

## **Yearly Status Report - 2019-2020**

| Pari  | : A   |
|---|---|
| Data of the Institution                       |   |
| 1. Name of the Institution                    | Pillai HOC College of Engineering and<br>Technology |
| Name of the head of the Institution           | Dr. Madhumita Chatterjee                            |
| Designation                                   | Principal   |
| Does the Institution function from own campus | Yes   |
| Phone no/Alternate Phone no.                  | 02192-252005  |
| Mobile no.                                    | 9224281153  |
| Registered Email                              | principal.phcet@mes.ac.in                           |
| Alternate Email                               | msubhedar@mes.ac.in                                 |
| Address                                       | Pillai HOCL Educational Campus                      |
| City/Town                                     | Rasayani, Tal. Khalapur, Dist. Raigad               |
| State/UT                                      | Maharashtra   |
| Pincode                                       | 410207  |

| 2. Institutional Status   |   |
|---|---|
| Zi montanonai otatao  |   |
| Affiliated / Constituent  | Affiliated  |
| Type of Institution   | Co-education  |
| Location  | Urban   |
| Financial Status  | private   |
| Name of the IQAC co-ordinator/Director                                  | Dr. Mansi Subhedar  |
| Phone no/Alternate Phone no.  | 02192669000   |
| Mobile no.  | 9867967304  |
| Registered Email  | msubhedar@mes.ac.in   |
| Alternate Email   | iqac.phcet@mes.ac.in  |
| 3. Website Address  |   |
| Web-link of the AQAR: (Previous Academic Year)                          | https://phcet.ac.in/igac/igac-phcet/                              |
| 4. Whether Academic Calendar prepared during the year                   | Yes   |
| if yes,whether it is uploaded in the institutional website:<br>Weblink: | https://phcet.ac.in/students/academic-<br>calendar/term-calendar/ |

## 5. Accrediation Details

| Cycle | Grade | CGPA | Year of      | Vali        | dity        |
|-------|-------|------|--------------|-------------|-------------|
|       |       |      | Accrediation | Period From | Period To   |
| 1     | A     | 3.03 | 2019         | 28-Mar-2019 | 27-Mar-2024 |

## 6. Date of Establishment of IQAC 02-Jul-2018

## 7. Internal Quality Assurance System

| Quality initiatives                           | Quality initiatives by IQAC during the year for promoting quality culture |     |  |
|---|---|-----|--|
| Item /Title of the quality initiative by IQAC |   |     |  |
| Seminar on Avenues for<br>Research Proposal   | 13-Jul-2019<br>1  | 147 |  |

| Submission |                  |  |
|------------|------------------|--|
|            | <u>View File</u> |  |

## 8. Provide the list of funds by Central/ State Government- UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.

| Institution/Departmen t/Faculty | Scheme                       | Funding Agency               | Year of award with duration | Amount |
|---------------------------------|------------------------------|------------------------------|-----------------------------|--------|
| Please see the attached file    | Please see the attached file | Please see the attached file | 2019<br>365                 | 702000 |
|                                 | -                            | <u>View File</u>             |                             |        |

| 9. Whether composition of IQAC as per latest NAAC guidelines:  | Yes              |
|--|------------------|
| Upload latest notification of formation of IQAC  | <u>View File</u> |
| 10. Number of IQAC meetings held during the year :   | 3                |
| The minutes of IQAC meeting and compliances to the decisions have been uploaded on the institutional website | Yes              |
| Upload the minutes of meeting and action taken report  | <u>View File</u> |
| 11. Whether IQAC received funding from any of the funding agency to support its activities during the year?  | No               |

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

1. ISO Certification 2. Academic Administrative Audit 3. PHCET has gained All India rank in Band C (rank above 50) (Private or SelfFinanced College / Institutes) in Atal Ranking of Institutions on Innovation Achievements (ARIIA) 2020 4. PHCET is now a recognized Swachhta Action Plan Institution. 5. PHCET has won RBNQA Performance Excellence Trophy 2019

No Files Uploaded !!!

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

| Plan of Action               | Achivements/Outcomes         |
|------------------------------|------------------------------|
| Please see the attached file | Please see the attached file |
| View                         | <u>/ File</u>                |

| 14. Whether AQAR was placed before statutory body ?   | Yes   |  |  |
|---|---|--|--|
| Name of Statutory Body  | Meeting Date  |  |  |
| Board of Governance   | 07-Mar-2020   |  |  |
| 15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning ? | Yes   |  |  |
| Date of Visit   | 31-Jan-2020   |  |  |
| 16. Whether institutional data submitted to AISHE:  | Meeting Date  07-Mar-2020  Yes  31-Jan-2020  Yes  2020  20-Feb-2020  Yes  Apart from implementation of egovernance in areas of operation planning and Development, Administration, Finance and Accounts, Student Admission and Support, Examination, PHCET has developed variety of in house softwares and digital archive as a part of MIS. The digital archive is created and managed by Principal and details of all activities year wise and department wise can be retrieved at a click of mouse. This data repository is of significant help to summarize the activities and submit the details for any accreditation activity and other quality initiatives instantly. The details of in house developed softwares: Academic Monitoring System |  |  |
| Year of Submission  | 2020  |  |  |
| Date of Submission  | 20-Feb-2020   |  |  |
| 17. Does the Institution have Management Information System ?   | Yes   |  |  |
| If yes, give a brief descripiton and a list of modules currently operational (maximum 500 words)                | egovernance in areas of operation planning and Development, Administration, Finance and Accounts, Student Admission and Support, Examination, PHCET has developed variety of in house softwares and digital archive as a part of MIS. The digital archive is created and managed by Principal and details of all activities year wise and department wise can be retrieved at a click of mouse. This data repository is of significant help to summarize the activities and submit the details for any accreditation activity and other quality initiatives instantly. The details of in house developed  |  |  |

department wise student roll list, faculty teaching load distribution, faculty list, course list, etc can be viewed at a glance. Teacher Guardian Mentoring System (TGMS): It is used for maintaining the records of mentoring. The detailed profile of each mentee is available on the portal. Discussion held with each mentee on weekly basis are uploaded on the portal. It helps to study mentees past responses and behavior and guide mentee further to do well in academic and other activities. It also helps to identify the weak and strong learners. Portal also allows them to interact with each other through messaging. Details of each mentee can be viewed only by the concerned mentor and it helps mentee to share their views, issues and problems and maintain confidentially to build strong between a mentor and mentee. Feedback System: Feedback is collected twice a semester from each student on teaching learning process and infrastructure and other facilities. Each student is provided with a login ID and password. Principal, Head of the department and feedback dissemination and counselling committee can thereby assess each faculty and guide them further if some improvement is required. It also helps to track the feedback of each faculty for previously taught courses. Course Exit Survey System: It is used for collecting the responses from students about the learning outcomes attained for each course. Each student is provided with a login ID and password and survey is collected. It is further used to improve the teaching methodologies wherever necessary and calculate the attainment of each course by indirect method. Mock Test System: To improve the employability skills, PHCET has designed this online platform and is used to offer several practice tests to students in the academics and aptitude skills. It has been observed that this system has definitely helped students to boost their confidence and excel in aptitude which has also played key role in placements. It is also helpful for all students to prepare for the competitive exams like GATE, GRE etc. plan to give competitive exams.

#### **CRITERION I – CURRICULAR ASPECTS**

#### 1.1 – Curriculum Planning and Implementation

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

PHCET, affiliated with the University of Mumbai and approved by AICTE conducts seven UG, four PG, and two research programs in engineering and follows the curriculum approved by the University of Mumbai for UG and PG Courses. Faculty are involved in various university bodies such as the Academic Council, Board of Studies (BOS), Syllabus setting, etc., and are actively involved and contribute to curriculum framework design. Program Educational Objectives (PEOs) are defined for all programs and have well documented processes for disseminating it to the students at numerous tiers. Teaching-learning processes are carried out with careful planning and effective delivery of Lecture / Practical/ Tutorial as per Institute and University academic calendar and semester plan is ensured. The curriculum planning and delivery are diligent and involve preparation of the lesson plan and concept inventory and adapting Bloom's Taxonomy by addressing all the levels of Bloom's Taxonomy. Each faculty prepares a course academic plan in line with the department's academic calendar. It consists of CO-PO-PSO mapping, academic calendar, teaching plan, concept inventory, assignments, University question papers of previous semesters, module-wise notes, content beyond scope topics list of experiments, lab manual, a question bank, rubrics for assignments, PBL, and lab work, etc., and is reviewed by the respective domain co-coordinator. The effective implementation of the curriculum is ensured by supplementing classroom teaching with expert lectures, seminars, mini projects, in-house, and industry-supported projects, industry visits, industrial internships, Project-Based Learning (PBL), hands-on-sessions, tutorials, e-learning, NPTEL lectures, technical quiz, assignments, internal-tests, etc. Institute has taken special initiatives to provide soft skill training, value-added courses, and counseling for the holistic development of students. Every department pays special attention to enhance the breadth of awareness of students by offering content beyond the syllabus in the form of field visits, participation in technical competitions, conferences, inter-university research competitions such as Avishkar, Hackathons, etc. PHCET practices nearly several student-centric methods to enhance the learning experience of the students. Each faculty selects the strategies according to the course contents. The objective is to create core competency in the selected domain. Assessment and evaluation are the best indicator of the effectiveness of the teaching learning process. Progress of each student is monitored continuously and actions are taken accordingly for improvisation if required. Subject teachers ensure the successful delivery of the curriculum to all students. Mentors play a significant role in guiding students and ensure students' expectations are met. PHCET uses various methods of evaluation to assess the rigor of its techniques and practices as well as to understand the learning that happens. Mapping of Course outcomes to program outcomes signifies the effectiveness of curriculum delivery.

#### 1.1.2 - Certificate/ Diploma Courses introduced during the academic year

| Certificate                               | Diploma Courses | Dates of<br>Introduction | Duration | Focus on employ ability/entreprene urship | Skill<br>Development |
|---|-----------------|--------------------------|----------|---|----------------------|
| Indian Institute of remote sensi ng(IIRS) | NA              | 08/07/2019               | 5        | Employabil<br>ity                         | NA                   |

| Outreach Programme on Advances in Remote Sensing and Geospatial Technologies for disaster early warning ,monitoring and mitigation LIVE Webinar organized by Department of Civil Engineering |    |            |   |                   |    |
|--|----|------------|---|-------------------|----|
| Indian Institute of remote sensi ng(IIRS) Outreach Programme on Satellite Remote Sensing for Air pollution studies LIVE Webinar organized by Department of Civil Engineering                 | NA | 05/08/2019 | 5 | Employabil<br>ity | NA |
| Indian Institute of remote sensi ng(IIRS) Outreach Programme on Digital Phot ogrammetry based 3D modelling LIVE Webinar organised by Department of Civil Engineering                         | NA | 29/07/2019 | 5 | Employabil<br>ity | NA |
| Indian Institute of remote sensi ng(IIRS) Outreach Programme on Geoprocessin   | NA | 22/07/2019 | 5 | Employabil<br>ity | NA |

| g using Python LIVE Webinar organized by Department of Civil Engineering   |    |            |    |                   |    |
|--|----|------------|----|-------------------|----|
| Indian Institute of remote sensi ng(IIRS) Outreach Programme on Basics of RS,GIS and GNIS LIVE Webinar organized by Department of Civil Engineering          | NA | 19/08/2019 | 78 | Employabil<br>ity | NA |
| Indian Institute of remote sensi ng(IIRS) Outreach Programme on Remote Sensing and Digital Image Analysis LIVE Webinar organized by Department of Civil      | NA | 19/08/2019 | 18 | Employabil<br>ity | NA |
| Indian Institute of remote sensi ng(IIRS) Outreach Programme on Global Navigation Satellite System LIVE Webinar organized by Department of Civil Engineering | NA | 09/09/2019 | 12 | Employabil<br>ity | NA |
| Indian Institute of remote sensi ng(IIRS)  | NA | 23/09/2019 | 30 | Employabil<br>ity | NA |

| Outreach Program on Geographic Information System LIVE organized by Department Civil Engineering  |    |            |    |                   |    |
|---|----|------------|----|-------------------|----|
| Indian Institute of remote sensi ng(IIRS) Outreach Programme on RS and GIS Application LIVE Webinar organized by Department of Civil Engineering                          | NA | 23/10/2019 | 25 | Employabil<br>ity | NA |
| Indian Institute of remote sensi ng(IIRS) Outreach Programme on Web GIS- Geo -visualizati on and online mapping LIVE Webinar organized by Department of Civil Engineering | NA | 25/11/2019 | 5  | Employabil<br>ity | NA |
| Indian Institute of remote sensi ng(IIRS) Outreach Program on RS and GIS in urban Planning LIVE Webinar organized by Department of Civil Engineering                      | NA | 09/12/2019 | 12 | Employabil<br>ity | NA |
| ndian Institute of remote sensi ng(IIRS)  | NA | 13/01/2020 | 12 | Employabil<br>ity | NA |

| Outreach Programme on Geo Processing and Visualiz ation LIVE Webinar organized by Department of Civil Engineering  |    |            |    |                   |    |
|--|----|------------|----|-------------------|----|
| Indian Institute of remote sensi ng(IIRS) Outreach Programme on Space Based Application of Geospatial Technologies for Disaster Risk Reduction LIVE Webinar organised by Department of Civil Engineering | NA | 17/02/2020 | 18 | Employabil<br>ity | NA |
| ndian Institute of remote sensi ng(IIRS) Outreach Programme on Basic Principles of Remote Sensing Technology LIVE Webinar organized by Department of Civil Engineering                                   | NA | 13/04/2020 | 13 | Employabil<br>ity | NA |
| Indian Institute of remote sensi ng(IIRS) Outreach Programme on Basics of SAR Remote Sensing LIVE Webinar organized by   | NA | 26/05/2020 | 5  | Employabil<br>ity | NA |

| Department of Civil Engineering  |    |            |    |                   |    |
|--|----|------------|----|-------------------|----|
| Indian Institute of remote sensi ng(IIRS) Outreach Programme on Planetary Geosciences LIVE Webinar organized by Department of Civil Engineering  | NA | 08/06/2020 | 5  | Employabil<br>ity | NA |
| Indian Institute of remote sensi ng(IIRS) Outreach Programme on "Remote Sensing GIS Technology and Applicat ions" for University Teachers Government Officials LIVE Webinar organized by Department of Civil Engineering | NA | 13/06/2020 | 19 | Employabil ity    | NA |
| Indian Institute of remote sensi ng(IIRS) Outreach Programme on "Health GIS" LIVE Webinar organised by Department of Civil Engineering   | NA | 15/06/2020 | 5  | Employabil<br>ity | NA |
| Indian Institute of remote sensi ng(IIRS) Outreach Programme on "Satellite P hotogrammetr  | NA | 29/06/2020 | 5  | Employabil<br>ity | NA |

| y and its Application " for University Teachers Government Officials LIVE Webinar organized by Department of Civil Engineering |    |            |    |                   |                      |
|--|----|------------|----|-------------------|----------------------|
| Short Term Training Programme on Post Covid Challenges in Infrastru ctural and E nvironmental Engineering                      | NA | 27/05/2020 | 5  | Employabil<br>ity | NA                   |
| Aptitude training conducted by Computer Engineering  | NA | 30/11/2020 | 24 | Employabil<br>ity | NA                   |
| IIT Spoken Tutorial course on LaTeX  | NA | 20/07/2019 | 30 | Employabil<br>ity | Skill<br>Development |
| IIT Spoken<br>Tutorial<br>Course on<br>PHP and<br>MySQL  | NA | 20/07/2019 | 30 | Employabil<br>ity | Skill<br>Development |
| IIT Spoken<br>Tutorial<br>Course on<br>Arduino   | NA | 20/07/2019 | 30 | Employabil<br>ity | Skill<br>Development |
| IIT Spoken Tutorial Course on OpenFoam   | NA | 20/07/2019 | 30 | Employabil<br>ity | Skill<br>Development |
| IIT Spoken<br>Tutorial<br>course on<br>Java  | NA | 20/07/2019 | 30 | Employabil<br>ity | Skill<br>Development |
| IIT Spoken Tutorial in Python (Department of Computer Engineering)   | NA | 20/07/2019 | 30 | Employabil<br>ity | Skill<br>Development |
| IIT Spoken   | NA | 20/07/2019 | 30 | Employabil        | Skill                |

| Tutorial in<br>Python                          |    |            |    | ity               | Development          |
|--|----|------------|----|-------------------|----------------------|
| IIT Spoken Tutorial Course on Oscad E sim      | NA | 20/07/2019 | 30 | Employabil<br>ity | Skill<br>Development |
| IIT Spoken Tutorial Course on Q- CAD           | NA | 20/07/2019 | 30 | Employabil<br>ity | Skill<br>Development |
| Aptitude training conducted by EXTC Department | NA | 30/11/2019 | 24 | Employabil<br>ity | NA                   |

## 1.2 - Academic Flexibility

1.2.1 – New programmes/courses introduced during the academic year

| Programme/Course                | Programme Specialization | Dates of Introduction |  |  |
|---------------------------------|--------------------------|-----------------------|--|--|
| BE Please see the attached file |                          | 08/07/2019            |  |  |
| <u>View File</u>                |                          |                       |  |  |

1.2.2 – Programmes in which Choice Based Credit System (CBCS)/Elective course system implemented at the affiliated Colleges (if applicable) during the academic year.

| Name of programmes adopting CBCS | Programme Specialization   | Date of implementation of CBCS/Elective Course System |
|----------------------------------|--|---|
| BE                               | U.G. Program in<br>Automobile Engineering                                  | 08/07/2019  |
| BE                               | U.G. Program in Civil<br>Engineering                                       | 08/07/2019  |
| BE                               | U.G. Program in<br>Computer Engineering                                    | 08/07/2019  |
| BE                               | U.G. Program in Electrical Engineering                                     | 08/07/2019  |
| BE                               | U.G. Program in<br>Electronics and<br>Telecommunication<br>Engineering     | 08/07/2019  |
| BE                               | U.G. Program in<br>Information Technology                                  | 08/07/2019  |
| BE                               | U.G. Program in<br>Mechanical Engineering                                  | 08/07/2019  |
| ME                               | P.G. Program in Civil Engineering(Construction Engineering and Management) | 08/07/2019  |
| ME                               | P.G. Program in<br>Computer Engineering                                    | 08/07/2019  |
| ME                               | P.G. Program in  | 08/07/2019  |

|    | Mechanical Engineering (Machine Design)                       |            |
|----|---|------------|
| ME | P.G. Program in Electronics and Telecommunication Engineering | 08/07/2019 |

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

|                    | Certificate | Diploma Course |
|--------------------|-------------|----------------|
| Number of Students | 9207        | Nil            |

#### 1.3 - Curriculum Enrichment

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

| Value Added Courses          | Date of Introduction | Number of Students Enrolled |  |  |
|------------------------------|----------------------|-----------------------------|--|--|
| Please see the attached file | 01/07/2020           | 2981                        |  |  |
| <u>View File</u>             |                      |                             |  |  |

## 1.3.2 - Field Projects / Internships under taken during the year

| Project/Programme Title | Programme Specialization     | No. of students enrolled for Field<br>Projects / Internships |  |  |
|-------------------------|------------------------------|--|--|--|
| BE                      | Please see the attached file | 1086   |  |  |
| <u>View File</u>        |                              |  |  |  |

#### 1.4 - Feedback System

#### 1.4.1 – Whether structured feedback received from all the stakeholders.

| Students  | Yes |
|-----------|-----|
| Teachers  | Yes |
| Employers | Yes |
| Alumni    | Yes |
| Parents   | Yes |

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

#### Feedback Obtained

PHCET takes inputs to improve the academic processes through informal and formal methods that involve discussions with faculty, students, alumni and parents on a regular basis. The main purpose of the feedback is to provide a platform for collecting, summarizing, visualising and documenting perceptions of students and other stakeholders for the purpose of improving the quality and effectiveness of various teaching and cocurricular processes offered.

Monitoring and improving the quality of students' learning experiences is ensured through the timely collection, analysis and reporting of student feedback concerning teaching, learning and assessment. Student Feedback

Collection Process: 1. A standard automated questionnaire is used to take the feedback from all the students. 2. Each student is given access to the inhouse designed online feedback system in a controlled manner. a) Each student logs in to the online feedback system b) He/she gets a form listing the names of the subjects of the semester and the names of the faculty members who had taught those subjects. c) Students can choose to give the feedback by clicking on the

subject-teacher link. 3. Students give their feedback on a scale of 5. Provision of mentioning additional comments is also made available. Student Feedback Analysis Process: 1. The feedback provided by the students is processed in an automated manner and send to the Head of the Department. 2. Faculty feedback dissemination team comprising of HOD and Senior faculty discuss the feedback and suggestions are given if required. Student Feedback Dissemination Process: 1. In certain critical cases, the feedback is discussed with the principal as and when required. 2. The feedback of the Head of Department may be discussed with the principal. Corrective measures are taken by the team for improvisation of feedback and is subsequently monitored in successive semesters. Feedback given by Parents in PTM and via website is discussed in faculty meetings and is addressed by modifying the teaching learning process, conduction of remedial lectures, study workshops etc. Feedback given by employers is analysed by TP team and department TPO takes care for the implementation of the same at department level. Alumni are regularly invited for seminars, expert talks and sharing their experiences with faculty and students. Their feedback is collected using Alumni Feedback in Alumni meetings and whenever they visit campus for sessions. These stakeholders feedback really helps to strengthen the TL processes and other processes offered by the Institute.

## **CRITERION II – TEACHING- LEARNING AND EVALUATION**

#### 2.1 - Student Enrolment and Profile

#### 2.1.1 – Demand Ratio during the year

| Name of the<br>Programme | Programme<br>Specialization        | Number of seats available | Number of<br>Application received | Students Enrolled |
|--------------------------|------------------------------------|---------------------------|-----------------------------------|-------------------|
| BE                       | Please see<br>the attached<br>file | 738                       | 276                               | 276               |
| <u>View File</u>         |                                    |                           |                                   |                   |

### 2.2 – Catering to Student Diversity

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

| Year | Number of<br>students enrolled<br>in the institution<br>(UG) | Number of<br>students enrolled<br>in the institution<br>(PG) | Number of fulltime teachers available in the institution teaching only UG | institution<br>teaching only PG | Number of<br>teachers<br>teaching both UG<br>and PG courses |
|------|--|--|---|---------------------------------|---|
|      |  |  | courses   | courses                         |   |
| 2019 | 2385   | 59   | 147   | 12                              | 8   |

### 2.3 - Teaching - Learning Process

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

| Number of<br>Teachers on Roll | Number of<br>teachers using<br>ICT (LMS, e-<br>Resources) | ICT Tools and resources available | Number of ICT<br>enabled<br>Classrooms | Numberof smart classrooms | E-resources and techniques used |
|-------------------------------|---|-----------------------------------|--|---------------------------|---------------------------------|
| 147                           | 147   | 6                                 | 52                                     | 8                         | 15                              |

View File of ICT Tools and resources

View File of E-resources and techniques used

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

PHCET has a robust teacher guardian mentoring system (TGMS). The mentor acts as a link between the students, the department and the Institute. A group of 15 -20 students is assigned to a faculty member in the beginning of each academic year. First year engineering students have mentors from the department of Applied Science and Humanities and second, third and fourth year students have mentors from the parent department. Same faculty member continues to be the mentor for the same group of students till their graduation. A dedicated slot is reserved in weekly timetable for discussions with students. The role and responsibilities of a mentor are listed below. A mentor can always do more for the benefit of the students. • Maintain personal details of the students including their address, contact numbers, overall academic performance and progress. • Discusses about various activities including class room lectures, laboratory performances, participation of seminars / conferences and technical event, any academic difficulty faced etc. Mentors Counsel, guide and motivate the students in all academic matters. • The mentor gives guidance to the students for their mini project, project based learning and final year project apart routine discussions. • Advise students regarding choice of electives, project, internship/training etc. • Mentor provides advice relating to selection of major, career guidance. • Continuously monitor overall development of the students. • Mentors keep track of the mentees' performance during the internship by continuous interaction with the industry guide designated to the student by the company. • Mentors Contact parents/guardians if in case of academic irregularities, negative behavioural changes of their ward. Achievements and positive feedback are also communicated from time to time. • Intimate HOD and suggest if any administrative action is called for. • Maintain a detail progressive record of the student. The HoDs (Head of the Department) also act as a mentor and monitor different activities of the assigned mentors and the students. The role and responsibilities of a mentor are listed below • Meet all mentors of his/her department at least once a month for the reviewing of proper implementation of the system. • Suggest and advise mentors whenever necessary.

| Number of students enrolled in the institution | Number of fulltime teachers | Mentor : Mentee Ratio |
|--|-----------------------------|-----------------------|
| 2385   | 147                         | 1:16                  |

## 2.4 - Teacher Profile and Quality

2.4.1 – Number of full time teachers appointed during the year

| No. of sanctioned positions | No. of filled positions | Vacant positions | Positions filled during the current year | No. of faculty with Ph.D |
|-----------------------------|-------------------------|------------------|--|--------------------------|
| 147                         | 147                     | Nill             | 3  | 19                       |

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

| Year of Award    | Name of full time teachers<br>receiving awards from<br>state level, national level,<br>international level | Designation | Name of the award,<br>fellowship, received from<br>Government or recognized<br>bodies |  |
|------------------|--|-------------|---|--|
| 2019             | Please see the attached file   | Nill        | Please see the attached file  |  |
| <u>View File</u> |  |             |   |  |

#### 2.5 - Evaluation Process and Reforms

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

| Programme Name | Programme Code           | Semester/ year           | Last date of the last<br>semester-end/ year-<br>end examination | Date of declaration of<br>results of semester-<br>end/ year- end<br>examination |
|----------------|--------------------------|--------------------------|---|---|
| BE             | Please see attached file | Please see attached file | Nill  | Nill  |
|                |                          | <u>View File</u>         |   |   |

2.5.2 – Reforms initiated on Continuous Internal Evaluation(CIE) system at the institutional level (250 words)

Continuous Internal Evaluation (CIE) is of paramount importance to reform the process continuously for academic excellence. PHCET adheres to University of Mumbai (UoM) guidelines for an effective teaching learning and evaluation process. Continuous Internal Evaluation (CIE) is established through innovative mini projects, unique assignments, Unit tests and practical exams. Institute's academic calendar is effectively used for CIE. The following reforms in CIE are executed to ensure quality teaching-learning standards: The evaluation system followed by the Institute, has two components 1. The Internal Assessment (IA). 2. The End Semester Examination. The weightage is 20 for IA and 80 for theory end examination. As per the guidelines of UoM, two unit tests are conducted per semester for each course. The attainment of COs (Course Outcomes) and POs (Programme Outcomes) is monitored by mapping it for each subject. A) Internal Assessment: Test papers are based on Blooms Taxonomy model to assess the varying levels of learning. The evaluated answer sheets and marks are shared and discussed with students and parents during parents-teacher meeting. This helps to secure lucidity in the CIE. Remedial lectures are arranged wherever required after declaring the unit test result. B) Digital Academic monitoring system: An Academic Management System (AMS) is developed in-house to ensure consistency in evaluation. Attendance, teaching plan, course content, notes, assignments, question paper with solutions is uploaded by each faculty on AMS. Notes and solution keys are made accessible to the students with their login Id's. C) Term work: Innovative and unique assignments are designed to enhance problem solving approach. This prevents students from duplication and sharing solutions and enhance individual problem-solving ability. Students are motivated to do challenging assignments and projects. Application based assignments are designed for the students to imbibe critical learning process and meet desired course outcomes. Students are encouraged to work on Problem Based Learning topics (PBL), mini projects, project presentations. Students of third and final year are guided on innovative projects to accelerate research publications. This creates a positive impact on the students and raises the standard of projects. D) Oral and Practical Exam: Oral and Practical exam is conducted as per the syllabus scheme for each subject. Panel of internal external examiners for conducting exams is nominated by department and is approved by examination cell and University. Apart from these evaluation methods, the progress is regularly by mentors and teachers for each student. Class tests, quizzes and group discussions are conducted regularly to ensure regular studies. The performance records are maintained in Google Classroom for ready reference and helps to monitor the progress over a period of time.

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

The Institute academic calendar is prepared by Principal and Heads of Department by referring to the Term calendar issued by University. It consists of detailed outline of all teaching learning, cocurricular and extra-curricular activities and assessment deadlines. The calendar is made available on Institute website, notice boards, staff rooms, laboratory and exam section at the beginning of each semester. It is also floated in official whatsapp groups and google groups. Each department also prepares the department academic calendar with the reference of the Institute academic calendar for representing additional department activities and events. Start of the semester, deadlines for assignment and term work submissions, unit tests, practical exams, and end semester exams is made available in it. PBL evaluation, BE project presentations, and seminars, workshops planned by the department are covered in the academic calendar. Schedule for study workshops, feedback activity, and parent-teacher meetings is mentioned in the academic calendar. It helps students to plan their studies and maintain a balance in academics. For faculty members also, the academic calendar is also very much useful. Submission of Course Academic plan, declaration of UT results, syllabus completion deadlines,

slots of conducting course exit survey, etc can be planned as per the calendar. If faculty would like to plan any additional events, this academic calendar helps them to identify the tentative slots easily without disturbing other activities. Adherence to the academic calendar is monitored by Senior faculty members, Heads of department and Principal from time to time throughout the semester.

#### 2.6 – Student Performance and Learning Outcomes

2.6.1 – Program outcomes, program specific outcomes and course outcomes for all programs offered by the institution are stated and displayed in website of the institution (to provide the weblink)

https://phcet.ac.in/academics/bachelors/mechanical-engineering/program-<u>overview/</u>

### 2.6.2 – Pass percentage of students

|                                |    |                                | appeared in the final year examination | in final year<br>examination |     |
|--------------------------------|----|--------------------------------|--|------------------------------|-----|
| Please see<br>attached<br>file | BE | Please see<br>attached<br>file | 753                                    | 753                          | 100 |

#### 2.7 - Student Satisfaction Survey

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

https://phcet.ac.in/wp-content/uploads/2021/07/SSS-2019-20.pdf

#### CRITERION III – RESEARCH, INNOVATIONS AND EXTENSION

#### 3.1 - Resource Mobilization for Research

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

| Nature of the Project | Duration | Name of the funding agency         | Total grant sanctioned | Amount received during the year |
|-----------------------|----------|------------------------------------|------------------------|---------------------------------|
| Total                 | 365      | Please see<br>the attached<br>file | 7.56                   | 7.56                            |
|                       |          | <u>View File</u>                   |                        |                                 |

#### 3.2 – Innovation Ecosystem

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

| Title of workshop/seminar                               | Name of the Dept.      | Date       |
|---|------------------------|------------|
| Seminar On Recent Trends In IC Engines                  | Automobile Engineering | 16/09/2019 |
| 2 Days workshop on<br>Motorsports Dynamics<br>Designing | Automobile Engineering | 20/09/2019 |
| Webinar on An Overview of a Driverless Car              | Automobile Engineering | 30/05/2020 |
| Webinar on QC Tools in                                  | Automobile Engineering | 16/06/2020 |

| Automobile Industry  |   |            |
|--|---|------------|
| Webinar on Machine<br>Learning - SAE Western<br>Wing   | Automobile Engineering                          | 19/06/2020 |
| One week Short TermTraining Programme, Advances in Disaster Management and Risk Reduction -A Remote Sensing and GIS Approach | Civil Engineering                               | 24/06/2019 |
| One day National workshop<br>on Non destructive<br>Testing of Concrete- an<br>Innovative approach                            | Civil Engineering                               | 23/08/2019 |
| Webinar on 'Green<br>Building and<br>Sustainability  | Civil Engineering                               | 14/05/2020 |
| Webinar on "Role of<br>Supplementary<br>Cementitious Materials on<br>Concrete Durability"                                    | Civil Engineering                               | 19/05/2020 |
| webinar on "Geotechnical Aspects for Design and Construction of Nuclear Facility"  | Civil Engineering                               | 30/05/2020 |
| Webinar on E-waste<br>management   | Computer Engineering                            | 17/06/2020 |
| Webinar on Understanding<br>Cloud Security and Its<br>Importance   | Computer Engineering                            | 29/06/2020 |
| Webinar on Self Discovery  | Computer Engineering                            | 30/06/2020 |
| Webinar on Ethical<br>hacking and cyber<br>security  | Computer Engineering                            | 11/07/2020 |
| Webinar on Microsoft<br>Azure Cloud Technology   | Computer Engineering                            | 08/08/2020 |
| Seminar on Sustainable Development trends in career opportunities  | Electronics<br>Telecommunication<br>Engineering | 26/08/2019 |
| Webinar on Cadence based Semi-custom Design flow and Cadence based Full- custom Design flow used in VLSI design              | Electronics<br>Telecommunication<br>Engineering | 09/06/2020 |
| Expert talk on Interview Techniques and Industry Readiness   | Electronics<br>Telecommunication<br>Engineering | 16/06/2020 |
| Webinar on Indian Space<br>Revolution  | Electronics<br>Telecommunication<br>Engineering | 19/06/2020 |
| Webinar on Switchgear and  | Electrical Engineering                          | 25/04/2020 |

| motors by Siemens SITRAIN   |                        |            |
|---|------------------------|------------|
| Guest Lecture on ,An<br>overview of Electrical<br>Vehicle Technology  | Electrical Engineering | 08/05/2020 |
| Expert Lecture on ,"Iterative Learning Control"   | Electrical Engineering | 22/05/2020 |
| Expert lecture on ," From Arduino prototype to commercial Product".   | Electrical Engineering | 20/06/2020 |
| Expert Lecture on,"Introduction to Machine Learning".   | Electrical Engineering | 27/06/2020 |
| One day webinar on<br>Internet of Things  | Information Technology | 19/06/2020 |
| One day webinar on Converging Technologies -Next Generation Wireless Network  | Information Technology | 15/06/2020 |
| One day webinar on Big<br>Data with Keras   | Information Technology | 17/06/2020 |
| One day webinar on Cyber<br>Security Threats and<br>Challenges  | Information Technology | 17/06/2020 |
| Expert Lecture on<br>Software Testing Tools   | Information Technology | 26/06/2020 |
| Workshop on API FUSION<br>360   | Mechanical Engineering | 26/08/2019 |
| Seminar on "Challenges Opportunities in Pipe Tube Industries: Role of Engineering Institutes Professional Societies | Mechanical Engineering | 28/09/2019 |
| Seminar on "Challenges<br>and opportunities in HVAC<br>Industries"  | Mechanical Engineering | 05/10/2019 |
| Webinar on Heating,<br>ventilation and<br>refrigeration   | Mechanical Engineering | 04/04/2020 |
| STTP on Python programming and its interdisciplinary applications   | Mechanical Engineering | 08/06/2020 |

## $3.2.2-Awards \ for \ Innovation \ won \ by \ Institution/Teachers/Research \ scholars/Students \ during \ the \ year$

| Title of the innovation            | Name of Awardee                    | Awarding Agency                    | Date of award | Category                           |
|------------------------------------|------------------------------------|------------------------------------|---------------|------------------------------------|
| Please see<br>the attached<br>file | Please see<br>the attached<br>file | Please see<br>the attached<br>file | Nill          | Please see<br>the attached<br>file |
|                                    |                                    | <u>View File</u>                   |               |                                    |

## 3.2.3 - No. of Incubation centre created, start-ups incubated on campus during the year

| Incubation<br>Center               | Name                               | Sponsered By                       | Name of the<br>Start-up            | Nature of Start-<br>up             | Date of Commencement |
|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|----------------------|
| Please see<br>the attached<br>file | Nill                 |
| <u>View File</u>                   |                                    |                                    |                                    |                                    |                      |

## 3.3 - Research Publications and Awards

3.3.1 – Incentive to the teachers who receive recognition/awards

| State | National | International |
|-------|----------|---------------|
| 1     | 1        | 1             |

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

| Name of the Department                           | Number of PhD's Awarded |
|--|-------------------------|
| Electronics and Telecommunication<br>Engineering | 1                       |

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

| Туре             | Department                   | Number of Publication | Average Impact Factor (if any) |  |
|------------------|------------------------------|-----------------------|--------------------------------|--|
| International    | Please see the attached file | 116                   | 2.28                           |  |
| National         | Please see the attached file | 4                     | 0.92                           |  |
| <u>View File</u> |                              |                       |                                |  |

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

| Department                   | Number of Publication |
|------------------------------|-----------------------|
| Please see the attached file | 35                    |
| Viev                         | <u>/ File</u>         |

3.3.5 – Bibliometrics of the publications during the last Academic year based on average citation index in Scopus/Web of Science or PubMed/ Indian Citation Index

| Title of the<br>Paper                 | Name of<br>Author                     | Title of journal                      | Year of publication | Citation Index | Institutional<br>affiliation as<br>mentioned in<br>the publication | Number of<br>citations<br>excluding self<br>citation |
|---------------------------------------|---------------------------------------|---------------------------------------|---------------------|----------------|--|--|
| Please<br>see the<br>attached<br>file | Please<br>see the<br>attached<br>file | Please<br>see the<br>attached<br>file | 2019                | Nill           | Please<br>see the<br>attached<br>file                              | Nill   |
| <u>View File</u>                      |                                       |                                       |                     |                |  |  |

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

| Title of the Nam<br>Paper Aut | , | Year of publication | h-index | Number of<br>citations<br>excluding self<br>citation | Institutional<br>affiliation as<br>mentioned in<br>the publication |
|-------------------------------|---|---------------------|---------|--|--|
|-------------------------------|---|---------------------|---------|--|--|

| Please<br>see the<br>attached<br>file | Please<br>see the<br>attached<br>file | Please<br>see the<br>attached<br>file | 2019 | Nill | Nill | Please<br>see the<br>attached<br>file |
|---------------------------------------|---------------------------------------|---------------------------------------|------|------|------|---------------------------------------|
| <u>View File</u>                      |                                       |                                       |      |      |      |                                       |

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

| Number of Faculty               | International | National | State | Local |
|---------------------------------|---------------|----------|-------|-------|
| Attended/Semi<br>nars/Workshops | 73            | 838      | 161   | 316   |
| Presented papers                | 44            | 7        | Nill  | 2     |
| Resource<br>persons             | 2             | 3        | 6     | 12    |
| View File                       |               |          |       |       |

#### <u>View File</u>

#### 3.4 - Extension Activities

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

| Title of the activities      | Organising unit/agency/<br>collaborating agency | Number of teachers participated in such activities | Number of students participated in such activities |  |
|------------------------------|---|--|--|--|
| Please see the attached file | Please see the attached file                    | 110  | 2493   |  |
| <u>View File</u>             |   |  |  |  |

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

| Name of the activity         | Award/Recognition            | Awarding Bodies              | Number of students<br>Benefited |  |
|------------------------------|------------------------------|------------------------------|---------------------------------|--|
| Please see the attached file | Please see the attached file | Please see the attached file | 465                             |  |
| <u>View File</u>             |                              |                              |                                 |  |

3.4.3 – Students participating in extension activities with Government Organisations, Non-Government Organisations and programmes such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the year

| Name of the scheme                 | Organising unit/Agen cy/collaborating agency | Name of the activity               | Number of teachers participated in such activites | Number of students participated in such activites |  |
|------------------------------------|--|------------------------------------|---|---|--|
| Please see<br>the attached<br>file | Please see<br>the attached<br>file           | Please see<br>the attached<br>file | 180   | 4213  |  |
| <u>View File</u>                   |  |                                    |   |   |  |

## 3.5 - Collaborations

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

| Nature of activity           | Participant                  | Source of financial support  | Duration |  |  |
|------------------------------|------------------------------|------------------------------|----------|--|--|
| Please see the attached file | Please see the attached file | Please see the attached file | 365      |  |  |
| <u>View File</u>             |                              |                              |          |  |  |

## 3.5.2 – Linkages with institutions/industries for internship, on-the- job training, project work, sharing of research facilities etc. during the year

| Nature of linkage                  | Title of the<br>linkage            | Name of the partnering institution/ industry /research lab with contact details | Duration From | Duration To | Participant                        |
|------------------------------------|------------------------------------|---|---------------|-------------|------------------------------------|
| Please see<br>the attached<br>file | Please see<br>the attached<br>file | Please see<br>the attached<br>file  | Nill          | Nill        | Please see<br>the attached<br>file |
| <u>View File</u>                   |                                    |   |               |             |                                    |

# 3.5.3 – MoUs signed with institutions of national, international importance, other universities, industries, corporate houses etc. during the year

| Organisation                 | Date of MoU signed | Purpose/Activities           | Number of students/teachers participated under MoUs |  |  |
|------------------------------|--------------------|------------------------------|---|--|--|
| Please see the attached file | Nill               | Please see the attached file | 329   |  |  |
| <u>View File</u>             |                    |                              |   |  |  |

## CRITERION IV – INFRASTRUCTURE AND LEARNING RESOURCES

## 4.1 - Physical Facilities

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

| Budget allocated for infrastructure augmentation | Budget utilized for infrastructure development |
|--|--|
| 56.7   | 35.58  |

## 4.1.2 - Details of augmentation in infrastructure facilities during the year

| Facilities   | Existing or Newly Added |  |  |  |
|--|-------------------------|--|--|--|
| Campus Area  | Existing                |  |  |  |
| Class rooms  | Existing                |  |  |  |
| Laboratories   | Existing                |  |  |  |
| Seminar Halls  | Existing                |  |  |  |
| Classrooms with LCD facilities   | Existing                |  |  |  |
| Seminar halls with ICT facilities  | Existing                |  |  |  |
| Video Centre   | Existing                |  |  |  |
| Number of important equipments purchased (Greater than 1-0 lakh) during the current year | Newly Added             |  |  |  |
| Classrooms with Wi-Fi OR LAN   | Existing                |  |  |  |
| <u>View File</u>   |                         |  |  |  |

## 4.2 - Library as a Learning Resource

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

| Name of the ILMS software | Nature of automation (fully or patially) | Version | Year of automation |
|---------------------------|--|---------|--------------------|
|                           | , , , , , , ,                            |         |                    |

| кона | Fully | 17.05.03.000 | 2016 |
|------|-------|--------------|------|
|------|-------|--------------|------|

## 4.2.2 - Library Services

| ·                       |          |         |             |        |       |         |
|-------------------------|----------|---------|-------------|--------|-------|---------|
| Library<br>Service Type | Existing |         | Newly Added |        | Total |         |
| Text<br>Books           | 20054    | 8681664 | 389         | 247738 | 20443 | 8929402 |
| Reference<br>Books      | 4985     | 2551105 | 90          | 54250  | 5075  | 2605355 |
| e-Books                 | 2094     | 57820   | Nill        | 57820  | 2094  | 115640  |
| Journals                | 76       | 156000  | Nill        | 156000 | 76    | 312000  |
| e-<br>Journals          | 6495     | 349742  | Nill        | 349742 | 6495  | 699484  |
| Digital<br>Database     | 1400     | Nill    | Nill        | Nill   | 1400  | Nill    |
| CD &<br>Video           | 49       | 14777   | Nill        | Nill   | 49    | 14777   |
| <u>View File</u>        |          |         |             |        |       |         |

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

| Name of the Teacher          | Name of the Module           | Platform on which module is developed | Date of launching e-<br>content |  |
|------------------------------|------------------------------|---------------------------------------|---------------------------------|--|
| Please see the attached file | Please see the attached file | Please see the attached file          | Nill                            |  |
| View File                    |                              |                                       |                                 |  |

## 4.3 - IT Infrastructure

## 4.3.1 - Technology Upgradation (overall)

| Туре         | Total Co<br>mputers | Computer<br>Lab | Internet | Browsing centers | Computer<br>Centers | Office | Departme<br>nts | Available<br>Bandwidt<br>h (MBPS/<br>GBPS) | Others |
|--------------|---------------------|-----------------|----------|------------------|---------------------|--------|-----------------|--|--------|
| Existin<br>g | 957                 | 730             | 957      | 46               | 60                  | 75     | 46              | 150  | 0      |
| Added        | 50                  | 50              | 50       | 0                | 0                   | 0      | 0               | 50   | 0      |
| Total        | 1007                | 780             | 1007     | 46               | 60                  | 75     | 46              | 200  | 0      |

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

200 MBPS/ GBPS

## 4.3.3 - Facility for e-content

| Name of the e-content development facility | Provide the link of the videos and media centre and recording facility |
|--|--|
| Lecture Capturing and Recording system     | https://www.youtube.com/channel/UCmLb2d<br>g200aThykHmXatCq/ featured  |

| In-house developed Light Board Studio |   |
|---------------------------------------|---|
|                                       | <pre>https://phcet.ac.in/about/infrastructur e-and-facilities/teaching- aids/lightboard-studio/</pre> |
| Smart Board                           |   |
|                                       | https://phcet.ac.in/about/infrastructur<br>e-and-facilities/teaching-aids/smart-<br>board/            |

### 4.4 - Maintenance of Campus Infrastructure

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

| Assigned Budget on academic facilities | Expenditure incurred on maintenance of academic facilities | Assigned budget on physical facilities | Expenditure incurredon maintenance of physical facilites |
|--|--|--|--|
| 42.02                                  | 40.6   | 60.6                                   | 58.98  |

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

Institute has a well streamlined procedure, skilled manpower and equally supported budgetary provision for every academic year to maintain academic, physical and support facilities. The physical facilities including Laboratories, Workshops, Classrooms and Computers, etc. are made available for the students, faculty and staff. PHCET has transparent and robust procedures for the utilization and maintenance of all physical, academic and support facilities. This is communicated to all concerned stake holders. The detailed procedure is given below. 1. Utilization of resources and facilities: Availability of resource is verified with the concerned In-Charge. Permission for the utilization is taken from the respective authorities. It is communicated in writing to the In-Charge to make the resource available. 2. Maintenance of resources and facilities: Institute believes in maintaining a clean campus. For this, annual maintenance contracts are signed with external agencies which ensure that the maintenance of the physical, academic and support facilities is carried out in a planned and systematic manner as per the standard policies developed by the Institute. The persons responsible regularly check the availability and usefulness of the resources and identify insufficient consumables and non-functioning capital items. It is communicated to the respective authority and appropriate action is taken as per the protocols. There are designated Lab In-charge, Workshop In-charge and Lab assistants as per need. Duties and responsibilities of the Laboratory /Workshop Assistant include Maintaining the DSR and Consumables Registers, estimating and procuring required equipment and consumables for the laboratories, making the infrastructure facilities in the labs adequate before the start of every semester. The college has adequate number of well-maintained computers, servers, routers, switches, etc., with all necessary System and Application software for the requirements of various department connected on LAN. All required facilities like printers, scanners, etc., are also available in sufficient numbers for the use of students, teachers and staff. All mentioned physical facilities are supported by continuous electrical supply with two 250 KV stand by generators. The supporting systems are well-maintained both by inhouse teams and outsourced agencies. In order to develop excellence in academics a well maintained and regularly updated library is essential. PHCET has an aesthetically pleasing and resource rich library with a separate section for digital resources. Library committee, headed by a senior Professor, makes all important decisions to ensure continued availability of knowledge resources

for students and faculty. Library also has arrangements and protocols like laboratories. A well-equipped Gym, Sport Authority of India supported indoor and outdoor sports facilities with qualified coaches are also available in PHCET.

https://phcet.ac.in/faculty/faculty-handbook/

#### **CRITERION V – STUDENT SUPPORT AND PROGRESSION**

## 5.1 - Student Support

5.1.1 - Scholarships and Financial Support

|                                      | Name/Title of the scheme | Number of students | Amount in Rupees |
|--------------------------------------|--------------------------|--------------------|------------------|
| Financial Support from institution   | Nill                     | Nill               | Nill             |
| Financial Support from Other Sources |                          |                    |                  |
| a) National                          | Nill                     | Nill               | Nill             |
| b)International                      | Nill                     | Nill               | Nill             |
| <u>View File</u>                     |                          |                    |                  |

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

| Name of the capability enhancement scheme | Date of implemetation | Number of students enrolled | Agencies involved            |  |
|---|-----------------------|-----------------------------|------------------------------|--|
| Please see the attached file              | Nill                  | 8772                        | Please see the attached file |  |
| <u>View File</u>                          |                       |                             |                              |  |

5.1.3 – Students benefited by guidance for competitive examinations and career counselling offered by the institution during the year

| Year             | Name of the scheme                 | Number of<br>benefited<br>students for<br>competitive<br>examination | Number of benefited students by career counseling activities | Number of<br>students who<br>have passedin<br>the comp. exam | Number of studentsp placed |
|------------------|------------------------------------|--|--|--|----------------------------|
| 2019             | Please see<br>the attached<br>file | 514  | 646  | 1  | 92                         |
| <u>View File</u> |                                    |  |  |  |                            |

5.1.4 – Institutional mechanism for transparency, timely redressal of student grievances, Prevention of sexual harassment and ragging cases during the year

| Total grievances received | Number of grievances redressed | Avg. number of days for grievance redressal |
|---------------------------|--------------------------------|---|
| Nill                      | Nill                           | Nill  |

## 5.2 – Student Progression

5.2.1 - Details of campus placement during the year

| On campus                    |                                 |                           | Off campus                         |                                       |                           |
|------------------------------|---------------------------------|---------------------------|------------------------------------|---------------------------------------|---------------------------|
| Nameof organizations visited | Number of students participated | Number of stduents placed | Nameof<br>organizations<br>visited | Number of<br>students<br>participated | Number of stduents placed |

| Please see<br>the attached<br>file | 1119 | 92          | Please see<br>the attached<br>file | Nill | Nill |
|------------------------------------|------|-------------|------------------------------------|------|------|
|                                    |      | <u>View</u> | <u>/ File</u>                      |      |      |

## 5.2.2 - Student progression to higher education in percentage during the year

| Year             | Number of<br>students<br>enrolling into<br>higher education | Programme<br>graduated from        | Depratment graduated from          | Name of institution joined         | Name of programme admitted to      |
|------------------|---|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| 2019             | 4   | Please see<br>the attached<br>file | Please see<br>the attached<br>file | Please see<br>the attached<br>file | Please see<br>the attached<br>file |
| <u>View File</u> |   |                                    |                                    |                                    |                                    |

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

| Items | Number of students selected/ qualifying |
|-------|---|
| GATE  | 1                                       |
| Viev  | v File                                  |

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

| Activity                     | Level                        | Number of Participants |  |  |
|------------------------------|------------------------------|------------------------|--|--|
| Please see the attached file | Please see the attached file | 2816                   |  |  |
| <u>View File</u>             |                              |                        |  |  |

### 5.3 - Student Participation and Activities

## 5.3.1 – Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one)

| Year             | Name of the award/medal               | National/<br>Internaional | Number of awards for Sports | Number of<br>awards for<br>Cultural | Student ID<br>number                  | Name of the student                   |
|------------------|---------------------------------------|---------------------------|-----------------------------|-------------------------------------|---------------------------------------|---------------------------------------|
| 2019             | Please<br>see the<br>attached<br>file | National                  | 6                           | 2                                   | Please<br>see the<br>attached<br>file | Please<br>see the<br>attached<br>file |
| <u>View File</u> |                                       |                           |                             |                                     |                                       |                                       |

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

Student Council Elections are conducted officially by PHCET in the presence of the Principal, HODs of all Department, Senior Faculties and students. One Senior teacher as coordinator of the student's council was appointed by the principal. Nominations for the various posts under student's council are done in the presence of the mentioned faculties and students and by election President, Secretary, Lady representative, Reservation representative, along with Cultural Coordinator, Sports Coordinator and Project Coordinator are elected. PHECT has various professional body student chapters like IETE, IE, ISHARE, ACM, IIRS etc. Every semester these student bodies conduct a variety of seminars, workshops under the guidance of the faculty in charge. The details of these events are available on the Institute website

https://phcet.ac.in/students/student-activities/. Programs like Freshers Party, Farewell, Technical and cultural fest are actively organized by students. The pandemic has imposed virtual interactions and students are finding new ways to conduct these events in online mode. NSS team has taken special efforts in helping the social community to overcome the issues by arranging various drives for grocery distribution, blood donation, webinars for stress management, and many more. Further details can be found at https://phcet.ac.in/students/studentactivities/student-associations/nss/ Committee Internal Quality Assurance Cell Anti Ragging Committee Internal Complaint Committee Prevention of Atrocities to SC/ST Committee Student Activities Committee Training and Placement Committee Canteen Committee. Institute has taken special efforts to keep students active in this pandemic. Each department has organized a variety of webinars on technical and co-curricular topics. A special event organized by Student Council was Lock n Roll. Total of 186 members participated in this online event. The nominal registration fee was collected and the amount received was donated to Milaap Foundation. Students actively celebrate Engineers Day, Rashtriya Ekta Diwas, Science day, Environment Day, Shivaji Maharaj Jayanti, Teachers Day, and many more.

## 5.4 – Alumni Engagement

5.4.1 – Whether the institution has registered Alumni Association?

Yes

The Alumni Association of PHCET is known as "Pillai HOC College of Engineering amp Technology Alumni Welfare Association". Main objective of the Association is to bridge the gap between the college and alumni. Since the establishment of the Alumni Association regular meetings are organized amp the former students enthusiastically attend these meetings. Various aspects of quality, assurance sustenance amp enhancement are discussed during these meetings amp the necessary measures are taken. Alumni Association of this college is very active amp sincerely contributing towards the qualitative growth of the institution. Along with the association meetings, annual alumni meet is also organized at the institute level every year. During the interaction, alumni have highlighted the importance of current trends in the market and guided the students about the career opportunities in different fields. They have also shared their personal experiences with students. Alumni visit campus at regular intervals to support the existing batch of students in planning and organizing events, extend support and guidance for functioning of various students' clubs. Alumni who are entrepreneurs have been providing inputs on how to start a new venture and become as entrepreneur. Alumni extend their support for campus placements and summer and winter internships for students from time to time. 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 alumnus. PHCET also has its own alumni committee who looks after all alumni related activities. Students can register at https://phcet.ac.in/alumni/alumni-registration/ Objectives of the Alumni association: ? To encourage and promote close relations between the Institution and its alumni and among the alumni themselves. ? To promote and encourage friendly relations between all members of the alumni body, an interest in the affairs and well-being of the Institution. ? To initiate and develop programs for the benefit of the alumni. ? To assist and supporting the efforts of the Institution in obtaining funds for development. ? To serve as a forum through which alumni may support and advance the pursuit of academic excellence at the Institution. ? To guide and assist alumni who have recently completed their courses to obtain employment and engage in productive pursuits useful to society. ? To collect, publish and distribute such information as may be useful to the alumni and their Alma Mater.

5.4.2 - No. of enrolled Alumni:

3081

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

755000

5.4.4 – Meetings/activities organized by Alumni Association :

Due to the pandemic, Alumni Meet were held in virtual mode department wise. Alumni were invited for guest lectures, carrier guidance session etc. It was a wonderful experience for students to listen to their seniors doing so well in Industries.

## CRITERION VI – GOVERNANCE, LEADERSHIP AND MANAGEMENT

#### 6.1 - Institutional Vision and Leadership

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

The PHCET functions in order to facilitate the decision making related to academic and administrative activities faster and to ensure complete transparency through participative management. We practice various decentralization strategies. There are several committees that help manage various academic, administrative, co-curricular and extracurricular activities that make PHCET vibrant. The faculty members are the coordinators and members of these committees. At different levels, the college grooms the initiative. The Governing body, College Academic Council, Principal, HODs, Registrar, IQAC Members, Faculty, staff, student council, Alumni, stakeholders and members of various committees jointly propose, design, figure and execute their plans within the framework of college. Principal Level: The principal is a member of the governing body and the chairperson of IQAC. The principal nominates different committees for the implementation of different academic, student administration, and related policies. All academic and operational policies are based on the unanimous decisions of the governing body, the IQAC, and the teachers of the college. Department level and Faculty Level: Each department in turn also practices decentralization thus bringing greater transparency and better provision of services that address the specific needs of each department. At the department level, there are various committees headed by HODs and senior faculty. They are urged to create initiative aptitudes by being responsible for different academic, co-curricular, and extracurricular activities. Departments are given authority to conduct industrial tours and to have to tie up with industries for organizing seminars/workshops/conferences/FDPs/MoUs/ Expert lecture series etc. Student Level: PHCET has a highly decentralized students' council that operates at the Department, and at the College level and addresses the needs of every group of students. The student councils are a great source of energy and responsibility and provide opportunities for students to assume leadership roles. It is through these vehicles of human transformation that the students imbibe values in ethical leadership, responsiveness, patriotism, self-discipline, integrity, ingenuity, creativity, responsibility, compassion through interactions in classrooms and outside, conflict resolution, culture, and sports activities, etc. Participative Management Institution advances the culture of participative administration at the key level, functional level and operational level. Principal, governing body, Teachers and the IQAC are involved in defining policies procedures, framing guidelines and rules regulations pertaining to admission, examination, code of conduct-discipline, grievance, support services, finance etc The management authorities regularly undertake the review of the institute in its Executive council meeting and working committee

meeting. The Necessary guidance and directives are issued through these meetings. Periodical reviews are undertaken by the top management. The budget is prepared prior to the commencement of the academic year and is approved by the management. Hence, there is good support from the management relating to the implementation of the objectives specially designed to attain quality teaching and learning aspects of the institute. The focus is given on the regular academics, timely completion of the syllabus, guidance for better performance in the examination, and providing the best possible teaching-learning environment. This is attained by regular meetings of the department, of the staff member conducted by the principal.

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

Yes

#### 6.2 - Strategy Development and Deployment

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

| Strategy Type  | Details  |
|--|--|
| Human Resource Management                                  | Management Board supports faculty and staff for various initiatives. All the rules' regulations and policies are clearly defined and are made available to concerned stakeholders. Management motivates faculty and staff for qualification enhancement and provides promotions and incentives from time to time. Faculty are always motivated to attend seminars, FDPs and conferences. Sponsorship, paid duty leaves are offered for pursuing PhD and participation in technical activities. Medical leave, study leave, maternity and paternity leave, vacations and earned leaves as applicable are provided for faculty and staff. Various in-house programs are organised for faculty and staff development. For research and upgradation in qualification, lab facilities, library facilities are full time available. Tie ups with Coursera, Swayam and IIT Spoken Tutorials etc are some of the initiatives taken up for faculty, staff and students. On-campus skills development and training centre is available in collaboration with Government of India and the Government of Maharashtra for training students and staff |
| Library, ICT and Physical Infrastructure / Instrumentation | PHCET Library is one of the important central facilities serving to the information needs of faculty, research scholars and student with Online Public Access Catalogue Searching Area, Digital library for accessing eresources, Laptop zone with Wi-Fi facility and specialized areas like   |

discussion rooms, reference section for users. PHCET's Dspace platform has digital archive for study material like Syllabus, Notes, Video Lectures, Assignments and Question banks etc. ICTs used for teaching learning process include interactive white board, Over Head Projector sheets (OHP), computer, projector, presentation tools (ppt), smart class, Learning Management System (LMS), Google Classroom, MOOCs etc. Academic Management system (AMS) helps to maintain student information and other details like subject wise attendance, test marks, Course Exit survey etc. This in turn helps to track the overall performance of the student from sem 1 to sem 8. Lecture recordings done with smart boards, light board studio are made available with MES YouTube channel. Library provides facility to check plagiarism for projects, thesis, research papers, and synopsis using Turnitin. No of available E-Resources, Magazines, Journal Subscriptions help students and faculty foster their research interest.

Industry Interaction / Collaboration

PHCET has strongly focused on industry institute interaction. Industry professionals are involved in department advisory body for sharing their views on effective curriculum delivery, Students are actively involved in Internships at reputed organisations. Problem definitions floated by industry are allocated to students for their Major projects. Industry professionals are invited for assessment for project work and Mini projects. We encourage our students to form or start their own start-ups to become an entrepreneur. PHCET is also planning to collaborate with other foreign institutes to share technical and HP resources. The institute provides industry exposure to students and faculty through industry visits, summer internship, practical training and industry projects. Conference, Workshops, and symposium with joint participation of the faculty and the industries are organized. Industry excecutives visits to the Institute for seeing PBL work and laboratories, discussions and delivering lectures on industrial latest trends and practices. Consultancy with industries also provides a platform for faculty to

interact with industry people and collaborate for technical aspects. MoUs with various organizations help to offer hands on training sessions, opportunities for further collaborations. Research and Development PHCET has a research culture and has exclusive infrastructure to support it. Thirteen applications filed is a proof of innovation ecosystem fostered. It is evinced by the research grants of Rs. 7.02 Lakhs received from the University of Mumbai in the AY 2019-20. Students are provided with resources such as computers, working space and financial help for establishing start- ups. Publishing the research and creating new linkages for collaboration are actively pursued. Faculty and students have published quality research papers in peer reviewed journals and national and international conferences. PHCET has MoU with several leading organizations of repute for academic and research collaboration. PHCET involves in extension activities to enthuse school students for STEM education. Every year students from neighbouring towns and villages spend a day in PHCET learning Robotics and participate in a competition like Maverick. From last two years around 2500 students from fifty schools participated. Examination and Evaluation PHCET follows University of Mumbai guidelines to conduct the Internal assessment, Practical and Oral exams and end sem exams. At the same time, faculty is given freedom design innovative assignments and continuous evaluation measures for ensuring outcome-based learning. The evaluation policy with a detailed scheme for university examinations are made available to students and faculty. On an average, students have at least one evaluation happening every 15 days - be it as a class assignment, class test, laboratory evaluation, quiz, unit test, etc. The rubrics designed for assessment are reviewed in department meetings and are informed to students as well. A formal student satisfaction survey is conducted twice a semester and the outcome are communicated to the faculty and appropriate actions are taken.

| Teaching | and L | earning |
|----------|-------|---------|
|          |       |         |

Needs of differently-able students are met. Almost every Indian mothertongue is spoken on the campus. Learning and performance of students are assessed periodically and various remedial measures are adopted to support slow learners. Advanced learners are encouraged to do challenging assignments and projects. Implementation of nearly fifty studentcentric methods is achieved through continuous engagement of students and faculty and has been a very rewarding experience for both. Each student has a mentor and each faculty mentors 15 to 20 students and has transformed the lives of several students. PHCET adheres to the academic calendar and uses it effectively for CIE. Formal and statutory processes exist to deal with examination related grievances and involve all related stakeholders. It is time-bound and efficient. Faculty use ICT tools effectively. This pandemic has helped to come up with innovative approached and tools for teaching and learning. Faculty have attended several FDPs, webinars and hands-on sessions for effective use of ICT tools and innovative approaches to teaching learning etc

Curriculum Development

PHCET being the affiliated institute follows curriculum designed at University of Mumbai. PHCET Faculty is actively involved in BOS, Syllabus Setting etc. The curriculum planning and delivery are diligent with the preparation of the lesson plan and concept inventory, course outcomes etc adapting Bloom's Taxonomy. Each department has a well-articulated vision and mission and academic activities aligned with it. Each semester the faculty reviews the COs and prepares the teaching plan that is validated by the domain coordinator. The COs are mapped with POs and PSOs. Short programs, in-house STTP that students are also permitted to attend, workshops, seminars, orientation programs, conferences, internship, Industrial visits, etc., are regularly organized for curricular enrichment. During last five years the number of students participating in such programs has steadily increased. Students are also encouraged to take subject related Certificate programs from MOOCs, NPTEL,

Coursera, etc. While academically conscientious, PHCET is sensitive to gender equity, minorities, underprivileged and reserved classes of students and staff. The students are consistently reminded to be conscious of our common heritage - the environment - and its sustainability through banners and posters, inspirational talks, participation in activities such as Save the River Rally, etc. Regular feedback is taken from students, parents, alumni and industry employers, and discussed during class teacher- students meet, PTM, alumni meet, etc., and actions are taken as and when required. Admission of Students PHCET is approved by AICTE, New Delhi and recognized by Govt of Maharashtra. Institute maintains a transparent and well-administered admission process, complying with all statutory norms of the concerned regulatory/governing agencies including DTE Maharashtra and affiliating University. Admission is strictly on merit based through Central Admission Process of state of Maharashtra. All the admissions are based on merit in accordance with the rank obtained in the MHCET or rank obtained in all India level entrance examinations JEE (Main).

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

| E-governace area              | Details   |
|-------------------------------|---|
| Student Admission and Support | Admission process is centralized controlled by the admission regulating authority DTE, Maharashtra State.  Dedicated student portal https://phcetstudentportal.mes.ac.in/ is used to offer a single platform for find all information on exam, fees paid etc. Exam related notices, fees payment related notices are also available on Institute website. Each student is provided with unique username and password to login. University results are also declared and made available in student portal. Dedicated mentors for group of students ensures that students can discuss issues, suggestions anytime with their mentors and mentors act as strong support for all students.  Various administrative committees are available to offer help to students like Anti ragging, Anti sexual harassment, grievance redressal, |

|                          | college development committee and many more. The contact numbers of faculty involved are displayed on major noticeboard and website too. We also encourage students to take part in different competitions, events, sports and also try to provide necessary funds to motivate and encourage them.  Availability of a qualified counsellor Ms Yvette Lee and a dedicated counselling cabin makes it convenient for personal counselling. The privacy of the individual is sacrosanct and inviolable. We also provide students with different private scholarships for financial support towards tuition fees.  |
|--------------------------|--|
| Planning and Development | E governance is implemented in overall working of the Institution at various places. For time planning of lecture/lab session, Lantiv studio is used. For monitoring student attendance, test marks and each student's performance AMS is used. Syllabus, teaching plan, Cos. Mapping with PO and PSO, list of assignments and solutions are also made available on AMS. For TGMS, a dedicated portal is available for each mentor to maintain each mentee's details.  |
| Administration           | In library, OPAC and Koha are used for planning and access to resources.  For students, student portal is available to check exam related notices, results and form filling etc.  At admin office, Eduright is used to maintain personal details of each student admitted in the institute. HR and Pyroll Software is used for finance and accounts.   |
| Finance and Accounts     | Our management provides us with necessary funds so that we can promote different learning methodologies for students. We also are looking forward to generate revenue through industry level projects, consultancies, research grants. 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 XVI. 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.   |
|-------------|--|
| Examination | In PHCET, students are given their personal profile and login credentials in Student Portal through which they can view their results, fill revaluation and photocopy form, examination form, take print of their hall ticket required for the final examination. All the Regular and ATKT examinations were conducted online with the help of google forms due to pandemic as per the guidelines given by affiliating University. The links for question papers were shared with the students in their official domain (mes) email id. A set of sample question papers was displayed on the Institutes Website. All notices and corresponding |
|             | communication are made available on<br>PHCET Website   |

## 6.3 – Faculty Empowerment Strategies

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

| Year             | Name of Teacher                    | Name of conference/<br>workshop attended<br>for which financial<br>support provided | Name of the professional body for which membership fee is provided | Amount of support |
|------------------|------------------------------------|---|--|-------------------|
| 2019             | Please see<br>the attached<br>file | Please see<br>the attached<br>file  | Please see<br>the attached<br>file                                 | 52830             |
| <u>View File</u> |                                    |   |  |                   |

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

| Year | Title of the professional development programme organised for teaching staff | Title of the administrative training programme organised for non-teaching staff | From date        | To Date | Number of participants (Teaching staff) | Number of<br>participants<br>(non-teaching<br>staff) |
|------|--|---|------------------|---------|---|--|
| 2019 | Please<br>see the<br>attached<br>file  | Please<br>see the<br>attached<br>file   | Nill             | Nill    | 942                                     | 24   |
|      |  |   | <u>View File</u> |         |   |  |

6.3.3 – No. of teachers attending professional development programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the year

| Title of the professional development | Number of teachers<br>who attended | From Date | To date | Duration |
|---------------------------------------|------------------------------------|-----------|---------|----------|
| programme                             |                                    |           |         |          |

| Please see<br>the attached<br>file | 655 | Nill             | Nill | 365 |
|------------------------------------|-----|------------------|------|-----|
|                                    |     | <u>View File</u> |      |     |

#### 6.3.4 – Faculty and Staff recruitment (no. for permanent recruitment):

| Teac      | hing      | Non-te    | aching    |
|-----------|-----------|-----------|-----------|
| Permanent | Full Time | Permanent | Full Time |
| 147       | 147       | 67        | 67        |

Non-teaching

#### 6.3.5 - Welfare schemes for

| Teaching                                       |
|--|
| Unlimited free                                 |
| certification of Coursera                      |
| courses, Employment of                         |
| local people for selected                      |
| jobs, Subsidized food in                       |
| the canteen, Free                              |
| transport facility,                            |
| Special leave is offered                       |
| to all faculty members                         |
| during their marriage,                         |
| Maternity leave facility                       |
| for all employees,                             |
| Paternity leave facility                       |
| for all employees,                             |
| Provision of 50                                |
| concession in fees to                          |
| faculty members pursuing                       |
| Ph.D. at the Institute, Provision of on-campus |
| Gym facility, Special                          |
| sports coaching facility                       |
| sponsored by Sports                            |
| Authority of India (SAI)                       |
| for children of employees                      |
| and neighbouring children                      |
| from socio-economically                        |
| challenging background,                        |
| First aid centre with a                        |
| dedicated room and beds                        |
| and doctor on call,                            |
| Faculty members (nursing                       |
| mothers) are permitted                         |
| for flexi hours,                               |
| Sponsorship for External Faculty Development   |
| Programs at (ISRO, IIT                         |
| and RCF), Teaching                             |
| assistantship for faculty                      |
| members pursuing Masters                       |
| in engineering, Financial                      |
| support for faculty                            |
| members pursuing Ph.D.                         |
| from well-known                                |
| Institutions such as IIT                       |

Establishment of on campus Skills development and training centre in collaboration with Government of India and the Government of Maharashtra for training students and staff, Employment of local people for selected jobs, Subsidized food in the canteen, Free transport facility, Special leave is offered during their marriage, Maternity leave facility for all employees, Paternity leave facility for all employees, Provision of on-campus Gym facility, Special sports coaching facility sponsored by Sports Authority of India (SAI) for children of employees and neighboring children from socioeconomically challenging background, First aid center with a dedicated room and beds and doctor on call. Faculty members (nursing mothers) are permitted flexi hours, Provision of Counselling Centre Sanitary Napkin Vending Machine, Excellent facilities for multiple sports and athletics.

Unlimited free certification of Coursera courses, Establishment of on campus Skills development and training center in collaboration with Government of India and the Government of Maharashtra for training students and staff, Subsidized food in the canteen, Subsidized transport facility, Provision of on-campus Gym facility, Special sports coaching facility sponsored by Sports Authority of India (SAI) for children of employees and neighboring children from socio-economically challenging background, First aid center with a dedicated room and beds and doctor on call, Provision of Counselling Centre, Group Insurance for students, Sanitary Napkin Vending Machine, Excellent facilities for multiple sports and athletics.

Students

and VJTI, Provision of Paid On duty leave for faculty members pursuing Ph.D. from other universities, Special leave for research paper presentations and participation in International Conferences, Provident fund for all employees with contributory pension, Financial assistance for travel to important International conferences and seminars, Provision of Counselling Centre, Sponsorship for STTP /seminars/ workshops at national and international level, Sanitary Napkin Vending Machine, Excellent facilities for multiple sports and athletics.

#### 6.4 - Financial Management and Resource Mobilization

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

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. In an environment rampant with fudging and frauds, there are stellar organizations with unimpeachable integrity. Mahatma Education Society (MES), the parent body of Pillai HOC College of Engineering and Technology (PHCET) is one of them. The fact that MES has been in existence without any blemish and 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 auditors are Mr. A.S. Majumdar Co. The Internal auditors are 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 noncash 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 XVI. 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 specially supervised by well qualified and experienced persons of the level of deputy finance officer. 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 and also helps in timely meeting of financial commitments to all debtors and most of all payment of salaries on time to its employees.

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

| Name of the non government funding agencies /individuals | Funds/ Grnats received in Rs. | Purpose                      |  |  |
|--|-------------------------------|------------------------------|--|--|
| Please see the attached 294897 file                      |                               | Please see the attached file |  |  |
| View File  |                               |                              |  |  |

#### 6.4.3 – Total corpus fund generated

500000

#### 6.5 – Internal Quality Assurance System

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

| Audit Type     | External |  | Inte   | rnal                              |
|----------------|----------|--|--------|-----------------------------------|
|                | Yes/No   | Agency   | Yes/No | Authority                         |
| Academic       | Yes      | Local Inspection Committee appointed by Affiliating University | Yes    | Academic<br>Audit Committee       |
| Administrative | Yes      | Local Inspection Committee appointed by Affiliating University | Yes    | Administrative<br>Audit Committee |

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

? We organize Parent Teacher meetings in every semester wherein parents can directly interact with the faculty members. This interaction helps the faculty members to understand the issues in a better way. ? Feedback given by the parents in Parent Teacher meetings is analyzed. Remedial classes and extra lectures for weak students are organized whenever needed. ? Parents can also offer feedback and suggestions by filling forms available on the Institute website.

#### 6.5.3 – Development programmes for support staff (at least three)

? One Day Hands on Training "PCB design" was organized by Department of Applied Science and Humanities on April 26, 2020 with a technical support from EXTC department ? Two days' workshop on "IC Engines and Bike Servicing" was organized by PHCET on June 27 and June 28, 2019 ? Online Meditation workshop for all faculty and non-teaching staff was organized on June 19, 2020

## 6.5.4 – Post Accreditation initiative(s) (mention at least three)

? Participated and won Workplace Safety Award on Oct 24, 2019 ? Applied for AICTE Smart Campus Award July 10, 2019 ? Applied for National Institute Ranking Framework (NIRF) NIRF on Dec 07, 2019 ? Applied for Atal Ranking of Institutions on Innovation Achievements (ARIIA) on Nov 01, ? Participated and won RBNQA Performance Excellence Trophy 2019 ? Successfully completed ISO Surveillance Audit

## 6.5.5 - Internal Quality Assurance System Details

| a) Submission of Data for AISHE portal | Yes |
|--|-----|
| b)Participation in NIRF                | Yes |
| c)ISO certification                    | Yes |
| d)NBA or any other quality audit       | Yes |

## 6.5.6 - Number of Quality Initiatives undertaken during the year

| Year             | Name of quality initiative by IQAC | Date of conducting IQAC | Duration From | Duration To | Number of participants |
|------------------|------------------------------------|-------------------------|---------------|-------------|------------------------|
| 2019             | Please see<br>the attached<br>file | Nill                    | Nill          | Nill        | Nill                   |
| <u>View File</u> |                                    |                         |               |             |                        |

## **CRITERION VII – INSTITUTIONAL VALUES AND BEST PRACTICES**

## 7.1 - Institutional Values and Social Responsibilities

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

| Title of the programme   | Period from | Period To  | Number of Participants |      |
|--|-------------|------------|------------------------|------|
|  |             |            | Female                 | Male |
| Womens Day   | 07/03/2019  | 07/03/2019 | 46                     | 21   |
| International Yoga Day- "Relevance of Meditation on Professional Life" | 24/06/2020  | 24/06/2020 | 41                     | 57   |
| Webinar on Yoga - Affirmations to Train your Subconscious Mind         | 27/06/2020  | 27/06/2020 | 105                    | 123  |
| Webinar on<br>"Self<br>Discovery"                                      | 30/06/2020  | 30/06/2020 | 57                     | 61   |
| Expert talk "One Step Ahead- Self Management                           | 18/06/2020  | 18/06/2020 | 53                     | 67   |
| Workshop on  | 18/06/2020  | 18/06/2020 | 74                     | 83   |

| Youth<br>Leadership<br>Program |            |            |    |     |
|--------------------------------|------------|------------|----|-----|
| Meditation sessions            | 21/06/2020 | 23/06/2020 | 84 | 93  |
| Lock and Roll<br>Event         | 01/06/2020 | 07/06/2020 | 83 | 103 |

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

## Percentage of power requirement of the University met by the renewable energy sources

(a)Percentage of annual power requirement of the Institution met by the renewable energy sources 1.17 (1) Total annual power requirement (in KWH): 645580.6 (2)Annual power requirement met by the renewable(SOLAR) energy sources (in KWH): 11037.6 (b) Percentage of annual lighting power requirements met through LED bulbs28.48 (3)Annual lighting power requirement (in KWH): 89510.4 (4)Annual lighting power requirement met through LED bulbs (in KWH) :25494

## 7.1.3 – Differently abled (Divyangjan) friendliness

| Item facilities  | Yes/No | Number of beneficiaries |
|--|--------|-------------------------|
| Physical facilities                                      | Yes    | Nill                    |
| Provision for lift                                       | Yes    | Nill                    |
| Ramp/Rails   | Yes    | Nill                    |
| Braille<br>Software/facilities                           | No     | Nill                    |
| Rest Rooms   | Yes    | Nill                    |
| Scribes for examination                                  | Yes    | Nill                    |
| Special skill development for differently abled students | No     | Nill                    |
| Any other similar facility                               | Yes    | Nill                    |

#### 7.1.4 - Inclusion and Situatedness

| Year | Number of initiatives to address locational advantages and disadva ntages | Number of initiatives taken to engage with and contribute to local community | Date | Duration | Name of initiative                    | Issues<br>addressed                   | Number of participating students and staff |
|------|---|--|------|----------|---------------------------------------|---------------------------------------|--|
| 2019 | 14  | 29   | Nill | 365      | Please<br>see the<br>attached<br>file | Please<br>see the<br>attached<br>file | 7605                                       |

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

| Title            | Date of publication | Follow up(max 100 words) |
|------------------|---------------------|--------------------------|
| Faculty Handbook | 23/03/2020          | The handbook for Code    |

of Conduct for various stakeholders has been published in May 2019. The same has been communicated to the stakeholders via Noticeboard and is always made available in the Institutes Administrative Office. It is a policy of the MES and its institutes to give equal opportunity to all employees and applicants for employment without regard to religion, race, creed, caste, colour, sex, disability, and age. The policy applies to initial employment, promotion, compensation, and termination. Employees / students are not denied benefits, or subjected to discrimination under any program or activity of the Institute. As a affiliated institute it follows University of Mumbai code of conduct. Various committees are formed in the College for the smooth and effcient management of activities. Since many faculty members form members of these committees, this also gives them an opportunity to develop their skills in administration and decision making. Institute every academic year prepares its information brochure which provide all the information regarding the changes in admission process and also highlight changes in rules and regulations of government authorities. Student Hand book 21/03/2020 he purpose of the students' council is to give students an opportunity to develop leadership quality by

organizing school activities and service projects. In addition to planning events that contribute to school spirit and community welfare, the student council is the connecting bond between teachers and students. The students council of PHCET constitutes President, Vice President, Secretary, Vice Secretary, Women's Representative, Caste Representative, Sports Representative. There is a faculty advisor associated with the students council to provide help and support, if required. Various committees are formed in the College for the smooth and efficient management of activities each year, committees are duly constituted by the Principal in consultation with the Heads of various departments. As per guidelines of the University of Mumbai the formation of Anti Ragging Committee is constituted, which comprises chairperson, member secretary, 5 members, undergraduate student representative Male, undergraduate student representative Female.

#### 7.1.6 – Activities conducted for promotion of universal Values and Ethics

| Activity                     | Duration From Duration To |     | Number of participants |  |  |  |
|------------------------------|---------------------------|-----|------------------------|--|--|--|
| Please see the attached file | Nil                       | Nil | 3816                   |  |  |  |
| <u>View File</u>             |                           |     |                        |  |  |  |

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

Eco friendly campus is top priority of our campus, Following Initiatives are taken to make the campus eco-friendly 1.Water Management 2.Waste Management 3.Sanitation and Hygiene 4.Energy Management 5.Greenery

#### 7.2 - Best Practices

Best Practice I: Academic Monitoring System Goal: AMS mainly helps teachers to monitor the progress and performance of the students. It also helps the Management and Principal to keep track of faculty performance. Various kinds of reports can be generated easily using it which helps teachers to analyse the student performance quickly and precisely. AMS ensures accurate time records and minimizes the inevitable and costly errors with manual data entry. The Context: AMS maintains digital records of students and faculty data such as attendance, test marks, course study material, and so on. Students' counselling minutes, curricular, co-curricular, and extracurricular achievements and activities are also well maintained in it. The online attendance management system has been built to eliminate the time and effort wasted in taking attendance. It is software that fulfills the requirement of academic record maintenance. It not only maintains the attendance data but also has the feature of maintaining the unit test marks of the students. Overall academic performance of the students can be easily monitored. On AMS the faculties upload teaching plans of their respective subjects. This teaching plan helps faculties to manage the syllabus completion in a given time. The Practice: Every activity of the faculty and students is continually updated. Being an online portal, retrieval and updating of information are convenient. Updating AMS is considered an integral part of the academic process. A timely update of attendance helps teachers and class coordinators to monitor the performance of students. The performance reports of each student are shared with parents during Parent-Teacher Meeting (PTM) and as and when required. Evidence Of Success: Monitoring and tracking of students' performance is enabled using AMS. Reports can be generated at any instant and allow slicing and dicing of information pertaining to their performance. During PTM reports of overall attendance and marks of individual students are obtained in a report on a single click. With an automated attendance management system, you can drastically save time and effort in keeping track of students. Eliminate duplicate data entries and errors in time and attendance entries. Improve visibility to track and manage student attendance absenteeism across multiple campuses. Auto-generate various types of reports of class or student attendance 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. Best Practices II: Professional Body Student Chapters (Forums) Goal: • To effectively promote the general advancement of engineering, engineering science and technology, and their application • To facilitate dissemination and exchange of information and ideas amongst the students • To instigate, enforce, and obtain projects and activities that will help the institution. • Grow the ability of students and empower them to become well-informed, truthful, engaged, and involved people. • To promote continuous professional and intellectual development and contributing significantly to the growth of technological knowledge, skills, and capacity building in students. The Context: Creating the conditions that foster student engagement, success and retention remain a perennial issue within the higher education sector. Traditionally satisfaction has been prioritized in assessing student success. The formation of an association which is entirely for students can increase the involvement of students in the affairs of the institution, in co-operation with the teachers. Student chapters provide support both within the student community and to local communities outside the institution. An environment conducive to educational and personal development can be molded with the help of a student chapter. - Student chapters can assist in organizing various activities like guest lectures, seminars, workshops, etc. The Practice: A

teacher is assigned as a faculty advisor who coordinates with the students to arrange various activities. HOD along with the faculty advisor creates a team of student coordinators. The team consists of Chairperson, Vice-Chairperson, Secretary, Treasurer, and members. After the formation of a student chapter, the activities are planned for a semester. While making plans different suggestions from students and faculty members are considered in a meeting. PHCET has nine student chapters which are Institution of Engineers (India) -Civil, Indian Society of Remote Sensing, Association of Structural Rehabilitation, Indian Green Building Council, The Institution of Electronics and Telecommunication Engineers, Institution of Engineers (India) - Electrical, The Indian Society of Heating, Refrigerating and Air Conditioning Engineers and Society of Automotive Engineers India, Computer Society of India. Evidence of Success: Numerous workshops, guest lectures, seminars and other non-technical events were conducted under the student chapters. All these events were well coordinated by students where the faculty advisor served as a guide. The students who are participating in activities are appreciated with certifications and prizes. All required documents such as reports, photos and attendance of participating students are maintained with the signature of the event in-charge. The active participation of students which was evident through the gradual increase in number of participants in different activities made a positive improvement in students like personality development, communication skills, management skills, programming skills, etc. Problems Encountered and Resources required: • Initially the number of students who showed interest in joining the chapter was very few. • Students showed less interest in participating in the activities organized on weekends. • Organizing various

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

programs during working hours, sometimes has led to sacrificing the classwork.

https://phcet.ac.in/igac/igac-phcet/

#### 7.3 - Institutional Distinctiveness

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

Vidya Karmasu Kaushalam (Knowledge is Excellence at Work) - the motto of PHCET is the pivot on which the academic and social life of PHCET revolves. The quest, pursuit and practice of quality and excellence in PHCET is relentless and does not have a pause and has been ingrained in the DNA of PHCET since its inception in 2009. In a span of twelve years PHCET has been able to achieve a lot. However, the most impressive aspect is that it has been growing from strength to strength. The quality of a service is not determined by the service provider but by the receiver, the community, by public scrutiny. As has been stated before several times 'Building Quality Consciousness' has been an area of great concern and thrust for PHCET'. Also, quality gets defined into maturity in performance excellence in diverse ways. In order to ride the wave, one has to be in a perpetual state of flux accepting every challenge that comes one's way and not being afraid to be considered even lower than one's own high pedestal expectations. This has been the strength of PHCET and has helped it to grow from strength to strength with confidence. We cite two examples to prove the point. PHCET has been participating in various accreditations and worthwhile corporate challenges both statutory and voluntary. In 20019-20, Departments of Computer Engineering and Mechanical Engineering were reaccredited by the National Board of Accreditation. The safety and security of the stakeholders and workforce are of immense concern and also form a major aspect of the quality consciousness of this institution. Hence it is a matter of pride to record that PHCET is the winner of the 'First Best of the Work Place Safety Awards' in 2019 from the Bombay Chamber of Commerce and Industry

(BCCI). Perfecting one's craft and performance is a perpetual journey more so for an academic institution. Participating in worthwhile challenges, third party assessments of one's performance, etc., are methods by which one can stay on course in pursuit of excellence. The feedback and suggestions received from external evaluators are valuable sources for introspection and improvement. PHCET has understood the value of it and keeps looking for opportunities. One of these has been the participation in the Indian Merchants Chamber's prestigious Ramkrishna Bajaj National Quality Award (RBNQA). And PHCET is declared winner of the 'Performance Excellence Trophy' from Indian Merchants Chamber Ramkrishna Bajaj National Quality Award (RBNQA) in December 2019. Anticipating the future is one of the major functions of quality academic intuitions. So far PHCET has succeeded init. In view of the changing times and needs a manufacturing centre is started in January 2020 to design and manufacture Printed Circuit Boards (PCBs). This centre trains students to become employable and also become entrepreneurs. The recognition of PHCET by BCCI for 'Safety and Security at Work Place' and the 'Performance Excellence Trophy' from Indian Merchants Chamber Ramkrishna Bajaj National Quality Award (RBNQA) is proof for PHCET that it has been pursuing its

#### Provide the weblink of the institution

https://phcet.ac.in/

#### 8. Future Plans of Actions for Next Academic Year

The pandemic due to COVID 19 has forced faculty and students to work from home. The Institute has planned to strengthen the teaching learning related resources so that curriculum delivery and other processed will not get hampered. License to online meeting platforms like ZOOM, etc has been taken for conducting workshops and seminars with a large number of audiences. MoU with Google for support of IT infrastructure has helped faculty to operate effectively from google classroom and maintain all student records at a glance effectively. All study material like notes, assignments, question banks and solutions are made available with Dspace. Students can access it remotely from any location with login details given to them. This will certainly help to serve students better if lockdown and this pandemic situation continues in coming days. Required resources are planned and made available by the Institute. Procedures for permissions for research center for PhD in mechanical engineering are carried out. The related faculty approvals and other formalities are under process. Institute has planned tie ups with international learning platform like Edx in coming days so that students and faculty can take advantage of their resources by doing MOOCs of global acceptance. The training and placement office is working on identifying opportunities for Online Internships for students. Preparing students for placement drives in online is crucial tasks. The TP team is working on it. Faculty have planned for recording of lab sessions using on campus laboratory resources as the pandemic has forced all of us to work form home. These lab recordings will be made available to students using Dspace and Official MES You Tube Channel. IQAC team is working with formation and implementation of IIC and NISP teams and their initiatives. Various FDP and webinars are planned for faculty and students for startups, innovation and IPR. NSS unit is working on awareness on Safety and hygiene programs, vaccination awareness programs and other social issues faced by the community. Student council with faculty is working on helping students to remain focused in this pandemic environment by arranging various importance of health, stress management, and other motivational sessions.