working on it along with students. PHCET has formulated a National Innovation and Startup Policy as per the guidelines of MIC. The seminars for awareness on NISP are conducted for faculty and students.

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://phcet.ac.in/iic/

3.2.2 - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the year

3.2.2.1 - Total number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year wise during the year

38

File Description	Documents
Report of the event	View File
Any additional information	View File
List of workshops/seminars during last 5 years (Data Template)	View File

3.3 - Research Publications and Awards

3.3.1 - Number of Ph.Ds registered per eligible teacher during the year

3.3.1.1 - How many Ph.Ds registered per eligible teacher within the year

1

File Description	Documents
URL to the research page on HEI website	https://phcet.ac.in/research/research-development/
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc (Data Template)	View File
Any additional information	View File

3.3.2 - Number of research papers per teachers in the Journals notified on UGC website during the year

3.3.2.1 - Number of research papers in the Journals notified on UGC website during the year

89

File Description	Documents
Any additional information	View File
List of research papers by title, author, department, name and year of publication (Data Template)	View File

3.3.3 - Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during the year

3.3.3.1 - Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings year wise during year

29

File Description	Documents
Any additional information	View File
List books and chapters edited volumes/ books published (Data Template)	View File

3.4 - Extension Activities

3.4.1 - Extension activities are carried out in the neighborhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the year

PHCET prepares the individual to find out one's inherent potentialities and develop the same to the maximum extent to derive utility for himself and contribute to society. An educational institution is the important social agency whose contribution to the development of the society is most expected and the national development is revolving around it. At PHCET we try to provide the same. Community-oriented education and its extensional activities are the modern ideologies of Education.

Extra-curricular activities conducted at PHCET open avenues for the students to make social participation and contribute to the social empowerment through Community Service, Uberang, NSS, Student Council, Marathi Vagmay Mandal, Alumni Association, etc.

Due to the pandemic, it was not possible to reach out to the community face to face but we arranged many events online and tried to achieve the objective. Few events were conducted online to collect money and it was donated to Panvel Gurudwara. Awareness about Organ Donation was organized as a result of which one faculty registered himself for the Eye Donation. Inhouse made Covid Safety materials, face shields, sanitizerswere provided to nearest Rasayani police station and traffic police. Through all these activities students work for society directly and try to help them in a better way.

File Description	Documents
Paste link for additional information	https://phcet.ac.in/students/student-council/, https://phcet.ac.in/students/student-activities/student-associations/nss/
Upload any additional information	View File

3.4.2 - Number of awards and recognitions received for extension activities from government / government recognized bodies during the year

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

4

File Description	Documents
Any additional information	View File
Number of awards for extension activities in last 5 year (Data Template)	View File
e-copy of the award letters	View File

3.4.3 - Number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc., (including the programmes such as Swachh Bharat, AIDS awareness, Gender issues etc. and/or those organized in collaboration with industry, community and NGOs) during the year

3.4.3.1 - Number of extension and outreach Programs conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the year

18

File Description	Documents
Reports of the event organized	View File
Any additional information	View File
Number of extension and outreach Programmes conducted with industry, community etc for the during the year (Data Template)	View File

3.4.4 - Number of students participating in extension activities at 3.4.3. above during year

3.4.4.1 - Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year wise during year

1893

File Description	Documents
Report of the event	View File
Any additional information	View File
Number of students participating in extension activities with Govt. or NGO etc (Data Template)	View File

3.5 - Collaboration

3.5.1 - Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship during the year

3.5.1.1 - Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship year wise during the year

79

File Description	Documents
e-copies of related Document	View File
Any additional information	View File
Details of Collaborative activities with institutions/industries for research, Faculty	View File

3.5.2 - Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the year

3.5.2.1 - Number of functional MoUs with Institutions of national, international importance, other universities, industries, corporate houses etc. year wise during the year

22

File Description	Documents
e-Copies of the MoUs with institution./ industry/corporate houses	View File
Any additional information	View File
Details of functional MoUs with institutions of national, international importance, other universities etc during the year	View File

INFRASTRUCTURE AND LEARNING RESOURCES

4.1 - Physical Facilities

4.1.1 - The Institution has adequate infrastructure and physical facilities for teaching- learning. viz., classrooms, laboratories, computing equipment etc.

In this pandemic period of COVID-19, an environment of excellence in education is achieved through the online teaching and learning process using advanced pedagogical Tools. All the co-curricular activities/extra-curricular activities, Parent Teacher Meeting, Campus Recruitment Training, seminars all are managed through an online platform using Google Meet and Zoom. Zoom license, extra HD, Switches, Access point, etc were purchased to strengthen the IT infrastructure. Various tools of Google attendance, Whiteboard Online, and various other online applications are used as effective teaching aids. PHCET has been set up as a nodal center for virtual labs by the Ministry of Human Resource Development through its ICT running under the National Education Mission. Virtual Labs cater to all the needs of students at the undergraduate level for laboratory. Teachers also use various ICT tools like Lightboard lecture recording system, Video Recordings of Lab Experiments performed, PowerPoint presentations, NPTEL, and other online lectures from Coursera, Edx to enrich the quality of contents delivered. PHCET Library has created Institutional Repository (Digital Library) for Comprehensive study materials like Lecture Notes, PPTs, Lab Manuals, Assignments, Syllabus, Question Papers, and all the other Academic relevant materials

required by the users. In this pandemic period also Component Library facility for borrowing various hardware components is available to Faculty and students to complete their Hardware projects on time. Research and Incubation Centre Laboratory Facility is also available to all Faculty and students while maintaining all social distance rules and regulations.

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://phcet.ac.in/about/infrastructure-and-facilities/

4.1.2 - The Institution has adequate facilities for cultural activities, sports, games (indoor, outdoor), gymnasium, yoga centre etc.

PHCET gives major emphasis to the total development of students. PHCET has a sports ground of 7 Acres and a tie-up with the Sports Authority of India (SAI). Under this tie-up, students can avail themselves of facilities for training in sports. The institution has a 400m track, 6 lane football ground, 3 volleyball courts,1 basketball ground, 2 handball ground, and a long jumpy arena.

We have a fully equipped and vibrant Gymnasium that can be used by students. All the major equipment is available in the gymnasium e.g. 2 leg presses, 2 Multi-Station, 4 benches for bench press, 2 Olympic boxes, treadmill, etc. Facilities for outdoor and indoor sports and games that include badminton, volleyball, basketball, carom, table tennis, and chess also exist in the institution.

PHCET has a separate yoga hall for the students and staff. Student Council, NSS, and Women Development Cell celebrate international yoga day and conduct different yoga sessions for students, faculty, and staff. Regular sessions on Meditation are also conducted this year in online mode.

We have an auditorium, stage, conference halls, and lawns for organizing annual functions and cultural events. PHCET provides a platform for Euforia, the annual cultural festival to encourage students to bring out their talents, abilities, and skills by organizing and participating in diverse events.

File Description	Documents
Upload any additional information	[View File]()
Paste link for additional information	https://phcet.ac.in/students/sports-and-games/ https://phcet.ac.in/students/campus-fest/euforia/

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

59

File Description	Documents
Upload any additional information	[View File]()
Paste link for additional information	https://phcet.ac.in/about/infrastructure-and-facilities/academic-infrastructure/
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	[View File]()

4.1.4 - Expenditure, excluding salary for infrastructure augmentation during the year (INR in Lakhs)

4.1.4.1 - Expenditure for infrastructure augmentation, excluding salary during the year (INR in lakhs)

262.62

File Description	Documents
Upload any additional information	[View File]()
Upload audited utilization statements	[View File]()
Upload Details of budget allocation, excluding salary during the year (Data Template	[View File]()

4.2 - Library as a Learning Resource

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

PHCET Library is housed with modern amenities and situated on the second floor of the Engineering building. PHCET Library is an integral part of learning and curriculum, enhancing the quality of the academic and research environment in the college.It has got a rich collection of more than 25,000 books in the field of Engineering, Technology, and related disciplines. The library has subscribed to over 5017 E-journals. The library houses an enviable collection of resources in the field of Engineering, Study Skills, Personality Development, General Management, Humanities, Science, and allied subjects. The library has also created a learning environment by establishing Online Public Access Catalogue Search Area, an internet browsing area for accessing e-resources, a Laptop zone with a Wi-Fi facility, and specialized workstations like a discussion room, Separate Room for rare documents and reference books. The library has a nucleus to meet the information requirements of students and faculties of the institution. The library has created Digital Library (Institutional Repository) for Comprehensive Study materials like Lecture Notes, PPTs, Lab Manuals, Assignments, Experiments, Syllabus, Question Papers, and all the other Academic relevant materials required by the users. Moodle an Open Source Online Learning Management System is used for developing the Digital Library. A dedicated Rack Server with a remote access Facility is provided for this purpose.

List of subscribed E-resources & Digital Library:

Sr.No.

E-Resources

Website

QTY

Remarks

1

IEEE Xplore Digital Library

https://ieeexplore.ieee.org

175

E- journals

4

J-Gate - Engineering & Technology (JET)

https://jgateplus.com/search/login/

4842

E-journals

6

Digital Library

http://114.143.219.19/libspace/

1

Study Materials

Total

5017 - E-journals

Library provides the facility to check plagiarism for projects, thesis, research papers, and synopsis. The library has Turnitin, which is internet-based plagiarism prevention software. Turnitin checks for potential unoriginal content by comparing submitted documents to several databases using a proprietary algorithm. The documents submitted by users are stored in a database used to check for plagiarism to avoid duplication of subject contents of a project, thesis, research papers, etc. by identifying matching text between papers.

Information and Communication Technologies (ICT) have immensely impacted the functioning of Libraries. PHCET Library is automated using open source Library Management Software "KOHA". Description of ILMS is as follows:

Name of the ILMS software - KOHA

Nature of automation (fully or partially) - Fully

Version- 17.05.03.000

Year of automation- 2016

Integrated Library Management System is used to manage various functions of the library. It has got remote access to OPAC (Online Access Public Catalogue) which is called Web OPAC. KOHA provides e-mail alerts for return/renewals of books before due dates; Reminders to return and renew overdue books.

The library has created a Facebook group and Instagram Account Page. These provide valuable information on Careers, Scholarships, Various Entrance Exams, etc. The group creates awareness and updates on Library Resources and Services. It gives information and news related to the field of education. Users may post messages/queries related to the library.

KOHA Link: URL: http://koha.mes.ac.in:9001/

OPAC Link: http://opac.mes.ac.in:9000/

File Description	Documents
Upload any additional information	View File
Paste link for Additional Information	https://phcet.ac.in/library/library-information/

4.2.2 - The institution has subscription for the **A. Any 4 or more of the above** **following e-resources e-journals e-ShodhSindhu Shodhganga Membership e-books Databases Remote access toe-resources**

File Description	Documents
Upload any additional information	View File
Details of subscriptions like e-journals,e-ShodhSindhu, Shodhganga Membership etc (Data Template)	View File

4.2.3 - Expenditure for purchase of books/e-books and subscription to journals/e- journals during the year (INR in Lakhs)

4.2.3.1 - Annual expenditure of purchase of books/e-books and subscription to journals/e-journals during the year (INR in Lakhs)

1.34

File Description	Documents
Any additional information	View File
Audited statements of accounts	View File
Details of annual expenditure for purchase of books/e-books and journals/e- journals during the year (Data Template)	View File

4.2.4 - Number per day usage of library by teachers and students (foot falls and login data for online access) (Data for the latest completed academic year)

4.2.4.1 - Number of teachers and students using library per day over last one year

6

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

4.3 - IT Infrastructure

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

The institute gives top priority to the expansion of its IT facilities including Wi-Fi because it understands the correlation between appropriate infrastructure and efficient teaching-learning.

At the beginning of the academic year assessment for replacement / up-gradation / addition of the existing infrastructure will be finalized based on suggestions from department heads, faculty & lab in charge, and system administrators after reviewing course requirements, computer to student ratio, budget, and performance of the existing equipment. Every year up-gradation is done in the second week of June. Currently, all labs have desktop computers with a configuration like Gigabyte Motherboard, Intel Core i5 Processor, 8 GB DDR2 RAM, Hard Disk 500 GB. Three Rack servers are available in the institute.

The institute has always been reviewing the current needs and accordingly the internet bandwidth is upgraded from time to time. Previous academic year internet speed was 200 Mbps. Now, high-speed internet access is available on campus at a speed of 300 Mbps. The Internet Service Provider (ISP) Tata provides connectivity with high fault tolerance. Tata Telecom Network with intercom facilities.

Institute is providing the following facilities:

- Wi-Fi 24 x 7
- G-Suite and Zoom facility
- Intercom facilities
- Virtual Labs nodal center.
- Subscription for unlimited Coursera and edX courses.

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://phcet.ac.in/about/infrastructure-and-facilities/it-facilities-%20/

4.3.2 - Number of Computers

1007

File Description	Documents
Upload any additional information	View File
List of Computers	View File

4.3.3 - Bandwidth of internet connection in the Institution

A. ? 50MBPS

File Description	Documents
Upload any additional Information	View File
Details of available bandwidth of internet connection in the Institution	View File

4.4 - Maintenance of Campus Infrastructure

4.4.1 - Expenditure incurred on maintenance of infrastructure (physical and academic support facilities) excluding salary component during the year (INR in Lakhs)

4.4.1.1 - Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component during the year (INR in lakhs)

47.75

File Description	Documents
Upload any additional information	View File
Audited statements of accounts	View File
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	View File

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

PHCET ensured appropriate sanitization and disinfection processes and procedures in this COVID-19 pandemic. Thermal check scans, Arogya setu App, and sanitization facility at the entrance point were carried out for faculty, students, staff, and all visitors entering the campus to protect and avoid infecting one another. All preventive measures, preparedness, and necessary support system to deal with the COVID -19 are monitored. The conditions of the entry for visitors were strictly laid down and displayed on all the entry points. Adequate arrangements of thermal scanners, sanitizers are available at all entry and exit points, including the reception area and office. Crowding is avoided at all entry/ exit points. No mask no entry is strictly implemented in PHCET. Staggered days for Lab assistants and Teaching staff on a rotation basis are maintained. Proper sanitization at all laboratories is ensured by all non-teaching staff. Cleaning and regular disinfection are mandatory in all classrooms and all laboratories on the entire campus. Laboratories are maintained by all the Lab Assistants of the concerned departments on a rotation basis, without violating the norms of "social distancing". CCTV camera is installed in all the laboratories. COVID-19 norms are maintained everywhere on campus including the library. All the course material such as Course Academic Plan, Lab Manuals, Reference Books, Notes, PPT, Question Bank Chapter wise, and Test Marks have uploaded in respective subject Google Classroom.

File Description	Documents
Upload any additional information	[View File](#)
Paste link for additional information	https://phcet.ac.in/faculty/faculty-handbook/

STUDENT SUPPORT AND PROGRESSION

5.1 - Student Support

5.1.1 - Number of students benefited by scholarships and free ships provided by the Government during the year

5.1.1.1 - Number of students benefited by scholarships and free ships provided by the Government during the year

1584

File Description	Documents
Upload self attested letter with the list of students sanctioned scholarship	[View File](#)
Upload any additional information	[View File](#)
Number of students benefited by scholarships and free ships provided by the Government during the year (Data Template)	[View File](#)

5.1.2 - Number of students benefitted by scholarships, free ships etc. provided by the institution / non- government agencies during the year

5.1.2.1 - Total number of students benefited by scholarships, free ships, etc provided by the institution / non- government agencies during the year

238

File Description	Documents
Upload any additional information	View File
Number of students benefited by scholarships and free ships institution / non- government agencies in last 5 years (Date Template)	View File

5.1.3 - Capacity building and skills enhancement initiatives taken by the institution include the following: Soft skills Language and communication skills Life skills (Yoga, physical fitness, health and hygiene) ICT/computing skills

A. All of the above

File Description	Documents
Link to Institutional website	https://phcet.ac.in/enhancement-schemes/
Any additional information	View File
Details of capability building and skills enhancement initiatives (Data Template)	View File

5.1.4 - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year

2460

5.1.4.1 - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year

2460

File Description	Documents
Any additional information	View File
Number of students benefited by guidance for competitive examinations and career counseling during the year (Data Template)	View File

5.1.5 - The Institution has a transparent mechanism for timely redressal of student

A. All of the above

grievances including sexual harassment and ragging cases Implementation of guidelines of statutory/regulatory bodies Organization wide awareness and undertakings on policies with zero tolerance Mechanisms for submission of online/offline students' grievances Timely redressal of the grievances through appropriate committees

File Description	Documents
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	View File
Upload any additional information	View File
Details of student grievances including sexual harassment and ragging cases	View File

5.2 - Student Progression

5.2.1 - Number of placement of outgoing students during the year

5.2.1.1 - Number of outgoing students placed during the year

288

File Description	Documents
Self-attested list of students placed	View File
Upload any additional information	View File
Details of student placement during the year (Data Template)	View File

5.2.2 - Number of students progressing to higher education during the year

5.2.2.1 - Number of outgoing student progression to higher education

11

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

5.2.3 - Number of students qualifying in state/national/ international level examinations during the year (eg: JAM/CLAT/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations)

5.2.3.1 - Number of students qualifying in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations) during the year

18

File Description	Documents
Upload supporting data for the same	View File
Any additional information	View File
Number of students qualifying in state/ national/ international level examinations during the year (Data Template)	View File

5.3 - Student Participation and Activities

5.3.1 - Number of awards/medals for outstanding performance in sports/cultural activities at university/state/national / international level (award for a team event should be counted as one) during the year

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

28

File Description	Documents
e-copies of award letters and certificates	View File
Any additional information	View File
Number of awards/medals for outstanding performance in sports/cultural activities at university/state/national/international level (During the year) (Data Template)	View File

5.3.2 - Institution facilitates students' representation and engagement in various administrative, co-curricular and extracurricular activities (student council/ students representation on various bodies as per established processes and norms)

A student council, at the highest level of student affairs, seeks to bind everyone together and move everyone forward, together. Under the supervision of faculty advisors and the Principal, the PHCET Student Council is in charge of organizing technical, cultural, social, and sporting events. The students are not only involved in making decisions but also, administrative decisions relevant to students are circulated to the students through Student Council. Student Council events for 2020-21 are available at https://phcet.ac.in/students/student-council/

Student bodies like CSI, IETE, IE, ISHARE, MESA, SAE, SFA, Team starkers nudge students towards developing special interests by organizing expert lectures, seminars through online mode. Under the direction of the faculty coordinators, all student bodies are involved in the organisation of co-curricular and extra-curricular activities. Unfortunately, the current pandemic crisis has forced us to halt our physical interactions and shift the flow to the virtual world. Every year, the Institute promotes new events and facilitates students to participate in various academic and administrative committees. This has aided management and faculty in gaining a better understanding of students and the problems they face, and has contributed massively to the teaching and learning processes, as a result of which the Institute has produced excellent results year after year. Students represent the following academic and administrative bodies of the college:

- College Development Committee
- Internal Quality Assurance Cell
- Anti-Ragging Committee
- Internal Complaint Committee

- **Prevention of Atrocities to SC/ST Committee**
- **Placement Committee**
- **Extracurricular Activities committee**
- **Canteen Committee**
- **Women Development Cell**

This enables the institute to review some administrative decisions from a student's perspective. An alumni representative also provides valuable inputs through his or her expertise and exposure. In addition to the above, NSS serves the community by taking initiatives like grocery distribution to the needy during covid-19, blood donation camp, plasma donation drive for covid-19 treatment to name a few. The sole aim of the NSS is to provide hands-on experience to young students in delivering community service. Students work cordially under the supervision of a faculty member. PHCET women in STEM has been inaugurated this year, it works towards uplifting female students and faculty in the fields of technology.

File Description	Documents
Paste link for additional information	https://phcet.ac.in/students/student-council/
Upload any additional information	View File

5.3.3 - Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions)

5.3.3.1 - Number of sports and cultural events/competitions in which students of the Institution participated during the year

28

File Description	Documents
Report of the event	View File
Upload any additional information	View File
Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions (Data Template)	View File

5.4 - Alumni Engagement

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

The Alumni Association of PHCET, named as "Pillai HOC College of Engineering and Technology Alumni Welfare Association". PHCET considers its Alumini as one of the its pillar. PHCET has always been benefited socially, academically and professionally by maintain a strong relationship with is Alumni. Likewise, even the alumni community have realized that it's not just a mere nostalgia that they associate their PHCET with, but it's much beyond that. Some of the PHCET focus areas with regards to its alumni are:

- Career Guidance - Alumni is a huge talent pool whose guidance can be beneficial to many students and other fellow-alumni in their respective areas of study. Even in this pandemic situation, the Alumni association conducted several online workshops and webinars, on technical as well as nontechnical subjects to guide the students.
- Networking Platform - Alumni network by itself is one of the best professional networking platforms available today.
- Fund-raising - A strong Alumni association can be one of the biggest benefactors of an institution that can contribute towards various developmental activities of the institution.
- Alumni Workshops and Seminars - Alumni regularly conduct workshops/ seminars for the students of various departments. This provides a platform for alumni to showcase their experience and skills to existing students. Alumni can thus serve as mentors for students, provide placement and scholarships as well as guide the careers of upcoming students.

MES Alumni Registration - PHCET, through MES, provides a uniform platform for all its alumni to register on and network called alumni.mes.ac.in. Here PHCET alumni can network with and they can track all the other alumni of any MES institute and each institute can keep track of each alumni. PHCET also has its own alumni committee and registered organization which manages the day to day activities and financial aspects of the PHCET alumni community. Students can register at https://alumniportal.mes.ac.in/

Continuing Education - PHCET offers many add on and certificate courses that are offered to alumni at discounted rates. In general alumni can get up to 50% concession in various courses and certification courses like SAP. SAP ERP is application based

software used by various multinational companies to manage their business processes efficiently. In partnership with our college, SAP also provides global certification courses to its students at an affordable rate. Harvard Business School that will make Harvard Business school online courses will be made available for all our alumni at special discounted rate. In this pandemic situation, Alumni associations could conduct several online workshops and webinars, on technical as well as non-technical subjects as much as possible for students.

File Description	Documents
Paste link for additional information	https://phcet.ac.in/alumni/alumni-registration/
Upload any additional information	View File

5.4.2 - Alumni contribution during the year (INR in Lakhs)   **A. ? 5Lakhs**

File Description	Documents
Upload any additional information	View File

GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 - Institutional Vision and Leadership

6.1.1 - The governance of the institution is reflective of and in tune with the vision and mission of the institution

PHCET has proposed the development of Innovation and Entrepreneurship in the academic and administrative governance systems. Academic and administrative governance objectives are based on PHCET's vision and mission. The significant bodies that monitor governance include Governing Body, IQAC, College Development Cell (CDC), and department advisory committee. The members of Governing Council, IQAC, and College Development Cell (CDC) are strategic executives, tactical and operational level staff, like top management members, the Principal, Heads of Departments, senior faculty members, and non-teaching staff members.

The principal plans, executes, records, and monitors academic and

administration events along with his executive team in the form of committees. Various academic and administrative committees are formed that include faculty members, supporting staff, and students as per the requirement. Some of the committees include IQAC, department budget committee, academic advisory committee, admission committee, anti-ragging committee, students grievance redressal committee, time table committee, library committee, examination committee, internal examination committee, anti unfair means & discipline committee, R&D committee, Extracurricular activity committee, social responsibility committee, sports committee, alumni committee, training & placement committee, anti-sexual harassment committee (internal complaints committee), the committee for the prevention of atrocities to backward class students, women development committee, students council committee, creativity and innovation, PHCET women and stem, entrepreneurship cell, newsletter committee. Constituted committees perform the function of planning, executing, and monitoring academic and administration events.

Academic and administrative events of the institute are identified as curricular, co-curricular, and extracurricular activities. Institute admits, educates, and trains the students to improve their skills and knowledge as per industry needs and social requirements with an organized governance structure. Curricular and co-curricular activities like curriculum syllabus development with Mumbai university syllabus development committees, teaching and learning activity, examination and evaluation, research and development, admission of students, library development administration, laboratory development administration, social events, industry and institute interaction system, mentor-mentee interaction system, project-based learning, sports and games, industry visits, arranging industry experts to deliver a lecture the industry problems and solutions are conducted with decentralization and participative management approach.

Governing council allocates fund for expenses of academic and administrative events of the academic year, the academic council formulates policies for the development of the academic environment, implements, monitor the academic and administrative events and the local management council monitors the different academic and administrative events in the concern of budget and academic activities and principal constitute different academic committees to enhance the performance of academic and administrative events. IQAC develops and updates quality systems for the betterment of the academic environment. Department advisory committee updates the problems and solutions of industry

and students' skills requirements for industries and introduces an add-on program to update students' skills. The functioning of all these bodies ensures that the governance of the institution is reflective of and in tune with the vision and mission of the institution.

File Description	Documents
Paste link for additional information	https://phcet.ac.in/about/board-of-governance/
Upload any additional information	View File

6.1.2 - The effective leadership is visible in various institutional practices such as decentralization and participative management.

PHCET has a mechanism for delegating authority and providing operational autonomy to all the various functionaries to work towards a decentralized governance system. Management authority reviews the institute through Executive council meetings and working committee meetings regularly. The Governing Body delegates all the academic and operational decisions based on policy to the Academic Monitoring Committee headed by the Principal. In academic year 20-21 executive council sanctioned Rs. 1 Lakh for 'Mahatma Education Society's Project Grant Scheme'.

Starkers Motorsports applied for 'Mahatma Education Society's Project Grant Scheme', a scheme where students with innovative ideas are provided with funds. The Principal appointed a panel of faculty members. The student's body presented their work in front of the panel. The panel members were satisfied by the work & depending on the budget of the academic year; Rs. 1 Lakh was sanctioned to the student group. Due to support from the institute, the motorsports team was able to participate in National Event (7th GKDC & 5th E-GKDC) at Kari Motor Speedway, Coimbatore. The team designed and manufactured two vehicles, a Combustion vehicle (150 CC) Go-Kart as well as Electric Go-Kart for the competition. The CV Kart won AIR 2nd and the EV kart got 4th position in AIR.

File Description	Documents
Paste link for additional information	https://phcet.ac.in/about/institute-organogram/, https://phcet.ac.in/about/institutional-committees/
Upload any additional information	View File

6.2 - Strategy Development and Deployment

6.2.1 - The institutional Strategic/ perspective plan is effectively deployed

The Institute has always focused on accountability and quality service to all its stakeholders while deploying the strategic plan. The strategic plan involves steps taken on various core competencies like Student-Centered Excellence, Teaching-Learning Process, Research and Innovation, Extension Activities Quality Consciousness, Infrastructure, and Learning Resources. In the current year 2020-21, the pandemic due to COVID 19 has made all stakeholders adapt to the new normal by remotely working. The major steps taken by the Institute to plan for the remote teaching-learning services include strengthening the IT infrastructure. Institute has adopted licenses for online meet platforms like ZOOM and support from Google for IT infrastructure. These resources have helped faculty members to offer teaching services to students in work from home culture. To help students with remote access to subject-related contents, Library space- Online Repository of Course material with remote access is developed and dedicated servers are made available for the same by the Institute. This approach has certainly helped students to bridge the gap that occurred due to the online mode of teaching-learning services.To strengthen the teaching and leadership skills for Faculty and to offer a better learning experience from globally accepted courses, Institute has made tie-ups with international Platforms like Coursera and EDX. All faculty members and students have found this strategy immensely helpful and have certainly added to knowledge and expertise in Faculty and students both.The formation of IIC and implementation of NISP was planned in the previous academic year. Accordingly, Institute has formed IIC and NISP body as per the norms, and various activities related to IPR related, entrepreneurship, and innovation are conducted throughout this year. One of the future plans of the Institute includes introducing the Ph.D. program in Mechanical Engineering. The formal procedures and approvals for the same are in process.Industry collaborations, MOUs and a variety of webinars on

recent technology trends have added value and enhanced the learning experience for faculty and students. Details of MOUs, co-curricular and extracurricular activities, etc are available on the PHCET website.

(https://phcet.ac.in/research/research-activity/mou/, https://phcet.ac.in/students/student-activities/seminars-and-workshops/, https://phcet.ac.in/news-and-events/events/)

As a regular practice and planning various drives and activities for blood donation, cleanliness and hygiene awareness, waste management and recycling, vaccination awareness are also executed for students, faculty, and nearby social community through NSS Unit and Student Council bodies of PHCET. A special drive for Vaccination for Faculty, staff, and Class IV members is also organized by PHCET.

File Description	Documents
Strategic Plan and deployment documents on the website	View File
Paste link for additional information	https://phcet.ac.in/about/board-of-governance/
Upload any additional information	View File

6.2.2 - The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment and service rules, procedures, etc.

Pillai HOC College of Engineering and Technology (PHCET) has various administrative and academic bodies/committees to monitor the overall functioning of the Institute. Governing body is the key body involved in planning and decision making. Governing body meetings are held regularly to review academic, administrative, and financial matters. This body gives a vision about new technology and courses that are to be initiated and plays a role in intellectual leadership and evaluates new scientific perspectives. It evolves policies and strategies for the generation of innovations & development of technical programs. The college development committee (CDC) prepares an overall comprehensive development plan of the college regarding academic, administrative, and infrastructural growth, and enable the college to foster excellence in curricular, co-curricular, and extra-curricular activities In pandemic due to COVID 19, the committee has identified the necessary modification to be made in teaching-

learning process, initiatives required for technology upgradation of students to strengthen their employability skills, and have taken steps for various collaborations with industry and other organizations. IQAC is one of the significant bodies that ensure the timely, efficient, and progressive performance of academic, administrative, and financial tasks.

Apart from these, there are several bodies/committees. The roles, constitution, and powers of each committee may vary depending on the rules of the University, Local Government, State Government, or Central Government. Each committee should meet a minimum of once a year and should provide written minutes after each meeting. To improve work efficiency in the day-to-day functioning of the Institute, to ensure accountability of each and every layer of administration, and to make the administrative environment of the Institute very cordial are the main objectives of these bodies. The service rules, policies, objectives, and responsibilities are clearly stated are available in Faculty Handbook at https://phcet.ac.in/about/policies/ and https://phcet.ac.in/faculty/faculty-handbook/

File Description	Documents
Paste link for additional information	https://phcet.ac.in/faculty/faculty-handbook/
Link to Organogram of the institution webpage	https://phcet.ac.in/about/institute-organogram/
Upload any additional information	View File

6.2.3 - Implementation of e-governance in areas of operation Administration Finance and Accounts Student Admission and Support Examination

A. All of the above

File Description	Documents
ERP (Enterprise Resource Planning)Document	[View File](#)
Screen shots of user inter faces	[View File](#)
Any additional information	[View File](#)
Details of implementation of e-governance in areas of operation, Administration etc(Data Template)	[View File](#)

6.3 - Faculty Empowerment Strategies

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

As the COVID-19 pandemic continues to spread, and lock-down and slow-down measures are put in place, PHCET has taken foremost importance to support teaching and non-teaching staff. A safe and healthy workplace was created for staffs who visit campus. A work from home policy approach was followed in the campus during the pandemic. Faculty utilized well-equipped laboratories with good Internet and free Wi-Fi facilities to conduct online classes while in the premises. The component Library facility for borrowing various hardware components is available to faculty. Research and Incubation Centre Laboratory Facility is also accessible to all faculties to help them with their academic research. Library facility is also made available.

The institute have provided the teachers with free access to a few e-learning platforms like Edx and Coursera to improve the quality of contents delivered via online mode. Free online faculty development programs and conferences were arranged. Sponsorship for STTP /seminars/ workshops at national level was also provided.

Flexible work schedules were instigated, providing the ability to work remotely to as much of the workforce as possible, to reduce their risk. A job-protected emergency paid leave was sanctioned to staff during the epidemic. Along with it, maternity and Paternity leave facility for all employees. Duty Leave support for faculty members pursuing Ph.D. from well-known Institutions such as IIT and VJTI and Provision of Paid On duty leave for faculty members pursuing Ph.D. from other universities was permitted. Summer and Winter Vacations were allowed as per norms. Employee Provident fund is implemented to all employees as per norms.

Free Covid-19 vaccination drive was conducted in the campus for all the employee. For the Psycho-social wellbeing of the employees, regular counselling is done for students and teachers reporting mental health issues such as anxiety and depression. As per the Covid-19 Guidance on Mitigating and Preventing the Spread of COVID-19 in the Workplace, personal protection items like face covers/masks, hand sanitizers etc was freely provided by management to the teachers and employee. Free bus facility was also made available for all the employees. In case of emergency, ambulance service is available in the campus 24*7.

Welfare measures like group insurance, maternity, medical leaves, MES credit society and employment provident fund schemes are employed for non-teaching staff as well. Free uniforms are provided for supporting staff.

File Description	Documents
Paste link for additional information	https://phcet.ac.in/faculty/faculty-handbook/
Upload any additional information	View File

6.3.2 - Number of teachers provided with financial support to attend conferences/ workshops and towards membership fee of professional bodies during the year

6.3.2.1 - Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the year

35

File Description	Documents
Upload any additional information	View File
Details of teachers provided with financial support to attend conference, workshops etc during the year (Data Template)	View File

6.3.3 - Number of professional development /administrative training programs organized by the institution for teaching and non-teaching staff during the year

6.3.3.1 - Total number of professional development /administrative training Programmes organized by the institution for teaching and non teaching staff during the year

39

File Description	Documents
Reports of the Human Resource Development Centres (UGCASC or other relevant centres).	View File
Reports of Academic Staff College or similar centers	View File
Upload any additional information	View File
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff (Data Template)	View File

6.3.4 - Number of teachers undergoing online/face-to-face Faculty development Programmes (FDP) during the year (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course etc.)

6.3.4.1 - Total number of teachers attending professional development Programmes viz., Orientation / Induction Programme, Refresher Course, Short Term Course during the year

129

File Description	Documents
IQAC report summary	View File
Reports of the Human Resource Development Centres (UGCASC or other relevant centers)	View File
Upload any additional information	View File
Details of teachers attending professional development programmes during the year (Data Template)	View File

6.3.5 - Institutions Performance Appraisal System for teaching and non- teaching staff

PHCET has Performance Based Appraisal System (PBAS) for teaching and non-teaching staff. PHCET follows the guidelines given by AICTE. All teaching and non-teaching staff of PHCET fills the Self-Appraisal Form (SAF) every year for the period from January to

December in the prescribed Proforma.

In this scheme, the performance is classified into three categories (i) Teaching, Learning and Evaluation related activities (ii) Co-Curricular, Extension and Professional Development related activities (iii) Research Publications and Academic Contributions. In the third category, the self-assessment score will be based on verifiable criteria and will be finalized by the screening/selection committee. The principal in consultation with head of the department fix certain minimum API scores to be achieved by the faculty members in all three categories. Further, at the end of each semester, feedback is taken from the students for each of the courses attended by them. The feedback forms in the form of questionnaire collect information about the teacher and different aspects pertaining to the teaching process. Head of the Department goes through the feedback forms collected from the students and send to all faculty members for their information and suggest suitable measures to improve the teaching-learning process.

File Description	Documents
Paste link for additional information	https://phcet.ac.in/faculty/faculty-handbook/
Upload any additional information	View File

6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly Enumerate the various internal and external financial audits carried out during the year with the mechanism for settling audit objections within a maximum of 200 words

The long-term sustainability of any organization is directly related to its financial health. The financial health is determined by the financial discipline and accounting practices. Budgeting, accounting, and auditing are the three pillars on which financial discipline of organizations rests. Mahatma Education Society (MES), the parent body of Pillai HOC College of Engineering and Technology (PHCET) has been in existence for last 50 years.MES has created and managed forty-eight renowned educational Institutions despite a plethora of regulations, regulatory bodies and compliances to follow is a proof of the

quality of its accounting practices and its law abiding nature. PHCET has inherited the same financial discipline, accounting practices, audit procedures and abides by the requirements and stipulations of various regulatory authorities. The audited account of PHCET is annually scrutinized by the Shikshan Shulk Samiti (Fee regulating body) of the Directorate of Technical Education (DTE), Government of Maharashtra. Auditing processes of PHCET takes place in two stages namely, internal audit and External Audit. These auditors are belonging to different auditing firms. The auditors re-appointed by the Governing body each year. The Internal audit is carried out by CA Susanna & Co. and the external auditorisS.B. Bhavi& Co. Internal auditor is in regular contact with the accounts department and visits at least once in two weeks and observes and audits the working. Most of the transactions are in non-cash mode and is done using Tally ERP 9 Software. SensysEasyPay from Sensys Technologies Pvt. Ltd., is used for salary related computations and disbursement and also for Income Tax purposes including generating of Form 16. The salary of each employee is directly credited into their bank accounts and Easy Pay is used to generate the quarterly income tax returns of the taxes deducted at source for various activities including monthly salary. Budgeting is a fairly complex activity in PHCET considering the seven departments with varying requirements. Each department creates its own budget and the budgets of all departments are consolidated at the college level. Budget preparation and accounting are supervised Finance and Budget Committee.PHCET is proud to record that no audit objection has ever been reported in its ten years of existence as the accounting processes and practices are meticulous and carried out scrupulously by capable people. Regular monitoring of fund flow also helps to monitor the financial health of the college.

File Description	Documents
Paste link for additional information	https://phcet.ac.in/faculty/faculty-handbook/
Upload any additional information	View File

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

6.4.2.1 - Total Grants received from non-government bodies, individuals, Philanthropers during the year (INR in Lakhs)

0.19

File Description	Documents
Annual statements of accounts	View File
Any additional information	View File
Details of Funds / Grants received from of the non-government bodies, individuals, Philanthropers during the year (Data Template)	View File

6.4.3 - Institutional strategies for mobilization of funds and the optimal utilization of resources

PHCET is a Malayalam linguistic minority institution. Therefore, the funding required for operating the college is mostly self-generated. The fees approved, by the Shikshan Shulk Samiti (Fee Regulating Authority) of the Directorate of Technical Education (DTE), Government of Maharashtra, and paid by students is the main source of funds for the operational purpose. The tuition fee and the development fee are the two headings of fees available for the operational expenditure of the college.

Various activities and events organized in the college are funded by MES, various agencies and differ from year to year. E.g., For the Academic year 2020-2021 AICTE sponsored for Faculty Development Program of Short-Term Training Program (STTP) the amount of Rs.2,99,667/- Approximately Three lakhs. Students benefit from several categories of scholarships from both government and non-government agencies. PHCET has also been making efforts to get scholarships and other financial support from private agencies, NGOs, private and public charitable trusts, etc., for students from financially not secured families. These scholarships and financial support are directly disbursed by the donor agency to the recipients. PHCET has been an enabler and facilitator and makes efforts to identify and interact with many such donors. In fact, PHCET has been successful in this effort. Bombay Community Public Trust (BCPT) helped several girl students with partial funding of their college expenses. FramjeeCawasjee Institute has been supporting a large number of final year engineering students both boys and girls with a good academic record from and from a financially poor background.

The University of Mumbai provides funds for minor research projects. Several income-generating projects and consultancy assignments are done by the faculty and they are charged

separately. The College organizes Industry-sponsored and paid conferences and seminars, workshops, etc.

File Description	Documents
Paste link for additional information	https://phcet.ac.in/online-fdp-on-challenges-opportunities-of-industry-4-0-techniques-scope-in-manufacturing-industries-manufacturing-systems/
Upload any additional information	View File

6.5 - Internal Quality Assurance System

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

IQAC has made great contributions to the implementation of quality assurance strategies and processes at all levels. Two examples of institutionalized practices as a result of IQAC initiatives are as follows:

1. To strengthen IT infrastructure for online teaching-learning and other processes

IQAC has taken initiative in adding the licenses of online teaching-learning or meeting platforms like Zoom, GoToMeeting. Institute has tie-up with Google for support in IT infrastructure. All students, faculty, and staff of PHCET have dedicated domain email accounts with unlimited storage facilities as a part of the Google Package (G-Suit). All official communication is made using these email accounts only. This helps to maintain transparency and security in online communication. Faculty had created Google classrooms for each course being taught and all study material, notes, assignments, sample questions, solutions, etc are made available in this GCR. Students who missed online lectures due to connectivity and other issues can go through the recorded lectures. This helps to bridge the gap left if any. Exams and Assessments are also handled using GCR.

2. Establish the IIC and NISP to strengthen innovation and entrepreneurship:

As an initiative of IQAC, PHCET has established Institution's Innovation Council (IIC) as per the guidelines of MoE's Innovation Cell (MIC) in the academic year 2020-21. The initiative was to

create a vibrant local innovation ecosystem, start-up supporting mechanism, establish a functioning ecosystem for scouting ideas and pre-incubation of ideas, and to develop the better cognitive ability for technology students. PHCET, IIC is actively involved in organizing and conducting various seminars, workshops, Idea competitions, Hackathon for school children, etc. for its students and faculties. 3 Faculty have completed IIC Innovation Ambassador Basic level training and will be undergoing advanced training soon.

The entrepreneurial ecosystem at PHCET will play a key role in identifying, mentoring, nurturing the innovative and entrepreneurial potential of students, faculty, and staff, and transforming them into start-up entrepreneurs by providing avenues of funding, investment opportunities, and networking support to make the innovation and venture successful.

File Description	Documents
Paste link for additional information	https://phcet.ac.in/iqac/iqac-phcet/, https://phcet.ac.in/iic/
Upload any additional information	View File

6.5.2 - The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms and recorded the incremental improvement in various activities

- **Tie-up with Coursera and EdX**

To continue providing best quality education in online mode during the Pandemic" was a major challenge in pandemic faced by education domain stakeholders. To help students utilize their time effectively in this pandemic and to expand learning capabilities through an online platform, Institute had an exclusive tie-up for Coursera and Edx Online Campus Essentials. Under this, Institute had offered the free facility to complete n number of international certifications offered by these agencies to all its students, faculty, and staff. This opportunity helped these stakeholders to learn and upgrade their skills in all technical/non-technical fields of interest. Students got the opportunity to complete guided projects and assignments through these certifications. This initiative helped students and faculty to learn industry standard skills from renowned experts all over the globe. The facility of audit course was available for the

course which is not included in the subscription. This helped to remove all barriers and take up any course of interest. Faculty got an opportunity to update their course material and pedagogy with the help of resources available with these certifications. For assessment and evaluation, assignments and projects were given in line with certifications enrolled in by students. This really helped to overcome routine assessments styles and has certainly benefited students and faculty to upgrade their skills. Students who are preparing for their placements got additional benefits as they could do communication skills, aptitude, leadership and workplace ethics, etc courses too.

- **Introduced Value Added Courses as per industry requirements to improve employability:**

PHCET has a large number of students from rural areas in Raigad District, Maharashtra. They also come from a relatively poor academic background. Some are first-generation students. Therefore, special attention is required to this group of students. The IQAC team decided to offer "value addcourses" for skill-based technical training, with the primary objective of improving the employability skills of students. List of Value add Courses and course curricula etc. can be found at Value Added Courses | PHCET | Pillai HOC College of Engineering and Technology. The courses were designed to match recent trends in the field of AI, ML, IoT, and other mechanical domain trends. As a result of implementing such best practices, PHCET students have improved their soft skills, placements, and interdisciplinary skills. Value add courses have become an integral part of the holistic development of PHCET students.

File Description	Documents
Paste link for additional information	https://phcet.ac.in/free-coursera-courses-a-pillai-group-initiative/
Upload any additional information	View File

6.5.3 - Quality assurance initiatives of the institution include: Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analyzed and used for improvements Collaborative quality initiatives with other institution(s) Participation in NIRF any other quality audit

A. All of the above

recognized by state, national or international agencies (ISO Certification, NBA)

File Description	Documents
Paste web link of Annual reports of Institution	https://phcet.ac.in/about/mandatory-disclosures/annual-report/
Upload e-copies of the accreditations and certifications	View File
Upload any additional information	View File
Upload details of Quality assurance initiatives of the institution (Data Template)	View File

INSTITUTIONAL VALUES AND BEST PRACTICES

7.1 - Institutional Values and Social Responsibilities

7.1.1 - Measures initiated by the Institution for the promotion of gender equity during the year

PHCET is an institution that encourages gender equity. The institution treats all its staff and students in the same way irrespective of gender and promotes women empowerment by conducting various activities throughout the academic years. Under Women's cell various workshops, webinars were conducted to relieve faculty and students from stress and encourage them to lead a healthy lifestyle.

There is a separate counseling room with a personal counselor. The campus has a first aid room with a resting facility and doctor on call. The college provides transport on a subsidized rate for students and free for the faculty and staff. There is 24x7 security on the campus; Along with security guards round the clock CCTV surveillance is also provided. Provision of standby power supply ensures protection against power outages

For maintaining Safety and Security of women, a Women's grievance redressal cell committee has been constituted. PHCET have constituted different committees like Anti-Sexual harassment and Anti-ragging Committee, Internal Complaints Committee to deal with any dereliction. PHCET Women in STEM committee's main motive is to empower and uplift women in the field of science and technology and also motivates students and faculty to participate in both technical and non-technical events.

File Description	Documents
Annual gender sensitization action plan	https://drive.google.com/drive/folders/16Qf8vzg17k4_5VrdrcRtD1Tu7xBh3EXx?usp=sharing
Specific facilities provided for women in terms of:a. Safety and security b. Counseling c. Common Rooms d. Day care center for young children e. Any other relevant information	https://drive.google.com/drive/folders/16Qf8vzg17k4_5VrdrcRtD1Tu7xBh3EXx?usp=sharing

7.1.2 - The Institution has facilities for alternate sources of energy and energy conservation measures   Solar energy Biogas plant Wheeling to the Grid   Sensor-based energy conservation Use of LED bulbs/ power efficient equipment

C. Any 2 of the above

File Description	Documents
Geo tagged Photographs	View File
Any other relevant information	View File

7.1.3 - Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 200 words) Solid waste management Liquid waste management Biomedical waste management E-waste management Waste recycling system Hazardous chemicals and radioactive waste management

PHCET is very much conscious about the waste management system and provides the following facilities to dispose or recycle the waste.

- **Solid waste management:**

Each collection point is furnished with separate dustbins for the storage of dry waste and wet waste. Biodegradable waste from the canteen is deposited in the compost bins where it is converted to manure. Non-degradable waste is taken to the dumping yard and collected by Municipality staff.

- **Liquid waste management:**

Liquid waste includes Sewage and Cafeteria effluent waste: Sewage is collected with a proper underground sewer system which is connected to the inlet pipe of the septic tank built in the campus. The outlet of the septic tank is connected with the sub-

main of gram panchayat??which leads to the Sewage Treatment Plant, Rasayani.

- **Waste recycling system:**

"Pet Bottle Reverse Vending Machine" is installed at PHCET.Plastic bottles used for packaging soft drinks and drinking water are fed into machines where they are crushed and converted to pet chips. The chips can be used for manufacturing other plastic products, in association with RIL.

- **E-Waste Management:**

Hardware waste from computer labs such as computers, printers, projectors, scanners etc. These components when scraped are stored at E-Waste Collection Cell (EWCC) then the scraped hardware components are separated and segregated as per their characteristic properties. The E-waste generated is used whenever there is minor repairs/change in hardware parts as replacements, minimizing the procurement cost. The E-waste generated at PHCET is used as partial replacement of Coarse Aggregate (CA) in combination with fly ash as part of Civil Engineering projects.

File Description	Documents
Relevant documents like agreements / MoUs with Government and other approved agencies	[View File](#)
Geo tagged photographs of the facilities	[View File](#)

7.1.4 - Water conservation facilities available in the Institution: Rain water harvesting Bore well /Open well recharge Construction of tanks and bunds Waste water recycling Maintenance of water bodies and distribution system in the campus

A. Any 4 or all of the above

File Description	Documents
Geo tagged photographs / videos of the facilities	<u>View File</u>
Any other relevant information	<u>View File</u>

7.1.5 - Green campus initiatives include

7.1.5.1 - The institutional initiatives for greening the campus are as follows:

     A. Any 4 or All of the above

1. **Restricted entry of automobiles**
2. **Use of bicycles/ Battery-powered vehicles**
3. **Pedestrian-friendly pathways**
4. **Ban on use of plastic**
5. **Landscaping**

File Description	Documents
Geo tagged photos / videos of the facilities	<u>View File</u>
Various policy documents / decisions circulated for implementation	<u>View File</u>
Any other relevant documents	<u>View File</u>

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

7.1.6.1 - The institutional environment and energy initiatives are confirmed through the following 1.Green audit 2. Energy audit 3.Environment audit 4.Clean and green campus recognitions/awards 5. Beyond the campus environmental promotional activities

     A. Any 4 or all of the above

File Description	Documents
Reports on environment and energy audits submitted by the auditing agency	View File
Certification by the auditing agency	View File
Certificates of the awards received	View File
Any other relevant information	View File

7.1.7 - The Institution has disabled-friendly, barrier free environment Built environment with ramps/lifts for easy access to classrooms. Disabled-friendly washrooms Signage including tactile path, lights, display boards and signposts Assistive technology and facilities for persons with disabilities (Divyangjan) accessible website, screen-reading software, mechanized equipment 5. Provision for enquiry and information : Human assistance, reader, scribe, soft copies of reading material, screen reading

A. Any 4 or all of the above

File Description	Documents
Geo tagged photographs / videos of the facilities	View File
Policy documents and information brochures on the support to be provided	View File
Details of the Software procured for providing the assistance	View File
Any other relevant information	View File

7.1.8 - Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities (within 200 words).

PHCET helps in transforming, motivating the thoughts of all its stakeholders towards learning and understanding the various diversities and become a responsible citizen completing his/her academic education. Institute initiatives for smart sustainable solutions by students participating in STEM, IIC for innovations

and competitions like Avishkar, Hackathon, Mapathon, Toycathon, Vishwakarma. In Campus Environment Awareness like Solar Panel, Rainwater harvesting, waste management, plastic recycling. Institute always believes in the practice of involving people from a range of different social and ethnic backgrounds and of different genders, sexual orientations in spreading harmony by giving monitory support to Panvel gurudwara for covid and floods, blood / food / mask/shield donation dives during covid. Spreading prosperity irrespective of caste and creed through cultural festivals for regional -Shivaji Jayanti, National- Diwali, Christmas, Onam, Navratri's Jalsa, and Linguistic events like independence day, Tilak Diwas, Azad. Communal socioeconomic events like Tree plantation, Road safety, Pothole filling, Helping Traffic police, and events for Tolerance against Drug Abuse, Illicit Trafficking, Stress Management were conducted. Days celebrated across diversities are Yoga, Biofuel, National remote sensing, Kargil memorial, science, statistics day, etc. Talent Hunt events for Improving Talents, personality development, skills, and strength are conducted under the students' council through various clubs.

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

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

PHCET realizes the dedication and duty towards the constitution of India to strengthen adherence towards constitutional obligations and embark human values rights and responsibilities as Indian citizens. Institute incorporates a few integral bodies that are committed to inculcating these obligations of national service; the bodies are NSS, ISRO outreach Centre at PHCET, and various student forums. These bodies discern search programs and activities required to fulfill the realization of constitutional obligations.

- **Institute has encouraged students and employees for National service during the pandemic. Institute organized meal and grocery donation drive for the needy and poor people, blanket distribution during flood situations in the area when there was no hope for the survival of human lives were done. Institute also served the voiceless animals by arranging a 'dog feed distribution', catering meals, and serving nobility to animals. Book donation camp was organized involving students and staff to avail away the Books which are required by the needy.**

- **Institute has organized webinars on Suicide prevention, Women's health and wellness, and organ donation for inculcating values for being responsible citizens. The college promotes a sustainable environment by forming programs on 'Swatch Campus'. Institute fosters service to its community by organizing blood donation camps by the NSS unit.**

File Description	Documents
Details of activities that inculcate values; necessary to render students in to responsible citizens	https://phcet.ac.in/?s=Women%27s+health+and+wellness https://phcet.ac.in/?s=organ+donation https://phcet.ac.in/extension/swatch-campus/
Any other relevant information	https://phcet.ac.in/academics/isro-outreach-center/isro-pillais-phcet-outreach-network-institute/

7.1.10 - The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard. The Code of Conduct is displayed on the website There is a committee to monitor adherence to the Code of Conduct Institution organizes professional ethics programmes for students, teachers, administrators and other staff   4. Annual awareness programmes on Code of Conduct are organized

A. All of the above

File Description	Documents
Code of ethics policy document	View File
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programs etc., in support of the claims	View File
Any other relevant information	View File

7.1.11 - Institution celebrates / organizes national and international commemorative days, events and festivals

PHCET is committed to enabling stakeholders to realize that the best decision and the best investment you have made for your life as a college Motto is 'Vidya Karmasu Kaushalam' (Knowledge is Excellence at Work). We know work is worship that could shape our personal development. Institute along with this proactive personal development has a pretentious vision to inculcate constitutional

responsibility and instil patriotism and unity among its stakeholders and fellow citizens.

In this academic year 2020-2021several national, international days and eventswere celebrated through virtual mode (online platform) due to pandemic. The main aim of these activities was topromote ethics and values amongst students and faculty, this includesNational road safety day (14 June), International Yoga Day (21st June), Mahatma Gandhi Birth Anniversary (2 October), National Unity Day (26 November), International women's day (8 March)

The following is the list of national and international commemorative days, events and festivals the institute celebrates every year and make the students and faculty to participate.

Date

Details of Activities

05 June 2021

World Environment Day

14 June 2021

Poem writing competition on International Days in support of Victims of Torture

18-Jun-21

Webinar on Mahatma Gandhi Jayanti-Importance of Internship and career guidance-ITC Cell

21June 2021

International Yoga day

26 June 2021

International Days Student council-Poster making on Drug Abuse and Illicit Trafficking

15 August 2021

Independence Day

26-Nov-20

Quiz Competition on Constitution Day

18-Jan-21

Quiz Competition on Road Safety

26January 2021

Republic Day

8 March 2021

International women's day

File Description	Documents
Annual report of the celebrations and commemorative events for the last (During the year)	View File
Geo tagged photographs of some of the events	View File
Any other relevant information	View File

7.2 - Best Practices

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

Best Practice 1: Digital learning to enhance teaching-learning process during Pandemic

Goal:

- **To provide students with an online space to showcase their learning**
- **To explore new online teaching platforms**
- **To enhance the building capacity of teachers and students by exploring online platforms.**
- **To provide active and personalized education to all students through digital learning to complete the curriculum.**
- **To identify MOOC platforms for various courses to give**

continuous experience learning to teachers and students beyond the curriculum.

- To provide tools and visualizations that motivate the students to participate and collaborate within the class
- To explore a digital learning environment for laboratory experiments through a virtual lab.
- To develop digital library for E-resources and study material with students

The Context:

The education system has evolved since old times when it was only classroom teaching through textbooks. Now, we live in an era of rapidly developing technology with the widespread use of computer science and information technology, which have entered almost all areas of life. In the field of education, emerging technologies provide opportunities for enhancing and improving the learning and education process and using technological tools effectively in the teaching process which will help change learning and communication methods.

The COVID-19 has resulted in schools and colleges shut all across the world as a consequence of which children are out of the classroom. And most important of all, as a result of the pandemic, education has changed dramatically, with the distinctive rise of digital learning, whereby teaching is undertaken remotely and on digital platforms. In response to significant demand, many online learning platforms are offering free access to their services.

Practice:

To continue teaching using modern technologies, we use digital tools like Google Classroom, Google Meet, Zoom, Virtual Laboratory, Digital Library, etc. Every faculty in PHCET makes use of Google Classroom and Google meet for each and every subject they teach. All communications with the students related to the course will be made through Google classroom. Course Academic Plan, Study materials, Lab manuals, Powerpoint presentations, Tutorials, previous year question papers are shared with students through Google classroom. Assignments are given through Google classroom which is evaluated online. Internal Examinations are also conducted through Google classrooms which are assessed online.

The Broad areas of Virtual Labs are covered according to the syllabus. Subject-In-Charges decide the experiments be conducted

in a virtual lab platform. Subject-In-Charges will provide the link of the various relevant experiments in Virtual Lab to students which they will be performing during their dedicated laboratory sessions following which the feedback of the experiment will be submitted. Effective time utilization is done by PHCET with a tie-up for Edx and Coursera Online Campus Essentials to enhance knowledge in interdisciplinary subjects and soft skills. Faculty and students of PHCET have actively enrolled in numerous courses pertaining to different fields. For arranging webinars and events on technical. social and research fields, Youtube and Zoom platforms are extensively used by PHCET. Digital Library which has a collection of study material, Course Academic Plan, Question banks, previous year question papers, lab manuals, tutorials, assignments, PowerPoint presentations of every engineering subject which is a contribution of each faculty of PHCET creates a vast knowledge gaining platform for students of PHCET.

Evidence of Success:

A large number of students were benefitted through digital learning as is evident from the results of examinations conducted. One can access digital learning sites from anywhere and at any time you want to. They are available 24/7 and you can get access to these from your mobiles as well as PCs. The digital learning courses are designed keeping in mind a specific timeframe and the progress you make in that period is recorded. Every activity is designed to test the areas where you are weak and the subject teachers work on these to ensure a student's success. When learning something online, most of the time it is done because you want to and not because someone forces you into doing it like in your offline classes. Fewer distractions allow concentrate better on the topics you are trying to learn. This gives the confidence that you can study and understand easily which motivates you to study longer.

Problems Encountered and Resources required:

- Students may miss out on the hands-on experience that could be of value in later education
- Availability of the internet can be a concern for some students who live in remote villages.
- Digital Learning is a new, innovative approach to learning, and navigating them well is a skill in itself. Some students may find the shift from traditional to digital learning to be jarring.
- Students can learn something useful from a full sensory

experience in the real-world like weird noise and smell, random error, faulty machinery, etc.

- The use of technology can generate mental laziness in students. These tools simplify the resolution of tasks or activities with a single click, preventing them from analyzing in detail what they are learning.
- Students run the risk of finding erroneous, false, and even fraudulent content in digital learning.

Best Practice 2: Library Space Digital Learning Repository (LSDLR)

A Digital library, also called an online library, a digital repository is an online database of digital objects that can include text, still images, audio, video, or other digital media formats.

Library Space (LSDLR) is a centrally hosted repository for Study Materials, co-curricular and extra-curricular information.

Objectives:

- To collect, collate, disseminate and act as a gateway to digital learning resources to users
- To preserve and provide seamless access to information whenever and wherever users need
- To create and update a comprehensive database of Academic Information in the field of Engineering & Technology
- Promote the use of ICT
- Support teaching-learning activities

Context:

The primary issue is that of the technical architecture that underlies any digital library system. Libraries need to enhance and upgrade current technical architectures to accommodate digital materials. Library purchased a rack Server for the configuration of Processor: Intel® Xeon (R) CPU ES – 2620 v4 @ 2.10GHz 2.10, 64 GB RAM, 5 TB Hard disk.

One of the major issues in creating digital libraries is the building of digital collections. Obviously, for any digital library to be viable, it should eventually have a digital collection to make it truly useful. There are essentially three methods of building digital collections:

1 Digitization: Converting paper and other media in existing

collections to digital form

2. Acquisition of Resources: Collecting Study Materials from Faculty Members and other academic-related materials from various sources like Google, social media, Newspapers, etc.

3. Access to Resources: By collating the resources, digitizing them, and uploading them on the Digital Library. And for external resources by providing pointers to Web sites of E-resources and other relevant information. And providing remote access to the resources through public IP.

Practice:

Library Space is a well-structured and maintained digital learning repository. All these resources are made available to each and every user. Recording of events stored in LSDLR ensures information and knowledge shared by the expert is archived. Being an online portal, retrieval and updating of information are convenient. Updating LSDLR is considered an integral part of the academic process and is handled by the dedicated team. A timely update of resources helps users to access the latest resources. The integrity and consistency of the resources are managed by using role-based access control. The user has to log in to the system using his/her credentials like institutional email ID and Admission/Employee ID.

It contains fifteen main Course Categories like Study Materials; Career, Internship, Training, Jobs, Scholarships & Competitions; Conferences, Seminars, Webinars & Events; Institutional Magazines, Brochures, Newsletters, etc.; Project Report, Dissertation & Thesis, Rare Documents, etc. Users can refer to Career, Internship, Training, Jobs, Scholarships & Competitions and Conferences, Seminars; Webinars & Events related information for their Personal Development and Career.

The Study Material Course Category contains Lecture Notes, PPTs, Lab Manuals, Assignments, Experiments, Syllabus, Question Papers, and all the other Academic relevant materials required by the users. These are very helpful to users from their academic point of view. Students and faculty members doing project work and research can refer to the existing projects, dissertations, and e-resources.

Advertisements, Notifications, and Admission-related information are useful for Students and Administration staff.

Evidence of Success:

LSDLR has made access to the study material, especially for the students easy and efficient. During the COVID-19 pandemic, it played an important role. Sometimes students were not able to attend the live sessions, but students did not miss the learning as they were able to access the recording of the sessions anytime from anywhere. Along with students it also helped faculty members preserve and distribute study material to students. Also made other events recording, publication, research material, etc. available on single click. And before designing the LSDLR, students and Faculty Members were consulted about their expectations. All the suggestions are incorporated. Users need, Information Quality, Service Quality, Usefulness, and Ease of use is taken into consideration for users' satisfaction.

Problems Encountered and resources required:

Damage to the hard disk or CPU is a problem and is addressed by frequent back-ups. The software may slow down the process and the software must be updated regularly. Delay in updating leads to ambiguity. Authorization and authenticity must be monitored closely. Inconsistency in data entry can generate errors. Measures need to be taken to prevent false information.

Resources Required:

This is the digitization of all resources in the collection. While E-resources already held by the library are not considered to be part of this collection, links are provided to the same. Technical resource tools like Content Management Software System, Scanners, Servers, etc. are required.

Link for LSDLR

URL:http://172.17.0.5/libspace/

File Description	Documents
Best practices in the Institutional website	https://phcet.ac.in/wp-content/uploads/2022/01/Best-Practices-2020-21.pdf
Any other relevant information	http://172.17.0.5/libspace/

7.3 - Institutional Distinctiveness

7.3.1 - Portray the performance of the Institution in one area distinctive to its priority and thrust within 200 words

In AY 20-21 during the COVID 19 pandemic, the University of Mumbai decided to conduct an online exam for UG and PG students through the cluster concept. In each cluster, five engineering colleges are distributed by location. Among the five colleges, the university chose PHCET to take the lead in coordinating examination matters. Along with powerful academics, PHCET is recognized as one of the lead college by the University of Mumbai. As a young organization, this is a proud moment for PHCET. All colleges under PHCET are guided as per instructions of the University of Mumbai.

PHCET has a large number of students from rural areas in Raigad District, Maharashtra. They also come from a financially weaker background. Pursuing engineering can prove to be a costly affair and a students may not be able to pursue it due to the financial constraints. We approached private scholarships Framjee Cawasjee scholarship for PHCET students, especially those belonging to financially weaker sections and having good academic background. During AY 20-21 we offered 22 lakhs of scholarship to PHCET students through PHCET management and Framjee Cawasjee Scholarship. 176 number of students benefited across the departments of PHCET. In this way scholarship helps PHCET students to keep dreams of good students alive by helping them in completing their education.

Part B

CURRICULAR ASPECTS

1.1 - Curricular Planning and Implementation

1.1.1 - The Institution ensures effective curriculum delivery through a well planned and documented process

PHCET is affiliated with the University of Mumbai. PHCET follows the curriculum given by the university and curricular aspects of the courses taught are governed by the University of Mumbai Ordinance and guidelines. Before the commencement of every semester, an academic calendar as per guidelines given by the university is prepared. The departments allocate subjects to teachers and prepare a timetable. For the newly introduced Choice Based Credit and Grading System (CBCGS) scheme, the principal and heads of the department along with timetable coordinators decide the department level optional courses and institute level optional courses to be offered to students. The process of teaching-learning is carried out with careful planning and effective delivery of lectures / practical/ tutorial through online lectures using the open-source zoom software as per Institute and University academic calendar and semester plan is ensured. PHCET is recognized as a nodal center for the virtual lab in collaboration with India's premier institutes like IITs. Experiments of major courses were conducted through these virtual labs. Performance assessment of each student is monitored continuously and actions are taken accordingly for improvisation if required. Google classrooms were formed and the study material, assignments, question bank, and video of recorded lectures were provided to the students.

File Description	Documents
Upload relevant supporting document	[View File](#)
Link for Additional information	https://e-classroom.phcet.ac.in/

1.1.2 - The institution adheres to the academic calendar including for the conduct of Continuous Internal Evaluation (CIE)

The Institute academic calendar is prepared by the Principal and Department Heads based on the University's term calendar. A thorough overview of all curricular and extracurricular activities and assessment dates are included in this document.

Each semester, the institute's calendar is posted on the institute's website, notice boards, staff rooms, laboratories, and Examination Section. According to the Institute academic calendar, each department designs its own academic calendar to reflect PBL evaluation, BE project presentations, seminars and workshops. Continuous Internal Evaluation (CIE) is important for continuously reforming the process for academic excellence. Mini-projects, Assignments, Unit tests, and Oral/Practical exams are used to refer for CIE. When it comes to CIE, the academic calendar of the Institute is efficiently employed. There are two components to the evaluation approach used by the Institute. 1. The Internal Assessment (IA). 2. The End Semester Examination. Both examinations were conducted online due to pandemics. The weightage is 20% for IA and 80% for the end-semester examination. As per the guidelines of UoM, two unit tests are conducted per semester for each course.

The academic calendar is also extremely useful for students as well as faculty members. A senior faculty member, department head and Principal periodically monitors progress of activities planned in the academic schedule.

File Description	Documents
Upload relevant supporting document	View File
Link for Additional information	https://phcet.ac.in/students/academic-calendar/term-calendar/

| 1.1.3 - Teachers of the Institution participate in following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the year. Academic council/BoS of Affiliating University Setting of question papers for UG/PG programs Design and Development of Curriculum for Add on/ certificate/ Diploma Courses Assessment /evaluation process of the affiliating University | A. All of the above |

File Description	Documents
Details of participation of teachers in various bodies/activities provided as a response to the metric	View File
Any additional information	View File

1.2 - Academic Flexibility

1.2.1 - Number of Programmes in which Choice Based Credit System (CBCS)/ elective course system has been implemented

1.2.1.1 - Number of Programmes in which CBCS/ Elective course system implemented

11

File Description	Documents
Any additional information	View File
Minutes of relevant Academic Council/ BOS meetings	View File
Institutional data in prescribed format (Data Template)	View File

1.2.2 - Number of Add on /Certificate programs offered during the year

1.2.2.1 - How many Add on /Certificate programs are added during the year. Data requirement for year: (As per Data Template)

27

File Description	Documents
Any additional information	View File
Brochure or any other document relating to Add on /Certificate programs	View File
List of Add on /Certificate programs (Data Template)	View File

1.2.3 - Number of students enrolled in Certificate/ Add-on programs as against the total number of students during the year

1301

File Description	Documents
Any additional information	[View File](#)
Details of the students enrolled in Subjects related to certificate/Add-on programs	[View File](#)

1.3 - Curriculum Enrichment

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

PHCET focuses on imparting strong ethical values and moral consciousness among students by sensitizing students over Gender, Human Values, Professional Ethics, Environment, and Sustainability. Events such as Expert lectures; National Service Scheme (NSS) programs, the establishment of Committees like the Anti-Ragging Committee and Women's Development Cell incorporates professional values. Human Values, Pollution, and Professional Ethics are taught through subjects like professional practice and Environmental studies alongside various extended activities like Workshops, seminars/webinars, Industry visits, and Guest lectures.

The NSS team organizes camps in the rural areas to assist the underprivileged, conducts Blood Donation & Health Care Camps, and Tree Plantation activities to foster the sense of Human values and environment. The Women's Development cell aims to spread awareness on Women's issues by conducting Workshops, Motivation speeches, and Competitions on Women's Empowerment.

Guest lectures conducted on Interpersonal skills develop the Professional attitude of the students. Industry tours help students to gain practical perspectives. The college conducts events to perceive the value of the environment to promote sustainable development among students.

Anti-Ragging Committee is formed to supervise Ragging and Harassment issues in the Institute. The issues are carefully handled and the confidentialities of the issues are well-maintained by the committee.

File Description	Documents
Any additional information	[View File](#)
Upload the list and description of courses which address the Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum.	[View File](#)

1.3.2 - Number of courses that include experiential learning through project work/field work/internship during the year

193

File Description	Documents
Any additional information	[View File](#)
Programme / Curriculum/ Syllabus of the courses	[View File](#)
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	[View File](#)
MoU's with relevant organizations for these courses, if any	[View File](#)
Institutional Data in Prescribed Format	[View File](#)

1.3.3 - Number of students undertaking project work/field work/ internships

508

File Description	Documents
Any additional information	[View File](#)
List of programmes and number of students undertaking project work/field work/ /internships (Data Template)	[View File](#)

1.4 - Feedback System

1.4.1 - Institution obtains feedback on the syllabus and its transaction at the	**A. All of the above**

institution from the following stakeholders Students Teachers Employers Alumni

File Description	Documents
URL for stakeholder feedback report	https://phcet.ac.in/feedback/
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management	View File
Any additional information	View File

1.4.2 - Feedback process of the Institution may be classified as follows	**A. Feedback collected, analyzed and action taken and feedback available on website**

File Description	Documents
Upload any additional information	View File
URL for feedback report	https://phcet.ac.in/feedback/

TEACHING-LEARNING AND EVALUATION

2.1 - Student Enrollment and Profile

2.1.1 - Enrolment Number Number of students admitted during the year

2.1.1.1 - Number of students admitted during the year

300

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

2.1.2 - Number of seats filled against seats reserved for various categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy during the year (exclusive of supernumerary seats)

2.1.2.1 - Number of actual students admitted from the reserved categories during the year

142

File Description	Documents
Any additional information	[View File](#)
Number of seats filled against seats reserved (Data Template)	[View File](#)

2.2 - Catering to Student Diversity

2.2.1 - The institution assesses the learning levels of the students and organizes special Programmes for advanced learners and slow learners

To assess the learning level of the students, various direct and indirect methods are followed in the PHCET. Indirect methods, the student's knowledge, and skills are assessed from their performance in the internal assessment, oral/practical examination, end semester examination, etc. Monitoring students' attention in the classroom discussion, question-answer sessions, and students' interaction with mentors and teachers helps to identify students learning to leave indirectly. Academic growth of the advanced and slow learner is ensured by taking various measures.

To keep slow-learner in the mainstream remedial classes, extra lab sessions, additional tutorials, problem-solving sessions, and timely tests are conducted. Motivating them for reading books, watching subject-related videos helped them to understand the subject well. To boost confidence in slow learner mentor and teachers regularly interact with them and are encouraged to discuss their problems.

Advanced learners are motivated to learn more than the regular academic subjects. Various workshops, webinars on the latest technologies, higher studies helped them to explore various carrier options. Advanced learners having high academic track records are encouraged to achieve university ranks and take up competitive examinations like GATE during their final year. The bright students having an orientation towards research are encouraged to present their work at various platforms and competitions.

File Description	Documents
Paste link for additional information	https://phcet.ac.in/students/student-activities/student-events/
Upload any additional information	View File

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

Number of Students	Number of Teachers
2525	144

File Description	Documents
Any additional information	View File

2.3 - Teaching- Learning Process

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

PHCET aims at imparting knowledge through student centric method. Faculty use innovative and ICT enabled methods of teaching. The regular teaching learning process is enhanced with E-learning technology through light board studio recording, Google Classroom, NPTEL videos, IIT tutorials, Virtual labs, and digital library to access study material. The Institute has subscription of Coursera, Edx and ISRO outreach centre to provide free online certification courses in technical fields, including engineering and soft skill courses.

Students and faculty are involved in field projects, project-based learning which make learning more experimental. Seminars, workshops and guest lectures are arranged regularly to make students understand the needs of industry. Under MOU's with reputed industries industrial visit, internships, guest lectures, training courses are offered to students to enhance experiential learning. Students are encouraged to participate in project competition like Hackathon, Avishkar to boost their confidence and participatory learning. To achieve course outcome, Course exit survey is taken at the end of each semester which helps in sharpening the skills.

Under professional student chapters and student council various activities like poster competition, guest lectures, essay

**competitions, social events are conducted.https://phcet.ac.in/s
tudents/student-activities/student-centric-methods/**

File Description	Documents
Upload any additional information	[View File](#)
Link for additional information	https://phcet.ac.in/students/student-activities/student-centric-methods/

2.3.2 - Teachers use ICT enabled tools for effective teaching-learning process. Write description in maximum of 200 words

**In PHCET, divergent ICT tools are used by the faculty members
to enhance the teaching and learning process. It helped to
support, enhance, and optimize the delivery of education
specifically during online learning due to the covid-19
pandemic. Following tools and resources were used to enhance
the experience of teaching-learning process students and
teachers:**

1. **PPTs, videos, and audio clips to improve the teaching
   experience**
2. **Google classroom to share study material, assignments,
   keeps a record of each students' performance.**
3. **online platforms such as Google Meet and Zoom to conduct
   lecture, practical and other activities**
4. **Online exams conducted using Google forms**
5. **Virtual Labs provided by the various IITs and other
   standard institutes helped students to perform online
   practicals.**
6. **Coursera and Edx Online Campus Essentials subscription
   for National and international MOOC Certifications by
   faculty and students**
7. **Video lectures are prepared using an In-house developed
   Lecture recording system - Lightboard and made available
   on the institute's YouTube channel.**
8. **Library space - Digital Learning Repository of Course
   wise study material, question banks, video lectures, and
   sample question papers were developed for remote access
   to PHCET students and faculty.**

File Description	Documents
Upload any additional information	View File
Provide link for webpage describing the ICT enabled tools for effective teaching-learning process	View File

2.3.3 - Ratio of mentor to students for academic and other related issues (Data for the latest completed academic year)

2.3.3.1 - Number of mentors

144

File Description	Documents
Upload, number of students enrolled and full time teachers on roll	View File
Circulars pertaining to assigning mentors to mentees	View File
Mentor/mentee ratio	View File

2.4 - Teacher Profile and Quality

2.4.1 - Number of full time teachers against sanctioned posts during the year

144

File Description	Documents
Full time teachers and sanctioned posts for year (Data Template)	View File
Any additional information	View File
List of the faculty members authenticated by the Head of HEI	View File

2.4.2 - Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.B Superspeciality / D.Sc. / D.Litt. during the year (consider only highest degree for count)

2.4.2.1 - Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.C Superspeciality / D.Sc. / D.Litt. during the year

20

File Description	Documents
Any additional information	View File
List of number of full time teachers with Ph. D. / D.M. / M.Ch./ D.N.B Super specialty / D.Sc. / D.Litt. and number of full time teachers for year (Data Template)	View File

2.4.3 - Number of years of teaching experience of full time teachers in the same institution (Data for the latest completed academic year)

2.4.3.1 - Total experience of full-time teachers

930

File Description	Documents
Any additional information	View File
List of Teachers including their PAN, designation, dept. and experience details(Data Template)	View File

2.5 - Evaluation Process and Reforms

2.5.1 - Mechanism of internal assessment is transparent and robust in terms of frequency and mode. Write description within 200 words.

Institute's Academic calendar provides planned dates of internal assessment, projects, and term work submission. The academic calendar is made available well before the commencement of the semester through the college website, notice boards, and lab displays. Internal assessment comprises of term work assessment and internal tests as per the syllabus scheme prescribed by the University of Mumbai. Internal assessment is carried out periodically over the entire semester.

The evaluation of the term work is done for 25 marks in the majority of the subjects and 50 marks in a few subjects. The assessment of term work is based on the performance and evaluation of assignments, case studies, project-based learning, and experiments regularly. Concerned students are also aware of their grades/marks obtained in a particular

assignment experiment or case study as the marks are awarded in front of the students. Two internal tests are conducted each of 20 marks and an average is considered as 20% of the total weightage in each theory subject along with an end semester examination of 80 marks. The first test is conducted within 45 days of college reopening in such a way that at least 40% syllabus is covered in the class and the second test is scheduled after the next 40 % is covered.

The solution of the test along with a question-wise marking scheme is discussed with students to maintain transparency and uniformity in the assessment of the internal tests. After the assessment, answer sheets are shown to students, and performance is discussed. In mid of every semester, a parent-teacher meeting is conducted to update the parents about their ward's attendance and performance in the internal assessment of all subjects, and feedback is also sought from parents.

The internal assessments are routinely monitored by Heads of Department to ensure that they meet the learning outcomes outlined in the course syllabus. With these systems in place, PHCET very well exhibits transparency in the mechanism of internal assessment and robustness in terms of frequency and mode.

File Description	Documents
Any additional information	[View File](#)
Link for additional information	[https://phcet.ac.in/students/examination/examination-notices/](#)

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

A transparent, time-bound and efficient method is being followed in PHCET in terms of dealing with internal examination related grievances. Various internal examinations are being performed throughout the semester. Some of them are – IA 1, IA2, assignments, lab continuous evaluation, project evaluations, etc.

Internal Assessments (IA 1 and IA2):

The faculty evaluates the papers within a week of conduction of test. The evaluated answer sheets are shown to students in

class and faculty undertakes individual grievances with a student on the paper if required by the student. At the end of the semester the average marks of both the assessments is calculated and verified with the students. If any discrepancies are reported by the students, then they are resolved by the faculty immediately.

Assignments:

Faculty evaluates assignments based on the rubric which is also shared with the students. The rubric consists of criteria-timely submission, clarity, neatness, etc. The evaluated assignments are given back to students thus maintaining the transparency of the marks assigned and to resolve grievances is any.

Laboratory Experiments:

The experiment performed in lab by the student is immediately evaluated by the faculty and the performance marks are assigned based on the lab rubric designed by the faculty. The lab rubric is given in the lab manual which is shared with the students well in advance before the lab is conducted. The lab submissions are taken in LMS, e.g. Google classroom, and the marks given by the faculty are available to the students immediately, this providing a transparent way for students to reflect on their strengths and areas of improvements.

Project Evaluation:

In a semester two internal evaluations of the project is conducted in front of the panel consisting of group of faculties. The rubric is designed for these two presentations having criteria- quality of problem formulation, literature analysis, presentation, team work, etc. With these systems in place, PHCET very well exhibits transparency in the mechanism of dealing with grievances related to the internal assessment.

File Description	Documents
Any additional information	[View File](#)
Link for additional information	https://phcet.ac.in/about/grievance-redressal-mechanism/

2.6 - Student Performance and Learning Outcomes

2.6.1 - Programme and course outcomes for all Programmes offered by the institution are stated and displayed on website and communicated to teachers and students.

Institute follows the guidelines of Outcome-Based Education (OBE) and accordingly strict measures are taken to ensure the dissemination and awareness ofProgram Outcomes (POs), Program Specific Outcomes (PSOs), and Course Outcomes (COs). COs are predefined in the syllabus. These COs are refined at the department level after rigorous discussion among the faculty members if required. Following methods are followed by the institution to widely publicize COs and POs among the teachers, students, and other stakeholders.

- Display on Website:
- http://www.phcet.ac.in/departments/computerengineering.asp
- Institute website
- Displayed in Department Notice Boards, Faculty Rooms, Class Rooms, HoD Cabin, Laboratories and Library
- Printed on students' journals
- Discussed during Faculty Meeting
- Disseminated during Parent- Teacher Meeting
- Awareness is created among Alumni during Alumni Meetings

Awareness about POs, PSOs, and COs is created in students by HoD in the student orientation program. Subject in-charges, class coordinators, mentors, faculty members also emphasize creating consciousness among students about COs and POs and PSOs and the need for its attainment. Subject In-charge introduces students to all the COs of the course in the first lecture. Before starting a new module, COs related to that topic are revised.

POs are published on the institute website, Institute Brochure, students' journals. Displayed at various places in the campus such as notice boards, classrooms, faculty rooms, etc. These are also discussed with faculty members and parents during meetings. Students are made responsive towards the same by conveying them during the orientation program.

File Description	Documents
Upload any additional information	View File
Paste link for Additional information	https://phcet.ac.in/academics/bachelors/electrical-engineering/program-overview/
Upload COs for all Programmes (exemplars from Glossary)	View File

2.6.2 - Attainment of Programme outcomes and course outcomes are evaluated by the institution.

PHCET practices outcome-based education from the last six years. The attainment was measured as per NBA (Washington Accord) guidelines. The direct and indirect assessment methods were considered for calculating the attainment of course outcomes and program outcomes. The direct assessment method includes assessment of assignments, practical and oral examination, final year projects, experiments, internal assessment, and the end semester examination, while the indirect method was based on a course exit survey.

Initially set the target value of marks for each subject by considering the difficulty level of the subject. Based on the university curriculum weightage was given to each head. For individual subject, criteria for level selection (level-1,2,3) was decided by the subject teacher through analysis of previous years' university examination results. The final level for each head was decided by comparing level criteria and percentage of students at and the above-set target value of marks. The course attainment was calculated by multiplying the final level by weight percentage.

Mapping of each course outcome with end semester examination questions, assignments, practical and internal assessment questions was carried out.

Indirect assessments include a course exit survey. Course exit survey forms were shared with students to map course outcomes on a scale of 1 to 5. Total attainment was calculated by giving 80% weightage to the direct assessment method and 20% weightage to the indirect assessment method.

The PO's were mapped with CO's on the scale of 0, 0.33 (Low),

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0.66 (Medium), and 1 (High). Final program attainment was
calculated by multiplying total attainment with PO and CO
mapping scale. The same procedure was followed to calculate PSO
attainment.
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File Description	Documents
Upload any additional information	View File
Paste link for Additional information	https://phcet.ac.in/academics/bachelors/mechanical-engineering/program-overview/

2.6.3 - Pass percentage of Students during the year

2.6.3.1 - Total number of final year students who passed the university examination during the year

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892
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File Description	Documents
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	View File
Upload any additional information	View File
Paste link for the annual report	https://phcet.ac.in/students/examination/examination-notices/

2.7 - Student Satisfaction Survey

2.7.1 - Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design its own questionnaire) (results and details need to be provided as a weblink)

https://phcet.ac.in/iqac/student-satisfaction-survey/

RESEARCH, INNOVATIONS AND EXTENSION

3.1 - Resource Mobilization for Research

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

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

2.99

File Description	Documents
Any additional information	View File
e-copies of the grant award letters for sponsored research projects /endowments	View File
List of endowments / projects with details of grants(Data Template)	View File

3.1.2 - Number of teachers recognized as research guides (latest completed academic year)

3.1.2.1 - Number of teachers recognized as research guides

4

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

3.1.3 - Number of departments having Research projects funded by government and non government agencies during the year

3.1.3.1 - Number of departments having Research projects funded by government and non-government agencies during the year

1

File Description	Documents
List of research projects and funding details (Data Template)	View File
Any additional information	View File
Supporting document from Funding Agency	View File
Paste link to funding agency website	https://www.aicte-india.org/atal

3.2 - Innovation Ecosystem

3.2.1 - Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge

PHCET is having well established Research, Incubation, and Innovation Centre with state-of-the-art lab facilities, computer lab, and IPR cell. Faculty prepares research proposals regularly to the University of Mumbai, DST, and AICTE. In the academic year 2020-2, to promote innovation activities and provide an ecosystem for innovation, PHCET has established Institution's Innovation Council (IIC) as per the guidelines of MoE's Innovation Cell (MIC) in the academic year 2020-21. The initiative was to create a vibrant local innovation ecosystem, start-up supporting mechanism, establish a functioning ecosystem for scouting ideas and pre-incubation of ideas, and to develop the better cognitive ability for technology students. PHCET, IIC is actively involved in organizing and conducting various seminars, workshops, Idea competitions, Hackathon for school children's, etc. for its students and faculties. The details of the resolution, minutes of meetings, and activities conducted under IIC are available at https://phcet.ac.in/iic/. A hands-on workshop is conducted for writing patents and copyrights. Many faculty have identified topics for the same and are working on it along with students. PHCET has formulated a National Innovation and Startup Policy as per the guidelines of MIC. The seminars for awareness on NISP are conducted for faculty and students.

File Description	Documents
Upload any additional information	[View File]()
Paste link for additional information	https://phcet.ac.in/iic/

3.2.2 - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the year

3.2.2.1 - Total number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year wise during the year

38

File Description	Documents
Report of the event	View File
Any additional information	View File
List of workshops/seminars during last 5 years (Data Template)	View File

3.3 - Research Publications and Awards

3.3.1 - Number of Ph.Ds registered per eligible teacher during the year

3.3.1.1 - How many Ph.Ds registered per eligible teacher within the year

1

File Description	Documents
URL to the research page on HEI website	https://phcet.ac.in/research/research-development/
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc (Data Template)	View File
Any additional information	View File

3.3.2 - Number of research papers per teachers in the Journals notified on UGC website during the year

3.3.2.1 - Number of research papers in the Journals notified on UGC website during the year

89

File Description	Documents
Any additional information	View File
List of research papers by title, author, department, name and year of publication (Data Template)	View File

3.3.3 - Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during the year

3.3.3.1 - Total number of books and chapters in edited volumes/books published and

papers in national/ international conference proceedings year wise during year

29

File Description	Documents
Any additional information	View File
List books and chapters edited volumes/ books published (Data Template)	View File

3.4 - Extension Activities

3.4.1 - Extension activities are carried out in the neighborhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the year

PHCET prepares the individual to find out one's inherent potentialities and develop the same to the maximum extent to derive utility for himself and contribute to society. An educational institution is the important social agency whose contribution to the development of the society is most expected and the national development is revolving around it. At PHCET we try to provide the same. Community-oriented education and its extensional activities are the modern ideologies of Education.

Extra-curricular activities conducted at PHCET open avenues for the students to make social participation and contribute to the social empowerment through Community Service, Uberang, NSS, Student Council, Marathi Vagmay Mandal, Alumni Association, etc. Due to the pandemic, it was not possible to reach out to the community face to face but we arranged many events online and tried to achieve the objective. Few events were conducted online to collect money and it was donated to Panvel Gurudwara. Awareness about Organ Donation was organized as a result of which one faculty registered himself for the Eye Donation. Inhouse made Covid Safety materials, face shields, sanitizerswere provided to nearest Rasayani police station and traffic police. Through all these activities students work for society directly and try to help them in a better way.

File Description	Documents
Paste link for additional information	https://phcet.ac.in/students/student-council/, https://phcet.ac.in/students/student-activities/student-associations/nss/
Upload any additional information	View File

3.4.2 - Number of awards and recognitions received for extension activities from government / government recognized bodies during the year

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

4

File Description	Documents
Any additional information	View File
Number of awards for extension activities in last 5 year (Data Template)	View File
e-copy of the award letters	View File

3.4.3 - Number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc., (including the programmes such as Swachh Bharat, AIDS awareness, Gender issues etc. and/or those organized in collaboration with industry, community and NGOs) during the year

3.4.3.1 - Number of extension and outreach Programs conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the year

18

File Description	Documents
Reports of the event organized	View File
Any additional information	View File
Number of extension and outreach Programmes conducted with industry, community etc for the during the year (Data Template)	View File

3.4.4 - Number of students participating in extension activities at 3.4.3. above during year

3.4.4.1 - Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year wise during year

1893

File Description	Documents
Report of the event	View File
Any additional information	View File
Number of students participating in extension activities with Govt. or NGO etc (Data Template)	View File

3.5 - Collaboration

3.5.1 - Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship during the year

3.5.1.1 - Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship year wise during the year

79

File Description	Documents
e-copies of related Document	View File
Any additional information	View File
Details of Collaborative activities with institutions/industries for research, Faculty	View File

3.5.2 - Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the year

3.5.2.1 - Number of functional MoUs with Institutions of national, international importance, other universities, industries, corporate houses etc. year wise during the year

22

File Description	Documents
e-Copies of the MoUs with institution./ industry/corporate houses	View File
Any additional information	View File
Details of functional MoUs with institutions of national, international importance, other universities etc during the year	View File

INFRASTRUCTURE AND LEARNING RESOURCES

4.1 - Physical Facilities

4.1.1 - The Institution has adequate infrastructure and physical facilities for teaching- learning. viz., classrooms, laboratories, computing equipment etc.

In this pandemic period of COVID-19, an environment of excellence in education is achieved through the online teaching and learning process using advanced pedagogical Tools. All the co-curricular activities/extra-curricular activities, Parent Teacher Meeting, Campus Recruitment Training, seminars all are managed through an online platform using Google Meet and Zoom. Zoom license, extra HD, Switches, Access point, etc were purchased to strengthen the IT infrastructure. Various tools of Google attendance, Whiteboard Online, and various other online applications are used as effective teaching aids. PHCET has been set up as a nodal center for virtual labs by the Ministry of Human Resource Development through its ICT running under the National Education Mission. Virtual Labs cater to all the needs of students at the undergraduate level for laboratory. Teachers also use various ICT tools like Lightboard lecture recording system, Video Recordings of Lab Experiments performed, PowerPoint presentations, NPTEL, and other online lectures from Coursera, Edx to enrich the quality of contents delivered. PHCET Library has created Institutional Repository (Digital Library) for Comprehensive study materials like Lecture Notes, PPTs, Lab Manuals, Assignments, Syllabus, Question Papers, and all the other Academic relevant materials required by the users. In this pandemic period also Component Library facility for borrowing various hardware components is available to Faculty and students to complete their Hardware projects on time. Research and Incubation Centre Laboratory Facility is also available to all Faculty and students while maintaining all social distance rules and regulations.

File Description	Documents
Upload any additional information	[View File](#)
Paste link for additional information	https://phcet.ac.in/about/infrastructure-and-facilities/

4.1.2 - The Institution has adequate facilities for cultural activities, sports, games (indoor, outdoor), gymnasium, yoga centre etc.

PHCET gives major emphasis to the total development of students. PHCET has a sports ground of 7 Acres and a tie-up with the Sports Authority of India (SAI). Under this tie-up, students can avail themselves of facilities for training in sports. The institution has a 400m track, 6 lane football ground, 3 volleyball courts,1 basketball ground, 2 handball ground, and a long jumpy arena.

We have a fully equipped and vibrant Gymnasium that can be used by students. All the major equipment is available in the gymnasium e.g. 2 leg presses, 2 Multi-Station, 4 benches for bench press, 2 Olympic boxes, treadmill, etc. Facilities for outdoor and indoor sports and games that include badminton, volleyball, basketball, carom, table tennis, and chess also exist in the institution.

PHCET has a separate yoga hall for the students and staff. Student Council, NSS, and Women Development Cell celebrate international yoga day and conduct different yoga sessions for students, faculty, and staff. Regular sessions on Meditation are also conducted this year in online mode.

We have an auditorium, stage, conference halls, and lawns for organizing annual functions and cultural events. PHCET provides a platform for Euforia, the annual cultural festival to encourage students to bring out their talents, abilities, and skills by organizing and participating in diverse events.

File Description	Documents
Upload any additional information	[View File](#)
Paste link for additional information	https://phcet.ac.in/students/sports-and-games/ https://phcet.ac.in/students/campus-fest/euforia/

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

59

File Description	Documents
Upload any additional information	[View File](#)
Paste link for additional information	https://phcet.ac.in/about/infrastructure-and-facilities/academic-infrastructure/
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	[View File](#)

4.1.4 - Expenditure, excluding salary for infrastructure augmentation during the year (INR in Lakhs)

4.1.4.1 - Expenditure for infrastructure augmentation, excluding salary during the year (INR in lakhs)

262.62

File Description	Documents
Upload any additional information	[View File](#)
Upload audited utilization statements	[View File](#)
Upload Details of budget allocation, excluding salary during the year (Data Template	[View File](#)

4.2 - Library as a Learning Resource

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

PHCET Library is housed with modern amenities and situated on the second floor of the Engineering building. PHCET Library is an integral part of learning and curriculum, enhancing the quality of the academic and research environment in the college.It has got a rich collection of more than 25,000 books in the field of Engineering, Technology, and related disciplines. The library has subscribed to over 5017 E-journals. The library houses an enviable collection of resources in the field of Engineering, Study Skills, Personality Development, General Management, Humanities, Science, and allied subjects. The library has also created a learning environment by establishing Online Public Access Catalogue Search Area, an internet browsing area for accessing e-resources, a Laptop zone with a Wi-Fi facility, and specialized workstations like a discussion room, Separate Room for rare documents and reference books. The library has a nucleus to meet the information requirements of students and faculties of the institution. The library has created Digital Library (Institutional Repository) for Comprehensive Study materials like Lecture Notes, PPTs, Lab Manuals, Assignments, Experiments, Syllabus, Question Papers, and all the other Academic relevant materials required by the users. Moodle an Open Source Online Learning Management System is used for developing the Digital Library. A dedicated Rack Server with a remote access Facility is provided for this purpose.

List of subscribed E-resources & Digital Library:

Sr.No.

E-Resources

Website

QTY

Remarks

1

IEEE Xplore Digital Library

https://ieeexplore.ieee.org

175

E- journals

4

J-Gate – Engineering & Technology (JET)

https://jgateplus.com/search/login/

4842

E-journals

6

Digital Library

http://114.143.219.19/libspace/

1

Study Materials

Total

5017 - E-journals

Library provides the facility to check plagiarism for projects, thesis, research papers, and synopsis. The library has Turnitin, which is internet-based plagiarism prevention software. Turnitin checks for potential unoriginal content by comparing submitted documents to several databases using a proprietary algorithm. The documents submitted by users are stored in a database used to check for plagiarism to avoid duplication of subject contents of a project, thesis, research papers, etc. by identifying matching text between papers.

Information and Communication Technologies (ICT) have immensely impacted the functioning of Libraries. PHCET Library is automated using open source Library Management Software "KOHA". Description of ILMS is as follows:

Name of the ILMS software – KOHA

Nature of automation (fully or partially) – Fully

Version- 17.05.03.000

Year of automation- 2016

Integrated Library Management System is used to manage various functions of the library. It has got remote access to OPAC (Online Access Public Catalogue) which is called Web OPAC. KOHA provides e-mail alerts for return/renewals of books before due dates; Reminders to return and renew overdue books.

The library has created a Facebook group and Instagram Account Page. These provide valuable information on Careers, Scholarships, Various Entrance Exams, etc. The group creates awareness and updates on Library Resources and Services. It gives information and news related to the field of education. Users may post messages/queries related to the library.

KOHA Link: URL: http://koha.mes.ac.in:9001/

OPAC Link: http://opac.mes.ac.in:9000/

File Description	Documents
Upload any additional information	[View File](#)
Paste link for Additional Information	[https://phcet.ac.in/library/library-information/](#)

4.2.2 - The institution has subscription for the following e-resources e-journals e-ShodhSindhu Shodhganga Membership e-books Databases Remote access toe-resources	A. Any 4 or more of the above

File Description	Documents
Upload any additional information	[View File](#)
Details of subscriptions like e-journals,e-ShodhSindhu, Shodhganga Membership etc (Data Template)	[View File](#)

4.2.3 - Expenditure for purchase of books/e-books and subscription to journals/e-journals during the year (INR in Lakhs)

4.2.3.1 - Annual expenditure of purchase of books/e-books and subscription to journals/e-journals during the year (INR in Lakhs)

1.34

File Description	Documents
Any additional information	View File
Audited statements of accounts	View File
Details of annual expenditure for purchase of books/e-books and journals/e- journals during the year (Data Template)	View File

4.2.4 - Number per day usage of library by teachers and students (foot falls and login data for online access) (Data for the latest completed academic year)

4.2.4.1 - Number of teachers and students using library per day over last one year

6

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

4.3 - IT Infrastructure

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

The institute gives top priority to the expansion of its IT facilities including Wi-Fi because it understands the correlation between appropriate infrastructure and efficient teaching-learning.

At the beginning of the academic year assessment for replacement / up-gradation / addition of the existing infrastructure will be finalized based on suggestions from department heads, faculty & lab in charge, and system administrators after reviewing course requirements, computer to student ratio, budget, and performance of the existing equipment. Every year up-gradation is done in the second week of June. Currently, all labs have desktop computers with a configuration like Gigabyte Motherboard, Intel Core i5

Processor, 8 GB DDR2 RAM, Hard Disk 500 GB. Three Rack servers are available in the institute.

The institute has always been reviewing the current needs and accordingly the internet bandwidth is upgraded from time to time. Previous academic year internet speed was 200 Mbps. Now, high-speed internet access is available on campus at a speed of 300 Mbps. The Internet Service Provider (ISP) Tata provides connectivity with high fault tolerance. Tata Telecom Network with intercom facilities.

Institute is providing the following facilities:

- Wi-Fi 24 x 7
- G-Suite and Zoom facility
- Intercom facilities
- Virtual Labs nodal center.
- Subscription for unlimited Coursera and edX courses.

File Description	Documents
Upload any additional information	[View File](#)
Paste link for additional information	https://phcet.ac.in/about/infrastructure-and-facilities/it-facilities-%20/

4.3.2 - Number of Computers

1007

File Description	Documents
Upload any additional information	[View File](#)
List of Computers	[View File](#)

4.3.3 - Bandwidth of internet connection in the Institution	A. ? 50MBPS

File Description	Documents
Upload any additional Information	[View File](#)
Details of available bandwidth of internet connection in the Institution	[View File](#)

4.4 - Maintenance of Campus Infrastructure

4.4.1 - Expenditure incurred on maintenance of infrastructure (physical and academic support facilities) excluding salary component during the year (INR in Lakhs)

4.4.1.1 - Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component during the year (INR in lakhs)

47.75

File Description	Documents
Upload any additional information	View File
Audited statements of accounts	View File
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	View File

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

PHCET ensured appropriate sanitization and disinfection processes and procedures in this COVID-19 pandemic. Thermal check scans, Arogya setu App, and sanitization facility at the entrance point were carried out for faculty, students, staff, and all visitors entering the campus to protect and avoid infecting one another. All preventive measures, preparedness, and necessary support system to deal with the COVID -19 are monitored. The conditions of the entry for visitors were strictly laid down and displayed on all the entry points. Adequate arrangements of thermal scanners, sanitizers are available at all entry and exit points, including the reception area and office. Crowding is avoided at all entry/ exit points. No mask no entry is strictly implemented in PHCET. Staggered days for Lab assistants and Teaching staff on a rotation basis are maintained. Proper sanitization at all laboratories is ensured by all non-teaching staff. Cleaning and regular disinfection are mandatory in all classrooms and all laboratories on the entire campus. Laboratories are maintained by all the Lab Assistants of the concerned departments on a rotation basis, without violating the norms of "social distancing". CCTV camera is installed in all the laboratories. COVID-19 norms are maintained everywhere on campus including the library. All the course material such as Course Academic

Plan, Lab Manuals, Reference Books, Notes, PPT, Question Bank Chapter wise, and Test Marks have uploaded in respective subject Google Classroom.

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://phcet.ac.in/faculty/faculty-handbook/

STUDENT SUPPORT AND PROGRESSION

5.1 - Student Support

5.1.1 - Number of students benefited by scholarships and free ships provided by the Government during the year

5.1.1.1 - Number of students benefited by scholarships and free ships provided by the Government during the year

1584

File Description	Documents
Upload self attested letter with the list of students sanctioned scholarship	View File
Upload any additional information	View File
Number of students benefited by scholarships and free ships provided by the Government during the year (Data Template)	View File

5.1.2 - Number of students benefitted by scholarships, free ships etc. provided by the institution / non- government agencies during the year

5.1.2.1 - Total number of students benefited by scholarships, free ships, etc provided by the institution / non- government agencies during the year

238

File Description	Documents
Upload any additional information	View File
Number of students benefited by scholarships and free ships institution / non- government agencies in last 5 years (Date Template)	View File

5.1.3 - Capacity building and skills enhancement initiatives taken by the institution include the following: Soft skills Language and communication skills Life skills (Yoga, physical fitness, health and hygiene) ICT/computing skills

A. All of the above

File Description	Documents
Link to Institutional website	https://phcet.ac.in/enhancement-schemes/
Any additional information	View File
Details of capability building and skills enhancement initiatives (Data Template)	View File

5.1.4 - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year

2460

5.1.4.1 - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year

2460

File Description	Documents
Any additional information	View File
Number of students benefited by guidance for competitive examinations and career counseling during the year (Data Template)	View File

5.1.5 - The Institution has a transparent mechanism for timely redressal of student

A. All of the above

grievances including sexual harassment and ragging cases Implementation of guidelines of statutory/regulatory bodies Organization wide awareness and undertakings on policies with zero tolerance Mechanisms for submission of online/offline students' grievances Timely redressal of the grievances through appropriate committees

File Description	Documents
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	View File
Upload any additional information	View File
Details of student grievances including sexual harassment and ragging cases	View File

5.2 - Student Progression

5.2.1 - Number of placement of outgoing students during the year

5.2.1.1 - Number of outgoing students placed during the year

288

File Description	Documents
Self-attested list of students placed	View File
Upload any additional information	View File
Details of student placement during the year (Data Template)	View File

5.2.2 - Number of students progressing to higher education during the year

5.2.2.1 - Number of outgoing student progression to higher education

11

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

5.2.3 - Number of students qualifying in state/national/ international level examinations during the year (eg: JAM/CLAT/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations)

5.2.3.1 - Number of students qualifying in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations) during the year

18

File Description	Documents
Upload supporting data for the same	View File
Any additional information	View File
Number of students qualifying in state/ national/ international level examinations during the year (Data Template)	View File

5.3 - Student Participation and Activities

5.3.1 - Number of awards/medals for outstanding performance in sports/cultural activities at university/state/national / international level (award for a team event should be counted as one) during the year

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

28

File Description	Documents
e-copies of award letters and certificates	View File
Any additional information	View File
Number of awards/medals for outstanding performance in sports/cultural activities at university/state/national/international level (During the year) (Data Template)	View File

5.3.2 - Institution facilitates students' representation and engagement in various administrative, co-curricular and extracurricular activities (student council/ students representation on various bodies as per established processes and norms)

A student council, at the highest level of student affairs, seeks to bind everyone together and move everyone forward, together. Under the supervision of faculty advisors and the Principal, the PHCET Student Council is in charge of organizing technical, cultural, social, and sporting events. The students are not only involved in making decisions but also, administrative decisions relevant to students are circulated to the students through Student Council. Student Council events for 2020-21 are available at https://phcet.ac.in/students/student-council/

Student bodies like CSI, IETE, IE, ISHARE, MESA, SAE, SFA, Team starkers nudge students towards developing special interests by organizing expert lectures, seminars through online mode. Under the direction of the faculty coordinators, all student bodies are involved in the organisation of co-curricular and extra-curricular activities. Unfortunately, the current pandemic crisis has forced us to halt our physical interactions and shift the flow to the virtual world. Every year, the Institute promotes new events and facilitates students to participate in various academic and administrative committees. This has aided management and faculty in gaining a better understanding of students and the problems they face, and has contributed massively to the teaching and learning processes, as a result of which the Institute has produced excellent results year after year. Students represent the following academic and administrative bodies of the college:

- College Development Committee
- Internal Quality Assurance Cell

- **Anti-Ragging Committee**
- **Internal Complaint Committee**
- **Prevention of Atrocities to SC/ST Committee**
- **Placement Committee**
- **Extracurricular Activities committee**
- **Canteen Committee**
- **Women Development Cell**

This enables the institute to review some administrative decisions from a student's perspective. An alumni representative also provides valuable inputs through his or her expertise and exposure. In addition to the above, NSS serves the community by taking initiatives like grocery distribution to the needy during covid-19, blood donation camp, plasma donation drive for covid-19 treatment to name a few. The sole aim of the NSS is to provide hands-on experience to young students in delivering community service. Students work cordially under the supervision of a faculty member. PHCET women in STEM has been inaugurated this year, it works towards uplifting female students and faculty in the fields of technology.

File Description	Documents
Paste link for additional information	https://phcet.ac.in/students/student-council/
Upload any additional information	View File

5.3.3 - Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions)

5.3.3.1 - Number of sports and cultural events/competitions in which students of the Institution participated during the year

28

File Description	Documents
Report of the event	View File
Upload any additional information	View File
Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions (Data Template)	View File

5.4 - Alumni Engagement

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

The Alumni Association of PHCET, named as "Pillai HOC College of Engineering and Technology Alumni Welfare Association". PHCET considers its Alumini as one of the its pillar. PHCET has always been benefited socially, academically and professionally by maintain a strong relationship with is Alumni. Likewise, even the alumni community have realized that it's not just a mere nostalgia that they associate their PHCET with, but it's much beyond that. Some of the PHCET focus areas with regards to its alumni are:

- Career Guidance – Alumni is a huge talent pool whose guidance can be beneficial to many students and other fellow-alumni in their respective areas of study. Even in this pandemic situation, the Alumni association conducted several online workshops and webinars, on technical as well as nontechnical subjects to guide the students.
- Networking Platform – Alumni network by itself is one of the best professional networking platforms available today.
- Fund-raising – A strong Alumni association can be one of the biggest benefactors of an institution that can contribute towards various developmental activities of the institution.
- Alumni Workshops and Seminars – Alumni regularly conduct workshops/ seminars for the students of various departments. This provides a platform for alumni to showcase their experience and skills to existing students. Alumni can thus serve as mentors for students,

provide placement and scholarships as well as guide the careers of upcoming students.

MES Alumni Registration - PHCET, through MES, provides a uniform platform for all its alumni to register on and network called alumni.mes.ac.in. Here PHCET alumni can network with and they can track all the other alumni of any MES institute and each institute can keep track of each alumni. PHCET also has its own alumni committee and registered organization which manages the day to day activities and financial aspects of the PHCET alumni community. Students can register at https://alumniportal.mes.ac.in/

Continuing Education - PHCET offers many add on and certificate courses that are offered to alumni at discounted rates. In general alumni can get up to 50% concession in various courses and certification courses like SAP. SAP ERP is application based software used by various multinational companies to manage their business processes efficiently. In partnership with our college, SAP also provides global certification courses to its students at an affordable rate. Harvard Business School that will make Harvard Business school online courses will be made available for all our alumni at special discounted rate. In this pandemic situation, Alumni associations could conduct several online workshops and webinars, on technical as well as non-technical subjects as much as possible for students.

File Description	Documents
Paste link for additional information	https://phcet.ac.in/alumni/alumni-registration/
Upload any additional information	View File

5.4.2 - Alumni contribution during the year (INR in Lakhs)	A. ? 5Lakhs

File Description	Documents
Upload any additional information	View File

GOVERNANCE, LEADERSHIP AND MANAGEMENT
6.1 - Institutional Vision and Leadership
6.1.1 - The governance of the institution is reflective of and in tune with the vision and mission of the institution

PHCET has proposed the development of Innovation and Entrepreneurship in the academic and administrative governance systems. Academic and administrative governance objectives are based on PHCET's vision and mission. The significant bodies that monitor governance include Governing Body, IQAC, College Development Cell (CDC), and department advisory committee. The members of Governing Council, IQAC, and College Development Cell (CDC) are strategic executives, tactical and operational level staff, like top management members, the Principal, Heads of Departments, senior faculty members, and non-teaching staff members.

The principal plans, executes, records, and monitors academic and administration events along with his executive team in the form of committees. Various academic and administrative committees are formed that include faculty members, supporting staff, and students as per the requirement. Some of the committees include IQAC, department budget committee, academic advisory committee, admission committee, anti-ragging committee, students grievance redressal committee, time table committee, library committee, examination committee, internal examination committee, anti unfair means & discipline committee, R&D committee, Extracurricular activity committee, social responsibility committee, sports committee, alumni committee, training & placement committee, anti-sexual harassment committee (internal complaints committee), the committee for the prevention of atrocities to backward class students, women development committee, students council committee, creativity and innovation, PHCET women and stem, entrepreneurship cell, newsletter committee. Constituted committees perform the function of planning, executing, and monitoring academic and administration events.

Academic and administrative events of the institute are identified as curricular, co-curricular, and extracurricular activities. Institute admits, educates, and trains the students to improve their skills and knowledge as per industry needs and social requirements with an organized governance structure. Curricular and co-curricular activities like curriculum syllabus development with Mumbai university syllabus

development committees, teaching and learning activity, examination and evaluation, research and development, admission of students, library development administration, laboratory development administration, social events, industry and institute interaction system, mentor-mentee interaction system, project-based learning, sports and games, industry visits, arranging industry experts to deliver a lecture the industry problems and solutions are conducted with decentralization and participative management approach.

Governing council allocates fund for expenses of academic and administrative events of the academic year, the academic council formulates policies for the development of the academic environment, implements, monitor the academic and administrative events and the local management council monitors the different academic and administrative events in the concern of budget and academic activities and principal constitute different academic committees to enhance the performance of academic and administrative events. IQAC develops and updates quality systems for the betterment of the academic environment. Department advisory committee updates the problems and solutions of industry and students' skills requirements for industries and introduces an add-on program to update students' skills. The functioning of all these bodies ensures that the governance of the institution is reflective of and in tune with the vision and mission of the institution.

File Description	Documents
Paste link for additional information	https://phcet.ac.in/about/board-of-governance/
Upload any additional information	[View File](#)

6.1.2 - The effective leadership is visible in various institutional practices such as decentralization and participative management.

PHCET has a mechanism for delegating authority and providing operational autonomy to all the various functionaries to work towards a decentralized governance system. Management authority reviews the institute through Executive council meetings and working committee meetings regularly. The Governing Body delegates all the academic and operational decisions based on policy to the Academic Monitoring Committee headed by the Principal. In academic year 20-21 executive council sanctioned

Rs. 1 Lakh for 'Mahatma Education Society's Project Grant Scheme'.

Starkers Motorsports applied for 'Mahatma Education Society's Project Grant Scheme', a scheme where students with innovative ideas are provided with funds. The Principal appointed a panel of faculty members. The student's body presented their work in front of the panel. The panel members were satisfied by the work & depending on the budget of the academic year; Rs. 1 Lakh was sanctioned to the student group. Due to support from the institute, the motorsports team was able to participate in National Event (7th GKDC & 5th E-GKDC) at Kari Motor Speedway, Coimbatore. The team designed and manufactured two vehicles, a Combustion vehicle (150 CC) Go-Kart as well as Electric Go-Kart for the competition. The CV Kart won AIR 2nd and the EV kart got 4th position in AIR.

File Description	Documents
Paste link for additional information	https://phcet.ac.in/about/institute-organogram/, https://phcet.ac.in/about/institutional-committees/
Upload any additional information	View File

6.2 - Strategy Development and Deployment

6.2.1 - The institutional Strategic/ perspective plan is effectively deployed

The Institute has always focused on accountability and quality service to all its stakeholders while deploying the strategic plan. The strategic plan involves steps taken on various core competencies like Student-Centered Excellence, Teaching-Learning Process, Research and Innovation, Extension Activities Quality Consciousness, Infrastructure, and Learning Resources. In the current year 2020-21, the pandemic due to COVID 19 has made all stakeholders adapt to the new normal by remotely working. The major steps taken by the Institute to plan for the remote teaching-learning services include strengthening the IT infrastructure. Institute has adopted licenses for online meet platforms like ZOOM and support from Google for IT infrastructure. These resources have helped faculty members to offer teaching services to students in work from home culture. To help students with remote access to subject-related contents, Library space- Online Repository of Course material with remote access is developed and dedicated servers are made

available for the same by the Institute. This approach has certainly helped students to bridge the gap that occurred due to the online mode of teaching-learning services.To strengthen the teaching and leadership skills for Faculty and to offer a better learning experience from globally accepted courses, Institute has made tie-ups with international Platforms like Coursera and EDX. All faculty members and students have found this strategy immensely helpful and have certainly added to knowledge and expertise in Faculty and students both.The formation of IIC and implementation of NISP was planned in the previous academic year. Accordingly, Institute has formed IIC and NISP body as per the norms, and various activities related to IPR related, entrepreneurship, and innovation are conducted throughout this year. One of the future plans of the Institute includes introducing the Ph.D. program in Mechanical Engineering. The formal procedures and approvals for the same are in process.Industry collaborations, MOUs and a variety of webinars on recent technology trends have added value and enhanced the learning experience for faculty and students. Details of MOUs, co-curricular and extracurricular activities, etc are available on the PHCET website.

(https://phcet.ac.in/research/research-activity/mou/, https://phcet.ac.in/students/student-activities/seminars-and-workshops/, https://phcet.ac.in/news-and-events/events/)

As a regular practice and planning various drives and activities for blood donation, cleanliness and hygiene awareness, waste management and recycling, vaccination awareness are also executed for students, faculty, and nearby social community through NSS Unit and Student Council bodies of PHCET. A special drive for Vaccination for Faculty, staff, and Class IV members is also organized by PHCET.

File Description	Documents
Strategic Plan and deployment documents on the website	View File
Paste link for additional information	https://phcet.ac.in/about/board-of-governance/
Upload any additional information	View File

6.2.2 - The functioning of the institutional bodies is effective and efficient as visible from

policies, administrative setup, appointment and service rules, procedures, etc.

Pillai HOC College of Engineering and Technology (PHCET) has various administrative and academic bodies/committees to monitor the overall functioning of the Institute. Governing body is the key body involved in planning and decision making. Governing body meetings are held regularly to review academic, administrative, and financial matters. This body gives a vision about new technology and courses that are to be initiated and plays a role in intellectual leadership and evaluates new scientific perspectives. It evolves policies and strategies for the generation of innovations & development of technical programs. The college development committee (CDC) prepares an overall comprehensive development plan of the college regarding academic, administrative, and infrastructural growth, and enable the college to foster excellence in curricular, co-curricular, and extra-curricular activities In pandemic due to COVID 19, the committee has identified the necessary modification to be made in teaching-learning process, initiatives required for technology upgradation of students to strengthen their employability skills, and have taken steps for various collaborations with industry and other organizations. IQAC is one of the significant bodies that ensure the timely, efficient, and progressive performance of academic, administrative, and financial tasks.

Apart from these, there are several bodies/committees. The roles, constitution, and powers of each committee may vary depending on the rules of the University, Local Government, State Government, or Central Government. Each committee should meet a minimum of once a year and should provide written minutes after each meeting. To improve work efficiency in the day-to-day functioning of the Institute, to ensure accountability of each and every layer of administration, and to make the administrative environment of the Institute very cordial are the main objectives of these bodies. The service rules, policies, objectives, and responsibilities are clearly stated are available in Faculty Handbook at https://phcet.ac.in/about/policies/ and https://phcet.ac.in/faculty/faculty-handbook/

File Description	Documents
Paste link for additional information	https://phcet.ac.in/faculty/faculty-handbook/
Link to Organogram of the institution webpage	https://phcet.ac.in/about/institute-organogram/
Upload any additional information	View File

6.2.3 - Implementation of e-governance in areas of operation Administration Finance and Accounts Student Admission and Support Examination	A. All of the above

File Description	Documents
ERP (Enterprise Resource Planning)Document	View File
Screen shots of user inter faces	View File
Any additional information	View File
Details of implementation of e-governance in areas of operation, Administration etc(Data Template)	View File

6.3 - Faculty Empowerment Strategies

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

As the COVID-19 pandemic continues to spread, and lock-down and slow-down measures are put in place, PHCET has taken foremost importance to support teaching and non-teaching staff. A safe and healthy workplace was created for staffs who visit campus. A work from home policy approach was followed in the campus during the pandemic. Faculty utilized well-equipped laboratories with good Internet and free Wi-Fi facilities to conduct online classes while in the premises. The component Library facility for borrowing various hardware components is available to faculty. Research and Incubation Centre Laboratory Facility is also accessible to all faculties to help them with their academic research. Library facility is also made available.

The institute have provided the teachers with free access to a few e-learning platforms like Edx and Coursera to improve the quality of contents delivered via online mode. Free online faculty development programs and conferences were arranged. Sponsorship for STTP /seminars/ workshops at national level was also provided.

Flexible work schedules were instigated, providing the ability to work remotely to as much of the workforce as possible, to reduce their risk. A job-protected emergency paid leave was sanctioned to staff during the epidemic. Along with it, maternity and Paternity leave facility for all employees. Duty Leave support for faculty members pursuing Ph.D. from well-known Institutions such as IIT and VJTI and Provision of Paid On duty leave for faculty members pursuing Ph.D. from other universities was permitted. Summer and Winter Vacations were allowed as per norms. Employee Provident fund is implemented to all employees as per norms.

Free Covid-19 vaccination drive was conducted in the campus for all the employee. For the Psycho-social wellbeing of the employees, regular counselling is done for students and teachers reporting mental health issues such as anxiety and depression. As per the Covid-19 Guidance on Mitigating and Preventing the Spread of COVID-19 in the Workplace, personal protection items like face covers/masks, hand sanitizers etc was freely provided by management to the teachers and employee. Free bus facility was also made available for all the employees. In case of emergency, ambulance service is available in the campus 24*7.

Welfare measures like group insurance, maternity, medical leaves, MES credit society and employment provident fund schemes are employed for non-teaching staff as well. Free uniforms are provided for supporting staff.

File Description	Documents
Paste link for additional information	https://phcet.ac.in/faculty/faculty-handbook/
Upload any additional information	View File

6.3.2 - Number of teachers provided with financial support to attend conferences/ workshops and towards membership fee of professional bodies during the year

6.3.2.1 - Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the year

35

File Description	Documents
Upload any additional information	View File
Details of teachers provided with financial support to attend conference, workshops etc during the year (Data Template)	View File

6.3.3 - Number of professional development /administrative training programs organized by the institution for teaching and non-teaching staff during the year

6.3.3.1 - Total number of professional development /administrative training Programmes organized by the institution for teaching and non teaching staff during the year

39

File Description	Documents
Reports of the Human Resource Development Centres (UGCASC or other relevant centres).	View File
Reports of Academic Staff College or similar centers	View File
Upload any additional information	View File
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff (Data Template)	View File

6.3.4 - Number of teachers undergoing online/face-to-face Faculty development Programmes (FDP) during the year (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course etc.)

6.3.4.1 - Total number of teachers attending professional development Programmes viz., Orientation / Induction Programme, Refresher Course, Short Term Course during the

year

129

File Description	Documents
IQAC report summary	View File
Reports of the Human Resource Development Centres (UGCASC or other relevant centers)	View File
Upload any additional information	View File
Details of teachers attending professional development programmes during the year (Data Template)	View File

6.3.5 - Institutions Performance Appraisal System for teaching and non- teaching staff

PHCET has Performance Based Appraisal System (PBAS) for teaching and non-teaching staff. PHCET follows the guidelines given by AICTE. All teaching and non-teaching staff of PHCET fills the Self-Appraisal Form (SAF) every year for the period from January to December in the prescribed Proforma.

In this scheme, the performance is classified into three categories (i) Teaching, Learning and Evaluation related activities (ii) Co-Curricular, Extension and Professional Development related activities (iii) Research Publications and Academic Contributions. In the third category, the self-assessment score will be based on verifiable criteria and will be finalized by the screening/selection committee. The principal in consultation with head of the department fix certain minimum API scores to be achieved by the faculty members in all three categories. Further, at the end of each semester, feedback is taken from the students for each of the courses attended by them. The feedback forms in the form of questionnaire collect information about the teacher and different aspects pertaining to the teaching process. Head of the Department goes through the feedback forms collected from the students and send to all faculty members for their information and suggest suitable measures to improve the teaching-learning process.

File Description	Documents
Paste link for additional information	https://phcet.ac.in/faculty/faculty-handbook/
Upload any additional information	View File

6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly Enumerate the various internal and external financial audits carried out during the year with the mechanism for settling audit objections within a maximum of 200 words

The long-term sustainability of any organization is directly related to its financial health. The financial health is determined by the financial discipline and accounting practices. Budgeting, accounting, and auditing are the three pillars on which financial discipline of organizations rests. Mahatma Education Society (MES), the parent body of Pillai HOC College of Engineering and Technology (PHCET) has been in existence for last 50 years.MES has created and managed forty-eight renowned educational Institutions despite a plethora of regulations, regulatory bodies and compliances to follow is a proof of the quality of its accounting practices and its law abiding nature. PHCET has inherited the same financial discipline, accounting practices, audit procedures and abides by the requirements and stipulations of various regulatory authorities. The audited account of PHCET is annually scrutinized by the Shikshan Shulk Samiti (Fee regulating body) of the Directorate of Technical Education (DTE), Government of Maharashtra. Auditing processes of PHCET takes place in two stages namely, internal audit and External Audit. These auditors are belonging to different auditing firms. The auditors re-appointed by the Governing body each year. The Internal audit is carried out by CA Susanna & Co. and the external auditorisS.B. Bhavi& Co. Internal auditor is in regular contact with the accounts department and visits at least once in two weeks and observes and audits the working. Most of the transactions are in non-cash mode and is done using Tally ERP 9 Software. SensysEasyPay from Sensys Technologies Pvt. Ltd., is used for salary related computations and disbursement and also for Income Tax purposes including generating of Form 16. The salary of each employee is directly credited into their bank accounts and Easy Pay is used to generate the quarterly income tax returns of the taxes deducted

at source for various activities including monthly salary. Budgeting is a fairly complex activity in PHCET considering the seven departments with varying requirements. Each department creates its own budget and the budgets of all departments are consolidated at the college level. Budget preparation and accounting are supervised Finance and Budget Committee.PHCET is proud to record that no audit objection has ever been reported in its ten years of existence as the accounting processes and practices are meticulous and carried out scrupulously by capable people. Regular monitoring of fund flow also helps to monitor the financial health of the college.

File Description	Documents
Paste link for additional information	https://phcet.ac.in/faculty/faculty-handbook/
Upload any additional information	View File

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

6.4.2.1 - Total Grants received from non-government bodies, individuals, Philanthropers during the year (INR in Lakhs)

0.19

File Description	Documents
Annual statements of accounts	View File
Any additional information	View File
Details of Funds / Grants received from of the non-government bodies, individuals, Philanthropers during the year (Data Template)	View File

6.4.3 - Institutional strategies for mobilization of funds and the optimal utilization of resources

PHCET is a Malayalam linguistic minority institution. Therefore, the funding required for operating the college is mostly self-generated. The fees approved, by the Shikshan Shulk Samiti (Fee Regulating Authority) of the Directorate of Technical Education (DTE), Government of Maharashtra, and paid by students is the main source of funds for the operational

purpose. The tuition fee and the development fee are the two headings of fees available for the operational expenditure of the college.

Various activities and events organized in the college are funded by MES, various agencies and differ from year to year. E.g., For the Academic year 2020-2021 AICTE sponsored for Faculty Development Program of Short-Term Training Program (STTP) the amount of Rs.2,99,667/- Approximately Three lakhs. Students benefit from several categories of scholarships from both government and non-government agencies. PHCET has also been making efforts to get scholarships and other financial support from private agencies, NGOs, private and public charitable trusts, etc., for students from financially not secured families. These scholarships and financial support are directly disbursed by the donor agency to the recipients. PHCET has been an enabler and facilitator and makes efforts to identify and interact with many such donors. In fact, PHCET has been successful in this effort. Bombay Community Public Trust (BCPT) helped several girl students with partial funding of their college expenses. FramjeeCawasjee Institute has been supporting a large number of final year engineering students both boys and girls with a good academic record from and from a financially poor background.

The University of Mumbai provides funds for minor research projects. Several income-generating projects and consultancy assignments are done by the faculty and they are charged separately. The College organizes Industry-sponsored and paid conferences and seminars, workshops, etc.

File Description	Documents
Paste link for additional information	https://phcet.ac.in/online-fdp-on-challenges-opportunities-of-industry-4-0-techniques-scope-in-manufacturing-industries-manufacturing-systems/
Upload any additional information	View File

6.5 - Internal Quality Assurance System

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

IQAC has made great contributions to the implementation of quality assurance strategies and processes at all levels. Two examples of institutionalized practices as a result of IQAC initiatives are as follows:

1. To strengthen IT infrastructure for online teaching-learning and other processes

IQAC has taken initiative in adding the licenses of online teaching-learning or meeting platforms like Zoom, GoToMeeting. Institute has tie-up with Google for support in IT infrastructure. All students, faculty, and staff of PHCET have dedicated domain email accounts with unlimited storage facilities as a part of the Google Package (G-Suit). All official communication is made using these email accounts only. This helps to maintain transparency and security in online communication. Faculty had created Google classrooms for each course being taught and all study material, notes, assignments, sample questions, solutions, etc are made available in this GCR. Students who missed online lectures due to connectivity and other issues can go through the recorded lectures. This helps to bridge the gap left if any. Exams and Assessments are also handled using GCR.

2. Establish the IIC and NISP to strengthen innovation and entrepreneurship:

As an initiative of IQAC, PHCET has established Institution's Innovation Council (IIC) as per the guidelines of MoE's Innovation Cell (MIC) in the academic year 2020-21. The initiative was to create a vibrant local innovation ecosystem, start-up supporting mechanism, establish a functioning ecosystem for scouting ideas and pre-incubation of ideas, and to develop the better cognitive ability for technology students. PHCET, IIC is actively involved in organizing and conducting various seminars, workshops, Idea competitions, Hackathon for school children, etc. for its students and faculties. 3 Faculty have completed IIC Innovation Ambassador Basic level training and will be undergoing advanced training soon.

The entrepreneurial ecosystem at PHCET will play a key role in identifying, mentoring, nurturing the innovative and entrepreneurial potential of students, faculty, and staff, and transforming them into start-up entrepreneurs by providing

avenues of funding, investment opportunities, and networking support to make the innovation and venture successful.

File Description	Documents
Paste link for additional information	https://phcet.ac.in/iqac/iqac-phcet/, https://phcet.ac.in/iic/
Upload any additional information	View File

6.5.2 - The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms and recorded the incremental improvement in various activities

- **Tie-up with Coursera and EdX**

To continue providing best quality education in online mode during the Pandemic" was a major challenge in pandemic faced by education domain stakeholders. To help students utilize their time effectively in this pandemic and to expand learning capabilities through an online platform, Institute had an exclusive tie-up for Coursera and Edx Online Campus Essentials. Under this, Institute had offered the free facility to complete n number of international certifications offered by these agencies to all its students, faculty, and staff. This opportunity helped these stakeholders to learn and upgrade their skills in all technical/non-technical fields of interest. Students got the opportunity to complete guided projects and assignments through these certifications. This initiative helped students and faculty to learn industry standard skills from renowned experts all over the globe. The facility of audit course was available for the course which is not included in the subscription. This helped to remove all barriers and take up any course of interest. Faculty got an opportunity to update their course material and pedagogy with the help of resources available with these certifications. For assessment and evaluation, assignments and projects were given in line with certifications enrolled in by students. This really helped to overcome routine assessments styles and has certainly benefited students and faculty to upgrade their skills. Students who are preparing for their placements got additional benefits as they could do communication skills, aptitude, leadership and workplace ethics, etc courses too.

- **Introduced Value Added Courses as per industry**

requirements to improve employability:

PHCET has a large number of students from rural areas in Raigad District, Maharashtra. They also come from a relatively poor academic background. Some are first-generation students. Therefore, special attention is required to this group of students. The IQAC team decided to offer "value addcourses" for skill-based technical training, with the primary objective of improving the employability skills of students. List of Value add Courses and course curricula etc. can be found at Value Added Courses | PHCET | Pillai HOC College of Engineering and Technology. The courses were designed to match recent trends in the field of AI, ML, IoT, and other mechanical domain trends. As a result of implementing such best practices, PHCET students have improved their soft skills, placements, and interdisciplinary skills. Value add courses have become an integral part of the holistic development of PHCET students.

File Description	Documents
Paste link for additional information	https://phcet.ac.in/free-coursera-courses-a-pillai-group-initiative/
Upload any additional information	View File

6.5.3 - Quality assurance initiatives of the institution include: Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analyzed and used for improvements Collaborative quality initiatives with other institution(s) Participation in NIRF any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)	A. All of the above

File Description	Documents
Paste web link of Annual reports of Institution	https://phcet.ac.in/about/mandatory-disclosures/annual-report/
Upload e-copies of the accreditations and certifications	View File
Upload any additional information	View File
Upload details of Quality assurance initiatives of the institution (Data Template)	View File

INSTITUTIONAL VALUES AND BEST PRACTICES

7.1 - Institutional Values and Social Responsibilities

7.1.1 - Measures initiated by the Institution for the promotion of gender equity during the year

PHCET is an institution that encourages gender equity. The institution treats all its staff and students in the same way irrespective of gender and promotes women empowerment by conducting various activities throughout the academic years. Under Women's cell various workshops, webinars were conducted to relieve faculty and students from stress and encourage them to lead a healthy lifestyle.

There is a separate counseling room with a personal counselor. The campus has a first aid room with a resting facility and doctor on call. The college provides transport on a subsidized rate for students and free for the faculty and staff. There is 24x7 security on the campus; Along with security guards round the clock CCTV surveillance is also provided. Provision of standby power supply ensures protection against power outages

For maintaining Safety and Security of women, a Women's grievance redressal cell committee has been constituted. PHCET have constituted different committees like Anti-Sexual harassment and Anti-ragging Committee, Internal Complaints Committee to deal with any dereliction. PHCET Women in STEM committee's main motive is to empower and uplift women in the field of science and technology and also motivates students and faculty to participate in both technical and non-technical events.

File Description	Documents
Annual gender sensitization action plan	https://drive.google.com/drive/folders/16Qf8vzg17k4_5VrdrcRtD1Tu7xBh3EXx?usp=sharing
Specific facilities provided for women in terms of:a. Safety and security b. Counseling c. Common Rooms d. Day care center for young children e. Any other relevant information	https://drive.google.com/drive/folders/16Qf8vzg17k4_5VrdrcRtD1Tu7xBh3EXx?usp=sharing

7.1.2 - The Institution has facilities for alternate sources of energy and energy conservation measures Solar energy Biogas plant Wheeling to the Grid Sensor-based energy conservation Use of LED bulbs/ power efficient equipment	**C. Any 2 of the above**

File Description	Documents
Geo tagged Photographs	View File
Any other relevant information	View File

7.1.3 - Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 200 words) Solid waste management Liquid waste management Biomedical waste management E-waste management Waste recycling system Hazardous chemicals and radioactive waste management

PHCET is very much conscious about the waste management system and provides the following facilities to dispose or recycle the waste.

- **Solid waste management:**

Each collection point is furnished with separate dustbins for the storage of dry waste and wet waste. Biodegradable waste from the canteen is deposited in the compost bins where it is converted to manure. Non-degradable waste is taken to the dumping yard and collected by Municipality staff.

- **Liquid waste management:**

Liquid waste includes Sewage and Cafeteria effluent waste:

Sewage is collected with a proper underground sewer system which is connected to the inlet pipe of the septic tank built in the campus. The outlet of the septic tank is connected with the sub-main of gram panchayat??which leads to the Sewage Treatment Plant, Rasayani.

- Waste recycling system:

"Pet Bottle Reverse Vending Machine" is installed at PHCET.Plastic bottles used for packaging soft drinks and drinking water are fed into machines where they are crushed and converted to pet chips. The chips can be used for manufacturing other plastic products, in association with RIL.

- E-Waste Management:

Hardware waste from computer labs such as computers, printers, projectors, scanners etc. These components when scraped are stored at E-Waste Collection Cell (EWCC) then the scraped hardware components are separated and segregated as per their characteristic properties. The E-waste generated is used whenever there is minor repairs/change in hardware parts as replacements, minimizing the procurement cost. The E-waste generated at PHCET is used as partial replacement of Coarse Aggregate (CA) in combination with fly ash as part of Civil Engineering projects.

File Description	Documents
Relevant documents like agreements / MoUs with Government and other approved agencies	View File
Geo tagged photographs of the facilities	View File

7.1.4 - Water conservation facilities available in the Institution: Rain water harvesting Bore well /Open well recharge	A. Any 4 or all of the above

Construction of tanks and bunds Waste water recycling Maintenance of water bodies and distribution system in the campus

File Description	Documents
Geo tagged photographs / videos of the facilities	View File
Any other relevant information	View File

7.1.5 - Green campus initiatives include

7.1.5.1 - The institutional initiatives for greening the campus are as follows:

1. **Restricted entry of automobiles**
2. **Use of bicycles/ Battery-powered vehicles**
3. **Pedestrian-friendly pathways**
4. **Ban on use of plastic**
5. **Landscaping**

A. Any 4 or All of the above

File Description	Documents
Geo tagged photos / videos of the facilities	View File
Various policy documents / decisions circulated for implementation	View File
Any other relevant documents	View File

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

7.1.6.1 - The institutional environment and energy initiatives are confirmed through the following 1.Green audit 2. Energy audit 3.Environment audit 4.Clean and green campus recognitions/awards 5. Beyond the campus environmental promotional activities

A. Any 4 or all of the above

File Description	Documents
Reports on environment and energy audits submitted by the auditing agency	View File
Certification by the auditing agency	View File
Certificates of the awards received	View File
Any other relevant information	View File

7.1.7 - The Institution has disabled-friendly, barrier free environment Built environment with ramps/lifts for easy access to classrooms. Disabled-friendly washrooms Signage including tactile path, lights, display boards and signposts Assistive technology and facilities for persons with disabilities (Divyangjan) accessible website, screen-reading software, mechanized equipment 5. Provision for enquiry and information : Human assistance, reader, scribe, soft copies of reading material, screen reading	A. Any 4 or all of the above

File Description	Documents
Geo tagged photographs / videos of the facilities	View File
Policy documents and information brochures on the support to be provided	View File
Details of the Software procured for providing the assistance	View File
Any other relevant information	View File

7.1.8 - Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities (within 200 words).

PHCET helps in transforming, motivating the thoughts of all its stakeholders towards learning and understanding the various diversities and become a responsible citizen completing his/her academic education. Institute initiatives for smart sustainable

solutions by students participating in STEM, IIC for innovations and competitions like Avishkar, Hackathon, Mapathon, Toycathon, Vishwakarma. In Campus Environment Awareness like Solar Panel, Rainwater harvesting, waste management, plastic recycling. Institute always believes in the practice of involving people from a range of different social and ethnic backgrounds and of different genders, sexual orientations in spreading harmony by giving monitory support to Panvel gurudwara for covid and floods, blood / food / mask/shield donation dives during covid. Spreading prosperity irrespective of caste and creed through cultural festivals for regional -Shivaji Jayanti, National- Diwali, Christmas, Onam, Navratri's Jalsa, and Linguistic events like independence day, Tilak Diwas, Azad. Communal socioeconomic events like Tree plantation, Road safety, Pothole filling, Helping Traffic police, and events for Tolerance against Drug Abuse, Illicit Trafficking, Stress Management were conducted. Days celebrated across diversities are Yoga, Biofuel, National remote sensing, Kargil memorial, science, statistics day, etc. Talent Hunt events for Improving Talents, personality development, skills, and strength are conducted under the students' council through various clubs.

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

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

PHCET realizes the dedication and duty towards the constitution of India to strengthen adherence towards constitutional obligations and embark human values rights and responsibilities as Indian citizens. Institute incorporates a few integral bodies that are committed to inculcating these obligations of national service; the bodies are NSS, ISRO outreach Centre at PHCET, and various student forums. These bodies discern search programs and activities required to fulfill the realization of constitutional obligations.

- Institute has encouraged students and employees for National service during the pandemic. Institute organized meal and grocery donation drive for the needy and poor people, blanket distribution during flood situations in the area when there was no hope for the survival of human lives were done. Institute also served the voiceless animals by arranging a 'dog feed distribution', catering meals, and serving nobility to animals. Book donation camp was organized involving students and staff to avail away the Books which are required by the needy.

- Institute has organized webinars on Suicide prevention, Women's health and wellness, and organ donation for inculcating values for being responsible citizens. The college promotes a sustainable environment by forming programs on 'Swatch Campus'. Institute fosters service to its community by organizing blood donation camps by the NSS unit.

File Description	Documents
Details of activities that inculcate values; necessary to render students in to responsible citizens	https://phcet.ac.in/?s=Women%27s+health+and+wellness https://phcet.ac.in/?s=organ+donation https://phcet.ac.in/extension/swatch-campus/
Any other relevant information	https://phcet.ac.in/academics/isro-outreach-center/isro-pillais-phcet-outreach-network-institute/

7.1.10 - The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard. The Code of Conduct is displayed on the website There is a committee to monitor adherence to the Code of Conduct Institution organizes professional ethics programmes for students, teachers, administrators and other staff 4. Annual awareness programmes on Code of Conduct are organized	**A. All of the above**

File Description	Documents
Code of ethics policy document	View File
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programs etc., in support of the claims	View File
Any other relevant information	View File

7.1.11 - Institution celebrates / organizes national and international commemorative days, events and festivals

PHCET is committed to enabling stakeholders to realize that the best decision and the best investment you have made for your life as a college Motto is 'Vidya Karmasu Kaushalam' (Knowledge is Excellence at Work). We know work is worship that could shape our personal development. Institute along with this

proactive personal development has a pretentious vision to inculcate constitutional responsibility and instil patriotism and unity among its stakeholders and fellow citizens.

In this academic year 2020-2021several national, international days and eventswere celebrated through virtual mode (online platform) due to pandemic. The main aim of these activities was topromote ethics and values amongst students and faculty, this includesNational road safety day (14 June), International Yoga Day (21st June), Mahatma Gandhi Birth Anniversary (2 October), National Unity Day (26 November), International women's day (8 March)

The following is the list of national and international commemorative days, events and festivals the institute celebrates every year and make the students and faculty to participate.

Date

Details of Activities

05 June 2021

World Environment Day

14 June 2021

Poem writing competition on International Days in support of Victims of Torture

18-Jun-21

Webinar on Mahatma Gandhi Jayanti-Importance of Internship and career guidance-ITC Cell

21June 2021

International Yoga day

26 June 2021

International Days Student council-Poster making on Drug Abuse and Illicit Trafficking

15 August 2021

Independence Day

26-Nov-20

Quiz Competition on Constitution Day

18-Jan-21

Quiz Competition on Road Safety

26January 2021

Republic Day

8 March 2021

International women's day

File Description	Documents
Annual report of the celebrations and commemorative events for the last (During the year)	[View File](#)
Geo tagged photographs of some of the events	[View File](#)
Any other relevant information	[View File](#)

7.2 - Best Practices

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

Best Practice 1: Digital learning to enhance teaching-learning process during Pandemic

Goal:

- **To provide students with an online space to showcase their learning**
- **To explore new online teaching platforms**
- **To enhance the building capacity of teachers and students by exploring online platforms.**
- **To provide active and personalized education to all**

students through digital learning to complete the curriculum.

- To identify MOOC platforms for various courses to give continuous experience learning to teachers and students beyond the curriculum.
- To provide tools and visualizations that motivate the students to participate and collaborate within the class
- To explore a digital learning environment for laboratory experiments through a virtual lab.
- To develop digital library for E-resources and study material with students

The Context:

The education system has evolved since old times when it was only classroom teaching through textbooks. Now, we live in an era of rapidly developing technology with the widespread use of computer science and information technology, which have entered almost all areas of life. In the field of education, emerging technologies provide opportunities for enhancing and improving the learning and education process and using technological tools effectively in the teaching process which will help change learning and communication methods.

The COVID-19 has resulted in schools and colleges shut all across the world as a consequence of which children are out of the classroom. And most important of all, as a result of the pandemic, education has changed dramatically, with the distinctive rise of digital learning, whereby teaching is undertaken remotely and on digital platforms. In response to significant demand, many online learning platforms are offering free access to their services.

Practice:

To continue teaching using modern technologies, we use digital tools like Google Classroom, Google Meet, Zoom, Virtual Laboratory, Digital Library, etc. Every faculty in PHCET makes use of Google Classroom and Google meet for each and every subject they teach. All communications with the students related to the course will be made through Google classroom. Course Academic Plan, Study materials, Lab manuals, Powerpoint presentations, Tutorials, previous year question papers are shared with students through Google classroom. Assignments are given through Google classroom which is evaluated online. Internal Examinations are also conducted through Google

classrooms which are assessed online.

The Broad areas of Virtual Labs are covered according to the syllabus. Subject-In-Charges decide the experiments be conducted in a virtual lab platform. Subject-In-Charges will provide the link of the various relevant experiments in Virtual Lab to students which they will be performing during their dedicated laboratory sessions following which the feedback of the experiment will be submitted. Effective time utilization is done by PHCET with a tie-up for Edx and Coursera Online Campus Essentials to enhance knowledge in interdisciplinary subjects and soft skills. Faculty and students of PHCET have actively enrolled in numerous courses pertaining to different fields. For arranging webinars and events on technical. social and research fields, Youtube and Zoom platforms are extensively used by PHCET. Digital Library which has a collection of study material, Course Academic Plan, Question banks, previous year question papers, lab manuals, tutorials, assignments, PowerPoint presentations of every engineering subject which is a contribution of each faculty of PHCET creates a vast knowledge gaining platform for students of PHCET.

Evidence of Success:

A large number of students were benefitted through digital learning as is evident from the results of examinations conducted. One can access digital learning sites from anywhere and at any time you want to. They are available 24/7 and you can get access to these from your mobiles as well as PCs. The digital learning courses are designed keeping in mind a specific timeframe and the progress you make in that period is recorded. Every activity is designed to test the areas where you are weak and the subject teachers work on these to ensure a student's success. When learning something online, most of the time it is done because you want to and not because someone forces you into doing it like in your offline classes. Fewer distractions allow concentrate better on the topics you are trying to learn. This gives the confidence that you can study and understand easily which motivates you to study longer.

Problems Encountered and Resources required:

- Students may miss out on the hands-on experience that could be of value in later education
- Availability of the internet can be a concern for some students who live in remote villages.

- **Digital Learning is a new, innovative approach to learning, and navigating them well is a skill in itself. Some students may find the shift from traditional to digital learning to be jarring.**
- **Students can learn something useful from a full sensory experience in the real-world like weird noise and smell, random error, faulty machinery, etc.**
- **The use of technology can generate mental laziness in students. These tools simplify the resolution of tasks or activities with a single click, preventing them from analyzing in detail what they are learning.**
- **Students run the risk of finding erroneous, false, and even fraudulent content in digital learning.**

Best Practice 2: Library Space Digital Learning Repository (LSDLR)

A Digital library, also called an online library, a digital repository is an online database of digital objects that can include text, still images, audio, video, or other digital media formats.

Library Space (LSDLR) is a centrally hosted repository for Study Materials, co-curricular and extra-curricular information.

Objectives:

- **To collect, collate, disseminate and act as a gateway to digital learning resources to users**
- **To preserve and provide seamless access to information whenever and wherever users need**
- **To create and update a comprehensive database of Academic Information in the field of Engineering & Technology**
- **Promote the use of ICT**
- **Support teaching-learning activities**

Context:

The primary issue is that of the technical architecture that underlies any digital library system. Libraries need to enhance and upgrade current technical architectures to accommodate digital materials. Library purchased a rack Server for the configuration of Processor: Intel® Xeon (R) CPU ES – 2620 v4 @ 2.10GHz 2.10, 64 GB RAM, 5 TB Hard disk.

One of the major issues in creating digital libraries is the building of digital collections. Obviously, for any digital library to be viable, it should eventually have a digital collection to make it truly useful. There are essentially three methods of building digital collections:

1 Digitization: Converting paper and other media in existing collections to digital form

2. Acquisition of Resources: Collecting Study Materials from Faculty Members and other academic-related materials from various sources like Google, social media, Newspapers, etc.

3. Access to Resources: By collating the resources, digitizing them, and uploading them on the Digital Library. And for external resources by providing pointers to Web sites of E-resources and other relevant information. And providing remote access to the resources through public IP.

Practice:

Library Space is a well-structured and maintained digital learning repository. All these resources are made available to each and every user. Recording of events stored in LSDLR ensures information and knowledge shared by the expert is archived. Being an online portal, retrieval and updating of information are convenient. Updating LSDLR is considered an integral part of the academic process and is handled by the dedicated team. A timely update of resources helps users to access the latest resources. The integrity and consistency of the resources are managed by using role-based access control. The user has to log in to the system using his/her credentials like institutional email ID and Admission/Employee ID.

It contains fifteen main Course Categories like Study Materials; Career, Internship, Training, Jobs, Scholarships & Competitions; Conferences, Seminars, Webinars & Events; Institutional Magazines, Brochures, Newsletters, etc.; Project Report, Dissertation & Thesis, Rare Documents, etc. Users can refer to Career, Internship, Training, Jobs, Scholarships & Competitions and Conferences, Seminars; Webinars & Events related information for their Personal Development and Career.

The Study Material Course Category contains Lecture Notes, PPTs, Lab Manuals, Assignments, Experiments, Syllabus, Question Papers, and all the other Academic relevant materials required

by the users. These are very helpful to users from their academic point of view. Students and faculty members doing project work and research can refer to the existing projects, dissertations, and e-resources.

Advertisements, Notifications, and Admission-related information are useful for Students and Administration staff.

Evidence of Success:

LSDLR has made access to the study material, especially for the students easy and efficient. During the COVID-19 pandemic, it played an important role. Sometimes students were not able to attend the live sessions, but students did not miss the learning as they were able to access the recording of the sessions anytime from anywhere. Along with students it also helped faculty members preserve and distribute study material to students. Also made other events recording, publication, research material, etc. available on single click. And before designing the LSDLR, students and Faculty Members were consulted about their expectations. All the suggestions are incorporated. Users need, Information Quality, Service Quality, Usefulness, and Ease of use is taken into consideration for users' satisfaction.

Problems Encountered and resources required:

Damage to the hard disk or CPU is a problem and is addressed by frequent back-ups. The software may slow down the process and the software must be updated regularly. Delay in updating leads to ambiguity. Authorization and authenticity must be monitored closely. Inconsistency in data entry can generate errors. Measures need to be taken to prevent false information.

Resources Required:

This is the digitization of all resources in the collection. While E-resources already held by the library are not considered to be part of this collection, links are provided to the same. Technical resource tools like Content Management Software System, Scanners, Servers, etc. are required.

Link for LSDLR

URL:http://172.17.0.5/libspace/

File Description	Documents
Best practices in the Institutional website	https://phcet.ac.in/wp-content/uploads/2022/01/Best-Practices-2020-21.pdf
Any other relevant information	http://172.17.0.5/libspace/

7.3 - Institutional Distinctiveness

7.3.1 - Portray the performance of the Institution in one area distinctive to its priority and thrust within 200 words

In AY 20-21 during the COVID 19 pandemic, the University of Mumbai decided to conduct an online exam for UG and PG students through the cluster concept. In each cluster, five engineering colleges are distributed by location. Among the five colleges, the university chose PHCET to take the lead in coordinating examination matters. Along with powerful academics, PHCET is recognized as one of the lead college by the University of Mumbai. As a young organization, this is a proud moment for PHCET. All colleges under PHCET are guided as per instructions of the University of Mumbai.

PHCET has a large number of students from rural areas in Raigad District, Maharashtra. They also come from a financially weaker background. Pursuing engineering can prove to be a costly affair and a students may not be able to pursue it due to the financial constraints. We approached private scholarships Framjee Cawasjee scholarship for PHCET students, especially those belonging to financially weaker sections and having good academic background. During AY 20-21 we offered 22 lakhs of scholarship to PHCET students through PHCET management and Framjee Cawasjee Scholarship. 176 number of students benefited across the departments of PHCET. In this way scholarship helps PHCET students to keep dreams of good students alive by helping them in completing their education.

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

7.3.2 - Plan of action for the next academic year

The plan for action for next academic year is as follows:

1. To start a new course UG Program in Electronics and Computer Science
2. To ensure all faculty, staff, and eligible students are completed vaccinated
3. To ensure an increase in the number of research papers and patent applications from the faculty
4. To ensure maximum faculty submit research proposals under various Research Promotion Schemes
5. To strengthen innovation and entrepreneurship skills by conducting activities, workshops under Institute Innovation Council
6. To improve student placements
7. To motivate faculty to register for Ph.D.
8. To increase the number of Ph.D. guides in the Institute
9. Launch an application for students to track campus activities, academic updates, competitions, and results.