



## YEARLY STATUS REPORT - 2020-2021

<b>Part A</b>	
<b>Data of the Institution</b>	
<b>1.Name of the Institution</b>	Bharatiya Vidya Bhavan's Sardar Patel College of Engineering
• Name of the Head of the institution	Dr. M. M. Murudi
• Designation	In-charge Principal
• Does the institution function from its own campus?	Yes
• Phone No. of the Principal	02226232192
• Alternate phone No.	02226289777
• Mobile No. (Principal)	9969259751
• Registered e-mail ID (Principal)	principal@spce.ac.in
• Address	Bhavans Campus, Munshi Nagar, Andheri - (w), Mumbai - 400058
• City/Town	Mumbai
• State/UT	Maharashtra
• Pin Code	400058
<b>2.Institutional status</b>	
• Autonomous Status (Provide the date of conferment of Autonomy)	23/06/2010
• Type of Institution	Co-education
• Location	Urban

• Financial Status	UGC 2f and 12(B)				
• Name of the IQAC Co-ordinator/Director	Dr. S. B. Rane				
• Phone No.	02226232192				
• Mobile No:	9967505051				
• IQAC e-mail ID	dean_acad@spce.ac.in				
<b>3. Website address (Web link of the AQAR (Previous Academic Year))</b>	<a href="http://www.spce.ac.in">http://www.spce.ac.in</a>				
<b>4. Was the Academic Calendar prepared for that year?</b>	Yes				
• if yes, whether it is uploaded in the Institutional website Web link:	<a href="https://www.spce.ac.in/Documents/Accreditation/AQAR/a-4%20brief%20academic%20calendars%202020-21.pdf">https://www.spce.ac.in/Documents/Accreditation/AQAR/a-4%20brief%20academic%20calendars%202020-21.pdf</a>				
<b>5. Accreditation Details</b>					
Cycle	Grade	CGPA	Year of Accreditation	Validity from	Validity to
Cycle 1	B	2.35	2021	07/09/2021	06/09/2026
<b>6. Date of Establishment of IQAC</b>			01/04/2012		
<b>7. Provide the list of Special Status conferred by Central and/or State Government on the Institution/Department/Faculty/School (UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC, etc.)?</b>					
Institution/ Department/Faculty/School	Scheme	Funding Agency	Year of Award with Duration	Amount	
TEQIP	TEQIP II	NPIU	01/04/2012	1247 LAKH	
TEQIP	TEQIP III	NPIU	01/04/2017	700 LAKH	
<b>8. Provide details regarding the composition of the IQAC:</b>					
• Upload the latest notification regarding the composition of the IQAC by the HEI	<a href="#">View File</a>				

<b>9.No. of IQAC meetings held during the year</b>	<b>3</b>	
<ul style="list-style-type: none"> <li>Were the minutes of IQAC meeting(s) and compliance to the decisions taken uploaded on the institutional website?</li> </ul>	<b>Yes</b>	
<ul style="list-style-type: none"> <li>If No, please upload the minutes of the meeting(s) and Action Taken Report</li> </ul>	No File Uploaded	
<b>10.Did IQAC receive funding from any funding agency to support its activities during the year?</b>	<b>Yes</b>	
<ul style="list-style-type: none"> <li>If yes, mention the amount</li> </ul>	<b>Rs. 133.47 Lakh from TEQIP-III</b>	
<b>11.Significant contributions made by IQAC during the current year (maximum five bullets)</b>		
Creation of plan for implementing the New Education Policy (NEP)		
Implementation of Examination Reforms		
MOU with Capgemini for alignment of curriculum to Industry 4.0 technologies		
<b>12.Plan of action chalked out by IQAC at the beginning of the academic year towards quality enhancement and the outcome achieved by the end of the academic year:</b>		

Plan of Action	Achievements/Outcomes
To promote curricular reforms	Curriculum reforms aligned with NEP and Industry 4.0 technologies, programs for slow and advanced learners, value added courses
To enhance teaching, learning and evaluation	Implementing project based learning, Use of ICT tools, online courses and online examinations, open book examination, induction programs for freshers
To boost research, innovations and extension	Implementation of Research Promotion Policy, receipt of research grants, start-up cell activities, IRG from testing and consultancy
To strengthen infrastructure and learning resources	Digitization of library resources, stronger IT infrastructure
To reinforce student support and progression	Provision of value added courses (technical and non-technical), training for competitive examination, collaboration with alumni
To provide good governance, leadership and management	Regular meetings by BOG, review of institute development plan, management of TEQIP-III funds for institute growth
To enrich institutional values and best practices	Promotion of green technologies in campus, rain water harvesting, disabled-friendly and barrier free environment
<b>13. Was the AQAR placed before the statutory body?</b>	Yes
<ul style="list-style-type: none"> <li>Name of the statutory body</li> </ul>	

Name of the statutory body	Date of meeting(s)
Member of Board of Governors and Academic mentor	24/12/2021
<b>14. Was the institutional data submitted to AISHE ?</b>	Yes
<ul style="list-style-type: none"> <li>Year</li> </ul>	
Year	Date of Submission
2020-2021	29/11/2021
<b>15. Multidisciplinary / interdisciplinary</b>	
<p>The HEI offers undergraduate and postgraduate programs. Each of the programs offers a choice to the students to choose open elective courses which have either multidisciplinary or interdisciplinary nature. The UG programs have provisions for Minor certification which enable students to learn skills from disciplines other than their major degree program. The capstone projects in the final year of the program are used by some students to tackle and solve multidisciplinary problems.</p>	
<b>16. Academic bank of credits (ABC):</b>	
<p>The HEI is not registered for the Academic Bank of Credits. However, students can earn prescribed credits toward their degree requirement after completing courses from NPTEL/SWAYAM courses. The HEI allows credit transfer for students from the HEIs approved by its governing body.</p>	
<b>17. Skill development:</b>	
<p>The curriculum of academic programs includes value-added technical and non-technical courses. These courses are meant to impart both relevant skills for the development of students as industry-ready engineers as well as socially responsible people. The HEI has a Center of Continuing Education (CCE) which coordinates and designs such courses. Some of the courses run during the current year are listed below.</p> <ul style="list-style-type: none"> <li>Continuous Learning &amp; Development Program on "Financial Literacy"</li> <li>Continuous Learning &amp; Development Program on "Integrated Self-</li> </ul>	

Management"

- Webinar on "Having an All-star LinkedIn Profile"
- Webinar on "Making an Impressive CV"
- Webinar on "Five Steps to U.S. Study: U.S. Higher Education System & Application Process"
- Webinar on "Looking after Your Mental Health during COVID-19 Lockdown"

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

The curriculum of programs includes two mandatory courses which integrate Indian knowledge into the curriculum. These mandatory courses are 'Indian Traditional Knowledge' and 'Constitution of India'.

The 'Indian Traditional Knowledge' course aims at imparting basic principles of thought process, reasoning, and inferencing. Sustainability is at the core of Indian Traditional knowledge systems connecting society and nature. The holistic lifestyle of yogic science and wisdom encapsulated in Sanskrit literature is discussed in the course which is also important in modern society.

The 'Constitution of India' course enables students to understand constitutional ethos and principles, and inculcate and pursue the values of civic life. The course reinforces the concepts of gender equality and human values which are the thematic backbone of the Indian constitution and culture.

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

The HEI has designed the curriculum for each of its academic programs with a focus on Outcome Based Education (OBE). HEI has defined Program Outcomes (POs), Program Specific Outcomes (PSOs) for each program, and Course Outcomes (COs) for each course. The POs define the capabilities the students are expected to achieve at the time of graduation. The PSOs define the additional outcomes offered by the HEI for each program; these are unique to each program and are framed based on competencies of faculty, regional needs, and inputs from alumni/employers. Since POs and PSOs are met through the attainment of COs of various courses of curriculum, COs for all courses are also accurately defined. The teaching, learning, and evaluation methods are selected to maximize the attainment of

outcomes.

The POs/PSOs/COs are displayed on the website and communicated to teachers and students through exhibits in classrooms and prominent locations in college. The faculty explains the outcomes expected from the students in the orientation classes/beginning lecture of every semester.

The POs, PSOs, and COs and their attainments are reviewed in the meetings of the Board of Studies and Academic Council at the beginning of every academic year and changes are made as appropriate.

#### 20.Distance education/online education:

The HEI has trained its faculty for effective online education. The laptops and digital writing pads are provided to all faculty members to facilitate the online mode of teaching.

In the current year, the lectures were conducted online over the Google Meet platform. Google Classroom (GC) is used as a learning management system (LMS). GC is used to post course material, assignments, quizzes, etc. GC is also used for the evaluation of laboratory work and tutorials.

### Extended Profile

#### 1.Programme

1.1 12

Number of programmes offered during the year:

File Description	Documents
Institutional Data in Prescribed Format	<a href="#">View File</a>

#### 2.Student

2.1 1132

Total number of students during the year:

File Description	Documents
Institutional data in Prescribed format	<a href="#">View File</a>

2.2 286

Number of outgoing / final year students during the year:

File Description	Documents
Institutional Data in Prescribed Format	<a href="#">View File</a>

2.3

1063

Number of students who appeared for the examinations conducted by the institution during the year:

File Description	Documents
Institutional Data in Prescribed Format	<a href="#">View File</a>

### 3.Academic

3.1

346

Number of courses in all programmes during the year:

File Description	Documents
Institutional Data in Prescribed Format	<a href="#">View File</a>

3.2

51

Number of full-time teachers during the year:



<b>Extended Profile</b>	
<b>1.Programme</b>	
1.1 Number of programmes offered during the year:	<b>12</b>
File Description	Documents
Institutional Data in Prescribed Format	<a href="#">View File</a>
<b>2.Student</b>	
2.1 Total number of students during the year:	<b>1132</b>
File Description	Documents
Institutional data in Prescribed format	<a href="#">View File</a>
2.2 Number of outgoing / final year students during the year:	<b>286</b>
File Description	Documents
Institutional Data in Prescribed Format	<a href="#">View File</a>
2.3 Number of students who appeared for the examinations conducted by the institution during the year:	<b>1063</b>
File Description	Documents
Institutional Data in Prescribed Format	<a href="#">View File</a>
<b>3.Academic</b>	
3.1 Number of courses in all programmes during the year:	<b>346</b>
File Description	Documents
Institutional Data in Prescribed Format	<a href="#">View File</a>

3.2	51
Number of full-time teachers during the year:	
File Description	Documents
Institutional Data in Prescribed Format	<a href="#">View File</a>
3.3	59
Number of sanctioned posts for the year:	
<b>4.Institution</b>	
4.1	587
Number of seats earmarked for reserved categories as per GOI/State Government during the year:	
4.2	26
Total number of Classrooms and Seminar halls	
4.3	427
Total number of computers on campus for academic purposes	
4.4	Rs. 169.94 Lakhs
Total expenditure, excluding salary, during the year (INR in Lakhs):	

## Part B

### CURRICULAR ASPECTS

#### 1.1 - Curriculum Design and Development

1.1.1 - Curricula developed and implemented have relevance to the local, national, regional and global developmental needs which are reflected in Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) of the various Programmes offered by the Institution.

To maintain relevance to the local, national, regional, and global developmental needs, the institute involves stakeholders from diverse backgrounds in curriculum development. The following three committees review the curriculum and its alignment with PO/PSO/CO before its implementation.

#### 1. Industry Consultation Committee (ICC): ICC comprising of

industry experts is formed for each domain. The inputs from the industry experts are considered while designing the curriculum, the outcome of which is Industry 4.0 related courses are included in the curriculum

2. Board of Studies (BoS): Each department has a separate BoS for UG and PG programs. BoS has members from industry, and reputed academic institutes along with department faculty and students' representatives.
3. Academic Council (AC): Academic Council is formed as per university guidelines for the approval of curriculum and rules related to academic processes.

The curriculum structure has following new features.

1. Mandatory courses of zero credit
2. Major/Minor certification for fast learners
3. Remedial classes and bridge courses for slow learners
4. Industry internship as a credit course
5. SWAYAM/NPTEL online courses can appear on students' grade sheet.
6. Professional/Open elective course groups
7. Value-added courses (zero credits) to gain of technical-skills and life-skills.

File Description	Documents
Upload additional information, if any	<a href="#">View File</a>
Link for additional information	Nil

**1.1.2 - Number of Programmes where syllabus revision was carried out during the year**

8

File Description	Documents
Minutes of relevant Academic Council/BOS meeting	<a href="#">View File</a>
Details of syllabus revision during the year	<a href="#">View File</a>
Any additional information	No File Uploaded

**1.1.3 - Number of courses focusing on employability/entrepreneurship/ skill development offered by the Institution during the year**

145

File Description	Documents
Curriculum / Syllabus of such courses	<a href="#">View File</a>
Minutes of the Boards of Studies/ Academic Council meetings with approval for these courses	<a href="#">View File</a>
MoUs with relevant organizations for these courses, if any	<a href="#">View File</a>
Any additional information	No File Uploaded

## 1.2 - Academic Flexibility

### 1.2.1 - Number of new courses introduced across all programmes offered during the year

4

File Description	Documents
Minutes of relevant Academic Council/BoS meetings	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>
Institutional data in prescribed format (Data Template)	<a href="#">View File</a>

### 1.2.2 - Number of Programmes offered through Choice Based Credit System (CBCS)/Elective Course System

8

File Description	Documents
Minutes of relevant Academic Council/BoS meetings	<a href="#">View File</a>
Any additional information	No File Uploaded
List of Add on /Certificate programs (Data Template)	<a href="#">View File</a>

## 1.3 - Curriculum Enrichment

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

**(a) Environment and Sustainability**

The curriculum of Mechanical Engineering department deals with health, safety & environmental norms for industrial applications and Green Manufacturing. The curriculum of Civil Engineering Department takes into account the problems related with environment, water quality, air quality, pollution and includes topic on green ambience. The curriculum of Electrical Engineering Department deals with utilization of electrical energy efficiently & environmental impact of electric installations.

**(b) Gender, Human Values and Professional Ethics**

The curriculum of programs includes two mandatory courses which integrate Gender, Human Values and Professional Ethics into the curriculum. These mandatory courses are 'Indian Traditional Knowledge' and 'Constitution of India'.

The 'Constitution of India' course enables students to understand constitutional ethos and principles, and inculcate and pursue the values of civic life. The course reinforces the concepts of gender equality and human values which are the thematic backbone of Indian constitution.

The 'Indian Traditional Knowledge' course aims at imparting basic principles of thought process, reasoning and inferencing. Sustainability is at the core of Indian Traditional knowledge systems connecting society and nature. Holistic life style of yogic science and wisdom capsules in Sanskrit literature are also important in modern society.

File Description	Documents
Upload the list and description of the courses which address issues related to Gender, Environment and Sustainability, Human Values and Professional Ethics in the curriculum	<a href="#">View File</a>
Any additional information	No File Uploaded

**1.3.2 - Number of value-added courses for imparting transferable and life skills offered during the year**

2

File Description	Documents
List of value-added courses	<a href="#">View File</a>
Brochure or any other document relating to value-added courses	<a href="#">View File</a>
Any additional information	No File Uploaded

### 1.3.3 - Number of students enrolled in the courses under 1.3.2 above

100

File Description	Documents
List of students enrolled	<a href="#">View File</a>
Any additional information	No File Uploaded

### 1.3.4 - Number of students undertaking field work/projects/ internships / student projects

286

File Description	Documents
List of programmes and number of students undertaking field projects / internships / student projects	<a href="#">View File</a>
Any additional information	No File Uploaded

## 1.4 - Feedback System

**1.4.1 - Structured feedback and review of the syllabus (semester-wise / year-wise) is obtained from 1) Students 2) Teachers 3) Employers and 4) Alumni** A. All 4 of the above

File Description	Documents
Provide the URL for stakeholders' feedback report	Nil
Upload the Action Taken Report of the feedback as recorded by the Governing Council / Syndicate / Board of Management	<a href="#">View File</a>
Any additional information	No File Uploaded

### 1.4.2 - The feedback system of the Institution comprises the following

### B. Feedback collected, analysed and action taken

File Description	Documents
Provide URL for stakeholders' feedback report	Nil
Any additional information	<a href="#">View File</a>

## TEACHING-LEARNING AND EVALUATION

### 2.1 - Student Enrollment and Profile

#### 2.1.1 - Enrolment of Students

##### 2.1.1.1 - Number of students admitted (year-wise) during the year

1063

File Description	Documents
Any additional information	<a href="#">View File</a>
Institutional data in prescribed format	<a href="#">View File</a>

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

570

File Description	Documents
Any additional information	<a href="#">View File</a>
Number of seats filled against seats reserved (Data Template)	<a href="#">View File</a>

### 2.2 - Catering to Student Diversity

2.2.1 - The institution assesses students' learning levels and organises special programmes for both slow and advanced learners.

#### Assessment of students' learning levels:

The HEI has a very good mechanism for continuous evaluation and monitoring the progress of students. The syllabus is well balanced with theory, laboratory and tutorial courses. Theory courses are evaluated by conducting two in semester tests and end semester examination. The laboratory experiments and tutorials are

evaluated based on rubrics defined. Most of the laboratory courses require students to complete mini projects and presentations in subject domain, on technical paper during tutorials. The final year project (one year) is evaluated in stages : topic selection, literature survey, implementation. Faculty conducts quizzes, discussions for term work evaluation.

For slow learners:

1. Bridge Courses :
2. Remedial Coaching :
3. Value Added Courses or workshops :

For advanced learners:

1. Value Added Courses :
2. Online courses:

The study material provided by faculty, guest lectures, industry visits etc. help for better understanding of the course.

\*Detailing is uploaded

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	<a href="https://www.spce.ac.in/UG.php">https://www.spce.ac.in/UG.php</a>

### 2.2.2 - Student – Teacher (full-time) ratio

Year	Number of Students	Number of Teachers
10/02/2022	1132	51

File Description	Documents
Upload any additional information	No File Uploaded

### 2.3 - Teaching- Learning Process

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

The students admitted experiences enhancing learning through the



following components from very first day of entry

1. Induction Program
2. Curriculum
3. Students' Festivals: Festivals include cultural as well as technical
4. Students' Clubs: Various students club such as ROBOCON, WAVE, Speaker's club, SPCE racing along with department students' associations namely EESA, CESA, MESA, TESA are active throughout the year.
5. Start up cell
6. Training and Placement Office TPO
7. Internship: As institute strictly follows academic calendar, students plan and complete internship during vacation slot. The internship gives hands on experience to the students  
\*Detailed information with links in uploaded file

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Link for additional Information	Nil

2.3.2 - Teachers use ICT-enabled tools including online resources for effective teaching and learning

All classrooms are provided with digital boards. Teachers are trained to use the same due to which the teaching-learning process has become interesting and interactive.

In the year 2020-2021 the classes were conducted online. The laptops and digital writing pads were provided to all faculty members. The lectures were conducted on google meet.

The google classrooms were used to post course material, assignments, quizzes, etc. Google Classroom is also used for the evaluation of laboratory work and tutorials.

File Description	Documents
Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process	Nil
Upload any additional information	<a href="#">View File</a>

### 2.3.3 - Ratio of students to mentor for academic and other related issues

#### 2.3.3.1 - Number of mentors

51

File Description	Documents
Upload year-wise number of students enrolled and full-time teachers on roll	<a href="#">View File</a>
Circulars with regard to assigning mentors to mentees	<a href="#">View File</a>

### 2.3.4 - Preparation and adherence to Academic Calendar and Teaching Plans by the institution

#### Academic Calendar

The HEI prepares the academic calendar for UG and PG separately before the beginning of every academic year and is displayed on the department notice boards as well as on the college website. Academic calendar mentions the days of delivery of academic instruction, schedule for conduct of in semester and end-semester examinations, assessment stages, declaration of results, other institute level events (co-curricular and extra-curricular) and the holidays. In the year 2020-2021 the separate calendar is prepared for lateral entry (direct second year students), First Year and PG students due to delay in admission process. The separate examination, library and placement calendars are prepared detailing the related activities.

#### Teaching Plans

The curricular is designed with the help of Industry Consultation committee and approved by Board of Studies and Academic Council. The course objectives and outcomes are defined for each course. Theory courses are divided into seven modules and each module is

assigned with number of hours required to teach the same. The list of experiments and the time required are also included in course content of laboratory course. Based on this individual teacher prepares lecture plan, mode of teaching used for particular topic, assignments etc. In the very first lecture the students are explained about course objectives, outcomes, contentment, evaluation etc. All faculty members maintain and update course files which are useful for same faculty delivering the course or new faculty to prepare his/ her teaching plan.

File Description	Documents
Upload the Academic Calendar and Teaching Plans during the year	<a href="#">View File</a>

## 2.4 - Teacher Profile and Quality

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

51

File Description	Documents
Year-wise full-time teachers and sanctioned posts for the year	<a href="#">View File</a>
List of the faculty members authenticated by the Head of HEI	No File Uploaded
Any additional information	<a href="#">View File</a>

### 2.4.2 - Number of full-time teachers with PhD/ D.M. / M.Ch. / D.N.B Super-Specialty / DSc / DLitt during the year

28

File Description	Documents
List of number of full-time teachers with PhD./ D.M. / M.Ch. / D.N.B Super-Specialty / D.Sc. / D.Litt. and number of full-time teachers for 5 years	<a href="#">View File</a>
Any additional information	No File Uploaded

### 2.4.3 - Total teaching experience of full-time teachers in the same institution: (Full-time teachers' total teaching experience in the current institution)

836

File Description	Documents
List of teachers including their PAN, designation, Department and details of their experience	<a href="#">View File</a>
Any additional information	No File Uploaded

## 2.5 - Evaluation Process and Reforms

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

25

File Description	Documents
List of Programmes and the date of last semester-end / year-end examinations and the date of declaration of result	<a href="#">View File</a>
Any additional information	No File Uploaded

### 2.5.2 - Number of students' complaints/grievances against evaluation against the total number who appeared in the examinations during the year

0

File Description	Documents
Upload the number of complaints and total number of students who appeared for exams during the year	<a href="#">View File</a>
Upload any additional information	No File Uploaded

2.5.3 - IT integration and reforms in the examination procedures and processes including Continuous Internal Assessment (CIA) have brought in considerable improvement in the Examination Management System (EMS) of the Institution

#### Response:

The college has an integrated examination platform, that is, Examination Section office. All examinations are conducted centrally by Examination Section. Examination section has been housed in a secure room with restricted access. The civil

infrastructure of the Examination section consists of Strong room, Office cabin for controller of examination, assessment hall for assessing answer-books and working space for supporting staff. Conventional and Wi-Fi net connectivity, adequate number of computer systems and printers as well as a photocopying machine

### Examination Reforms

The examination of SPCE functions as per the directions issued by academic council and departments. The followings are the important reforms in the examination systems which are further described in the attached document.

- Assessed answer books are shown to each student
- Exam. calendar and its publication on the website
- Continuous evaluation of the student
- Grading is decided based on mixed absolute and relative grading system.
- To avoid duplication of the grade sheets various security features are introduced in the grade sheets.
- Audit of the examination process for continuous improvements

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional Information	Nil

## 2.6 - Student Performance and Learning Outcomes

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

The college has defined Program Outcomes (POs), Program Specific Outcomes (PSOs) for each program and Course Outcomes for each course. These are displayed on website and communicated to teachers and students through display at classrooms and prominent locations of college. The POs define the capabilities the students of a program are expected to achieve at the time of graduation. The PSOs define the additional outcomes offered by the college for each program; these are unique to each program and are framed based on competencies of faculty, regional needs and inputs from alumni/employers. Since POs and PSOs are met through the attainment of course outcomes (COs) of various courses of curriculum, COs for all courses are also accurately defined.

POs, PSOs and COs are made available to respective stakeholders by following means. The POs, PSOs and COs are reviewed in the meetings of Board of Studies and Academic Council at the beginning of every academic year. The faculty explains the outcomes expected from the students in the orientation classes / beginning lecture of every semester. The course contents which are accessible to students, contain COs for each course.

<https://www.spce.ac.in/civil.php>

<https://www.spce.ac.in/mechanical.php>

<https://www.spce.ac.in/electrical.php>

<https://www.spce.ac.in/UG.php>

<https://www.spce.ac.in/PG.php>

File Description	Documents
Upload COs for all courses (exemplars from the Glossary)	<a href="#">View File</a>
Upload any additional information	No File Uploaded
Link for additional Information	Nil

### 2.6.2 - Attainment of Programme Outcomes and Course Outcomes as evaluated by the institution

All direct and indirect assessment tools are used by all faculty members of all programs throughout the semester. The attainment of course outcomes is computed by all faculty members for their respective courses through direct assessment tools with a weightage of 80% and Course Exit Survey with a weightage of 20%. The Program Coordinator of each program collects this information from Coordinators and computes the attainment of POs/PSOs. The details of this process is given in the attached document.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional Information	Nil

### 2.6.3 - Pass Percentage of students

### 2.6.3.1 - Total number of final year students who passed in the examinations conducted by Institution

214

File Description	Documents
Upload list of Programmes and number of students appear for and passed in the final year examinations	<a href="#">View File</a>
Upload any additional information	No File Uploaded
Paste link for the annual report	Nil

## 2.7 - Student Satisfaction Survey

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

<https://www.spce.ac.in/Documents/Accreditation/AQAR/2.7.1%20Student%20Satisfaction%20Survey%20report%202021%20graduates.pdf>

## RESEARCH, INNOVATIONS AND EXTENSION

### 3.1 - Promotion of Research and Facilities

3.1.1 - The institution's research facilities are frequently updated and there is a well-defined policy for promotion of research which is uploaded on the institutional website and implemented

The college continuously upgrades and renews its research infrastructure for strengthening its research facilities. Department-wise budget is allocated for laboratory development and regular laboratory updating is carried out. Recently, many of the laboratories are modernized under the TEQIP project. The new laboratories such as renewable energy, HV engineering, etc. are developed and new experiments are set up. The necessary simulation software such as MATLAB, ETAP, ANSYS, and FEM are available and used in laboratory assignments.

The research policy of the institute is available at [https://www.spce.ac.in/Documents/RnD/promotional%20policy/Research%20Promotion%20Policy\\_SPCE\\_v11.pdf](https://www.spce.ac.in/Documents/RnD/promotional%20policy/Research%20Promotion%20Policy_SPCE_v11.pdf)

File Description	Documents
Upload the Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption	No File Uploaded
Provide URL of policy document on promotion of research uploaded on the website	<a href="https://www.spce.ac.in/Documents/RnD/promotional%20policy/Research%20Promotion%20Policy_SPCE_v11.pdf">https://www.spce.ac.in/Documents/RnD/promotional%20policy/Research%20Promotion%20Policy_SPCE_v11.pdf</a>
Any additional information	<a href="#">View File</a>

### 3.1.2 - The institution provides seed money to its teachers for research

#### 3.1.2.1 - Seed money provided by the institution to its teachers for research during the year (INR in lakhs)

1

File Description	Documents
Minutes of the relevant bodies of the institution regarding seed money	No File Uploaded
Budget and expenditure statements signed by the Finance Officer indicating seed money provided and utilized	No File Uploaded
List of teachers receiving grant and details of grant received	No File Uploaded
Any additional information	No File Uploaded

### 3.1.3 - Number of teachers who were awarded national / international fellowship(s) for advanced studies/research during the year

0

File Description	Documents
e-copies of the award letters of the teachers	No File Uploaded
List of teachers and details of their international fellowship(s)	No File Uploaded
Any additional information	No File Uploaded



### 3.2 - Resource Mobilization for Research

#### 3.2.1 - Grants received from Government and Non-Governmental agencies for research projects, endowments, Chairs during the year (INR in Lakhs)

6.15

File Description	Documents
e-copies of the grant award letters for research projects sponsored by non-governmental agencies/organizations	<a href="#">View File</a>
List of projects and grant details	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>

#### 3.2.2 - Number of teachers having research projects during the year

7

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional Information	<a href="https://www.spce.ac.in/teqip_new_1.php">https://www.spce.ac.in/teqip_new_1.php</a>
List of research projects during the year	<a href="#">View File</a>

#### 3.2.3 - Number of teachers recognised as research guides

16

File Description	Documents
Upload copies of the letter of the university recognizing teachers as research guides	<a href="#">View File</a>
Institutional data in Prescribed format	<a href="#">View File</a>

#### 3.2.4 - Number of departments having research projects funded by Government and Non-Government agencies during the year

2

File Description	Documents
Supporting document from Funding Agencies	<a href="#">View File</a>
Paste link to funding agencies' website	<a href="http://www.npiu.nic.in/teqip3twinnedinstitutions.html">http://www.npiu.nic.in/teqip3twinnedinstitutions.html</a>
Any additional information	<a href="#">View File</a>

### 3.3 - Innovation Ecosystem

3.3.1 - Institution has created an ecosystem for innovations and creation and transfer of knowledge supported by dedicated centres for research, entrepreneurship, community orientation, incubation, etc.

SPCE Start-Up Cell was established in January 2018 to develop a vibrant and ideal entrepreneurial ecosystem in the institute. The main objective of this cell is to build entrepreneurial culture, support student innovations, identify the entrepreneurial potential of students and transform them into start-up entrepreneurs.

The institute is an active participant in the UMA and UBA through problem solutions for Rural populations. The institute is focusing on field public-oriented problems by analyzing various day-to-day social and developmental problems in the state of Maharashtra with active participation by faculty and UG/PG/PhD. students. (For example, rural sanitation, toilets, drainage management, drinking water, road development, evaluation and reinforcement of roads, water conservation, fuel and energy, health, drought, etc.).

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	<a href="https://www.spce.ac.in/SPCE%20Start%20Up%20Cell.php">https://www.spce.ac.in/SPCE%20Start%20Up%20Cell.php</a>

### 3.3.2 - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR), Entrepreneurship and Skill Development during the year

3

File Description	Documents
Report of the events	<a href="#">View File</a>
List of workshops/seminars conducted during the year	<a href="#">View File</a>
Any additional information	No File Uploaded

### 3.4 - Research Publications and Awards

**3.4.1 - The Institution ensures implementation of its Code of Ethics for Research uploaded in the website through the following: Research Advisory Committee Ethics Committee Inclusion of Research Ethics in the research methodology course work Plagiarism check through authenticated software**

**B. Any 3 of the above**

File Description	Documents
Code of Ethics for Research, Research Advisory Committee and Ethics Committee constitution and list of members of these committees, software used for plagiarism check	<a href="#">View File</a>
Any additional information	No File Uploaded

**3.4.2 - Number of PhD candidates registered per teacher (as per the data given with regard to recognized PhD guides/ supervisors provided in Metric No. 3.2.3) during the year**

**3.4.2.1 - Number of PhD students registered during the year**

19

File Description	Documents
URL to the research page on HEI website	<a href="https://www.spce.ac.in/rnd_1.php">https://www.spce.ac.in/rnd_1.php</a>
List of PhD scholars and details like name of the guide, title of thesis, and year of registration	<a href="#">View File</a>
Any additional information	No File Uploaded

**3.4.3 - Number of research papers per teacher in CARE Journals notified on UGC website during the year**

## 0.78

File Description	Documents
List of research papers by title, author, department, and year of publication	<a href="#">View File</a>
Any additional information	No File Uploaded

### 3.4.4 - Number of books and chapters in edited volumes / books published per teacher during the year

## 0.32

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	Nil

### 3.4.5 - Bibliometrics of the publications during the year based on average Citation Index in Scopus/ Web of Science/PubMed

#### 3.4.5.1 - Total number of Citations in Scopus during the year

182

File Description	Documents
Any additional information	No File Uploaded
Bibliometrics of the publications during the year	<a href="#">View File</a>

### 3.4.6 - Bibliometrics of the publications during the year based on Scopus/ Web of Science – h-Index of the University

#### 3.4.6.1 - h-index of Scopus during the year

23

File Description	Documents
Bibliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	<a href="#">View File</a>
Any additional information	No File Uploaded

### 3.5 - Consultancy

#### 3.5.1 - Revenue generated from consultancy and corporate training during the year (INR in lakhs)

59.134

File Description	Documents
Audited statements of accounts indicating the revenue generated through consultancy and corporate training	<a href="#">View File</a>
List of consultants and revenue generated by them	<a href="#">View File</a>
Any additional information	No File Uploaded

#### 3.5.2 - Total amount spent on developing facilities, training teachers and clerical/project staff for undertaking consultancy during the year

0

File Description	Documents
Audited statements of accounts indicating the expenditure incurred on developing facilities and training teachers and staff for undertaking consultancy	No File Uploaded
List of training programmes, teachers and staff trained for undertaking consultancy	No File Uploaded
List of facilities and staff available for undertaking consultancy	No File Uploaded
Any additional information	No File Uploaded

### 3.6 - Extension Activities

3.6.1 - Extension activities carried out in the neighbourhood sensitising students to social issues for their holistic development, and the impact thereof during the year

Sardar Patel College of Engineering Andheri (West), Mumbai is an active participant in the Unnat Maharashtra Abhiyan (UMA) and Unnat Bharat Abhiyan (UBA) through problem solutions for rural populations. SPCE Mumbai is focusing on field public-oriented problems by analyzing various day-to-day social and developmental

problems in the state of Maharashtra with active participation by faculty and UG/PG/Ph.D. students. (For example, rural sanitation, toilets, drainage management, drinking water, road development, evaluation and reinforcement of roads, water conservation, fuel and energy, health, drought, etc.).

The institute has started a new course Ubuntu for experiential learning to students about social issues. "Ubuntu" is a Nguni Bantu term meaning "humanity". It is often used in a more philosophical sense to mean "the belief in a universal bond of sharing that connects all humanity; namely the underprivileged children from schools as well as the Engineering students who mentor these children. The objective of the course is to explore experiencing the joy of giving and develop a life of being a contributor as an integral part of one universe. The course aims to give experiential learning to the students by sending them to schools to help underprivileged children learn in the selected thematic areas.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	Nil

### 3.6.2 - Number of awards and recognition received by the Institution, its teachers and students for extension activities from Government / Government-recognised bodies during the year

0

File Description	Documents
Number of awards for extension activities in during the year	No File Uploaded
e-copy of the award letters	No File Uploaded
Any additional information	No File Uploaded

### 3.6.3 - Number of extension and outreach programmes conducted by the institution through NSS/NCC/Red Cross/YRC, etc. during the year (including Government-initiated programmes such as Swachh Bharat, AIDS Awareness, and Gender Sensitization and those organised in collaboration with industry, community and NGOs)

0.0

File Description	Documents
Reports of the events organized	No File Uploaded
Any additional information	No File Uploaded

### 3.6.4 - Number of students participating in extension activities listed in 3.6.3 during the year

0.0

File Description	Documents
Reports of the events	No File Uploaded
Any additional information	No File Uploaded

## 3.7 - Collaboration

### 3.7.1 - Number of collaborative activities during the year for research/ faculty exchange/ student exchange/ internship/ on-the-job training/ project work

16

File Description	Documents
Copies of documents highlighting collaboration	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>

### 3.7.2 - Number of functional MoUs with institutions of national and/or international importance, other universities, industries, corporate houses, etc. during the year (only functional MoUs with ongoing activities to be considered)

3

File Description	Documents
e-copies of the MoUs with institution/ industry/ corporate house	<a href="#">View File</a>
Details of functional MoUs with institutions of national, international importance, other institutions etc. during the year	<a href="#">View File</a>
Any additional information	No File Uploaded

## INFRASTRUCTURE AND LEARNING RESOURCES

### 4.1 - Physical Facilities

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

The college maintains a policy for an appropriate teaching and learning environment. Classrooms are equipped with Smartboards. The premises are wifi enabled. e-learning classrooms are developed in the library. Special Purpose CNC lab, NDT lab, and artificial intelligence laboratory have been developed to improve employability. Renewable energy lab, Robotics, and embedded system lab have been developed. Switchgear lab and Power system Lab are equipped with a generator motor and WANS unit respectively. A 24X7 reading room facility is given in the library. Central computing facilities and research labs are well equipped with the requisite software to carry out research activities. The seminar hall and conference hall are designed to conduct industry expert sessions, seminars, conclaves, etc. for professional development. Central mechanical workshop facilities are available to carry out the fabrication activities for the completion of projects/devices needed by the students and the ROBOCON.SPCE racing, and Wave (Aerodynamic Modelling) teams.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	Nil

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

SPCE believes in the all-around development of students. Sports not only build better athletes but also better people with a team spirit. SPCE has taken the initiative to start its Sports Club, SPIKE, to ensure the student's all-around development. SPIRIT, the annual sports fest of SPCE, Andheri is conducted in the month of February wherein various sports are played by students participating from various colleges all over Mumbai. The institute also has a course on stress management through Yoga for PG students where sessions are taken by Yoga experts. Institute organizes yoga sessions in the induction program. Institute is part of Bhavan's Campus, Andheri where the organization -Yoga Bharati conducts yoga scientifically for better health. Institute promotes cultural activities through a power-packed SPACE Annual Cultural Festival. Competitions are organized in various aspects of culture and students from other institutions also participate



in the same. The institution has a speakers club, debating society, and magazine for developing the relevant talent in the students. The Bhavan's Campus has a Nature Park, Adventure Park, Playgrounds, Volley Ball Court, lakefront quipped with joggers track, and benches all of which are available for students to energize and refresh themselves.

File Description	Documents
Geotagged pictures	<a href="#">View File</a>
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

#### 4.1.3 - Number of classrooms and seminar halls with ICT-enabled facilities

26

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	<a href="#">View File</a>

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

155.80

File Description	Documents
Upload audited utilization statements	<a href="#">View File</a>
Details of Expenditure, excluding salary, during the years	<a href="#">View File</a>
Any additional information	No File Uploaded

## 4.2 - Library as a Learning Resource

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

Name of the ILMS software

Nature of automation (fully or partially)

Version

Year of automation

Software for Library Management System (SLIM)

Fully automated

1.7.1 (iSLIM)

1996 (Upgraded to web version in 2020)

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	Nil

**4.2.2 - Institution has access to the following:** A. Any 4 or more of the above  
**e-journals e-ShodhSindhu Shodhganga**  
**Membership e-books Databases Remote**  
**access to e-resources**

File Description	Documents
Details of subscriptions like e-journals, e-books, e-ShodhSindhu, Shodhganga membership	<a href="#">View File</a>
Upload any additional information	No File Uploaded

**4.2.3 - Expenditure on purchase of books/ e-books and subscription to journals/e-journals during the year (INR in lakhs)**

11.56

File Description	Documents
Audited statements of accounts	<a href="#">View File</a>
Any additional information	No File Uploaded
Details of annual expenditure for purchase of books/e-books and journals/e- journals during the year (Data Template)	<a href="#">View File</a>

#### 4.2.4 - Usage of library by teachers and students (footfalls and login data for online access)

##### 4.2.4.1 - Number of teachers and students using the library per day during the year

0.33

File Description	Documents
Upload details of library usage by teachers and students	<a href="#">View File</a>
Any additional information	No File Uploaded

#### 4.3 - IT Infrastructure

4.3.1 - Institution has an IT policy covering Wi-Fi, cyber security, etc. and has allocated budget for updating its IT facilities

##### IT FACILITIES

- Website: [www.spce.ac.in](http://www.spce.ac.in).
- Mail Server and Client: All the faculty members, staff, and students are given e-mail ID on spce.ac.in domain
- Internet: 100 MBPS Internet bandwidth through a dedicated Leased Line. This internet is available to students even beyond office hours.
- DSPACE (Digital Repository): Important documents are hosted.
- NPTEL Server: The Institute has dedicated NPTEL Server and the NPTEL Videos are hosted.
- Software Packages: Various technical softwares such as MATLAB, Simulink, CATIA, Ansys, AutoCAD, MS Office Suite, project management, etc.
- Computer, Laptop, Printer, Projector: There are more than

500 High End Desktop PCs available. All the faculty members are provided with a digital writing pad, printer and a personal desktop as well as laptop. All the classrooms are equipped with Digital Boards and LCD Projectors.

- **Wi-Fi facility:**The entire campus including hostel is Wi-Fi enabled with more than 47 WiFi access points.
- **LAN:** A gigabyte LAN with fibre optics backbone having more than 500 nodes.
- **CCTV Surveillance:** Implemented campus wide CCTV Surveillance system for safety and security.
- **Biometric Attendance System:**An iris based biometric attendance system for faculty/staff.
- **IT Infrastructure Committee:** In order to manage this IT Infrastructure, institute has also constituted an IT Infrastructure Management Committee.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	Nil

**4.3.2 - Student - Computer ratio**

Number of Students	Number of Computers
868	427

File Description	Documents
Upload any additional information	<a href="#">View File</a>

**4.3.3 - Bandwidth of internet connection in the Institution and the number of students on campus**      A. 50 Mbps

File Description	Documents
Details of bandwidth available in the Institution	<a href="#">View File</a>
Upload any additional information	No File Uploaded

**4.3.4 - Institution has facilities for e-content development:** **E. None of the above**  
**Facilities available for e-content development**  
**Media Centre**  
**Audio-Visual Centre**  
**Lecture Capturing System (LCS)**  
**Mixing equipments and software for editing**

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil
List of facilities for e-content development (Data Template)	No File Uploaded

#### 4.4 - Maintenance of Campus Infrastructure

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

**63.44**

File Description	Documents
Audited statements of accounts	<a href="#">View File</a>
Upload any additional information	No File Uploaded

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

The institute has well-established systems and procedures for maintaining and utilizing physical, academic, and support facilities. These are described in the maintenance manual attached with this report. Building and Infrastructure committee plays a vital role in maintaining the infrastructure of the institute. A review of the Building and Infrastructure committee is done every week for resolving the various issues.

It is common practice to prepare and submit budget proposals for equipment procurement and departmental refurbishment by the individual department every year. The proposals are scrutinized and funds are sanctioned for the subsequent year for the optimal utilization of funds. IT infrastructure committee comprising the system administrator maintains the website and all ICT-based systems on premises. The housekeeping services are provided to ensure cleanliness and sanitation across all classrooms, laboratories, and campus premises. The central facilities are common areas for all the institutional components and are organized, developed, and maintained by institute-level building planning and maintenance cells.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	Nil

## STUDENT SUPPORT AND PROGRESSION

### 5.1 - Student Support

#### 5.1.1 - Number of students benefitted by scholarships and freeships provided by the Government during the year

464

File Description	Documents
Upload self-attested letters with the list of students receiving scholarships	No File Uploaded
Upload any additional information	<a href="#">View File</a>

#### 5.1.2 - Number of students benefitted by scholarships and freeships provided by the institution and non-government agencies during the year

0

File Description	Documents
Upload any additional information	No File Uploaded
Institutional data in prescribed format	No File Uploaded

**5.1.3 - The following Capacity Development and Skill Enhancement activities are organised for improving students' capabilities Soft Skills Language and Communication Skills Life Skills (Yoga, Physical fitness, Health and Hygiene) Awareness of Trends in Technology**

**B. Any 3 of the above**

File Description	Documents
Link to Institutional website	<a href="https://www.spce.ac.in/CCE.php">https://www.spce.ac.in/CCE.php</a>
Details of capability development and schemes	<a href="#">View File</a>
Any additional information	No File Uploaded

**5.1.4 - Number of students benefitted from guidance/coaching for competitive examinations and career counselling offered by the institution during the year**

**180**

File Description	Documents
Any additional information	No File Uploaded
Number of students benefitted by guidance for competitive examinations and career counseling during the year (Data Template)	<a href="#">View File</a>

**5.1.5 - The institution adopts the following mechanism for redressal of students' grievances, including sexual harassment and ragging: Implementation of guidelines of statutory/regulatory bodies Creating awareness and implementation of policies with zero tolerance Mechanism for submission of online/offline students' grievances Timely redressal of grievances through appropriate committees**

**A. All of the above**

File Description	Documents
Minutes of the meetings of students' grievance redressal committee, prevention of sexual harassment committee and Anti-ragging committee	No File Uploaded
Details of student grievances including sexual harassment and ragging cases	No File Uploaded
Upload any additional information	No File Uploaded

## 5.2 - Student Progression

### 5.2.1 - Number of outgoing students who got placement during the year

92

File Description	Documents
Self-attested list of students placed	<a href="#">View File</a>
Upload any additional information	No File Uploaded

### 5.2.2 - Number of outgoing students progressing to higher education

32

File Description	Documents
Upload supporting data for students/alumni	No File Uploaded
Details of students who went for higher education	<a href="#">View File</a>
Any additional information	No File Uploaded

### 5.2.3 - Number of students qualifying in state/ national/ international level examinations during the year

5.2.3.1 - Number of students who qualified in state/ national/ international examinations (e.g.: IIT-JAM/NET/SET/JRF/ GATE /GMAT /CAT/ GRE/ TOEFL/Civil Services/State government examinations) during the year

72



File Description	Documents
Upload supporting data for students/alumni	<a href="#">View File</a>
Any additional information	No File Uploaded

### 5.3 - Student Participation and Activities

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

0

File Description	Documents
e-copies of award letters and certificates	No File Uploaded
Any additional information	No File Uploaded

#### 5.3.2 - Presence of an active Student Council and representation of students in academic and administrative bodies/committees of the institution

The student council is very active and a summary of its activities are presented as an attachment to this report. The student members are present in academic bodies such as Board of Studies and Academic Council.

Many guest lectures, workshops, and training programs are organized for students with the help of industry experts, alumni, and academic institutes (e Cell IITB). Industry visits are arranged for students. Sardar Patel Automation and Robotics K'lub (SPARK) represents working in designing and fabricating Robots for students.

The grooming of students for participation in various national and regional events is nurtured through different student bodies such as Student Council, CESA/EESA/MESA/TESA, IIIIE-SPCE Student Chapter, Robocon Club, SPCE Racing team in collaboration with SAEIndia, SPCE Wave club, ISHRAE chapter, SPCE Start-Up Cell, Speakers Club, Magazine Committee, Photography Magazine team and some more.

The students also organize the annual cultural event SPACE. Students participate in the technical festival SPECTRA which involves various competitions testing technical knowledge. The SPCE racing, WAVE, and ROBOCON teams enable the students to apply their

learning and participate in various national-level completions. Their efforts are reflected in the position they secure in such competitions.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	<a href="https://www.spce.ac.in/StudentsCouncil.php">https://www.spce.ac.in/StudentsCouncil.php</a>

### 5.3.3 - Number of sports and cultural events / competitions organised by the institution

8

File Description	Documents
Report of the event	<a href="#">View File</a>
List of sports and cultural events / competitions organised per year	<a href="#">View File</a>
Upload any additional information	No File Uploaded

### 5.4 - Alumni Engagement

5.4.1 - The Alumni Association and its Chapters (registered and functional) contribute significantly to the development of the institution through financial and other support services

SPCE Alumni committee is working to create a platform to interact with SPCE alumni. They are connected to the institute and hence the networking between the students and alumni is possible. To interact with the alumni, the committee is formed consisting of SPCE teachers and alumni members.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	<a href="https://www.spce.ac.in/alumni.php">https://www.spce.ac.in/alumni.php</a>

5.4.2 - Alumni's financial contribution during the year

E. <2 Lakhs

File Description	Documents
Upload any additional information	No File Uploaded

## GOVERNANCE, LEADERSHIP AND MANAGEMENT

### 6.1 - Institutional Vision and Leadership

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

The vision of HEI:

SARDAR PATEL COLLEGE OF ENGINEERING (SPCE) ASPIRES TO BE AN INSTITUTION OF NATIONAL REPUTE THAT WILL CREATE PROFESSIONALS WITH COMPETENCE AND MOTIVATE RESEARCH FOR THE PROGRESS OF THE NATION.

The mission of HEI

To impart quality education through time relevant curriculum in academic programs.

To enhance career opportunities for students through industry-institute interaction & value-added courses.

To promote excellence by encouraging innovative ideas and lateral thinking.

To inculcate a sense of discipline and responsibility towards society

All the programmes in its structure and in its contents are in line with societal and industry needs. The institute offers PhD programme in Civill Engineering, Electrical Engineering and also in Mechanical Engineering. The Institute offers fiveMTech Programmes in alignment with industry requirements. The Civil Engineering department of the college is recognized as a QIP center for Ph .D research. The college also has various MoUs with industries to enable students to get very good exposure to industries. This enables students to secure their bright future. Students do participate in competitive events wherein they exhibit their critical thinking and creativity. Students along with faculty have to their credit a few patents and numerous research papers at national and international forums.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	<a href="https://www.spce.ac.in/institute-vision-mission.php">https://www.spce.ac.in/institute-vision-mission.php</a>

6.1.2 - Effective leadership is reflected in various institutional practices such as decentralization and participative management

The organization has good decentralization of authorities, and the overall improvements are closely monitored. The administrative, academic and financial policies are designed at the Administrative Council level, however inputs for the policy-making are derived from various stakeholders namely; internal faculty, staff, students, University, Directorate of Technical Education, Alumni, Recruiters, Faculty experts from other institutes, Industries, Research Organizations, etc.

This HEI practices participative management at various levels through various positions and various committees

Various positions: Dean (Academics), Dean (Finance), Dean (R&D), PG chairman, Head of departments (Civil Mechanical, Electrical, first year), PG coordinators, Ph. D. coordinators, Electrical Maintenance In-charge, Water Maintenance In-charge, Hostel wardens, Rector, Security Incharge, Canteen In-charge, TEQIP Coordinator, etc.

Various Committees: Institute Development Committee (IDC), IQAC, Board of Studies (UG. PG: Civil Mechanical, Electrical), Academic council, Finance committee, Internal Compliance Committee, Purchase Committee, Research Committee.

The committee meetings are conducted regularly in which faculty, students, supporting staff, academicians, industry experts, and alumni are involved. Every week, Institute Development Committee (IDC) meets to review various activities including monitoring and resolving various issues in a participative manner. Matters pertaining to each department are discussed with the staff during department meetings and their collective decisions and opinions are considered in HODs meetings

File Description	Documents
Upload strategic plan and deployment documents on the website	No File Uploaded
Upload any additional information	No File Uploaded
Paste link for additional Information	Nil

## 6.2 - Strategy Development and Deployment

6.2.1 - The institutional Strategic/ Perspective plan has been clearly articulated and implemented

The HEI has a perspective plan focused on the following broad areas. The plan is articulated with stakeholders during various academic and administrative forums. The overall implementation is monitored by the Board of Governors.

- Teaching and learning
- Research and development
- Community Services
- Industry interaction

The details are described in the attached document.

File Description	Documents
Strategic Plan and deployment documents on the website	<a href="#">View File</a>
Paste link for additional information	Nil
Upload any additional information	<a href="#">View File</a>

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

The HEI has a well-framed administrative setup conforming to the norms of the regulatory bodies.

The Chairman, Board of Governors in consultation with other members of the BOG designs policies on administration, finance, HR, and Research activities and communicates to the Principal for implementation. The Principal conveys and monitors these activities in consultation with the Institute Development

Committee(IDC) members.

The IDC is composed of the following members under the chairmanship of the Principal: All Deans, TPO, all Heads of Department, Controller of Exams (CoE), IT coordinator, Librarian, Hostel Rector, and TEQIP Coordinator. IDC members discuss their opinions regarding implementing various policies.

The following statutory committees are functioning to look after the administrative and academic procedures as per the norms stipulated by the University Grants Commission (UGC): Board of Governance (BoG) Academic Council, Board of Studies Finance Committee, Institute Development Committee (IDC).

Additionally, the HEI has the following Non-statutory committees. IQAC, Information Committee, Anti-ragging Committee, Anti-Sexual Harassment Committee, Disciplinary Committee, Purchase Committee Grievance, Redressal Committee, Library Committee, Student Council, Alumni Committee, etc. The HEI has set up a separate grievances redressal cell. Through students' Council meetings many complaints are well attended. The mentors for students are available in each department.

File Description	Documents
Paste link to Organogram on the institution webpage	<a href="https://www.spce.ac.in/Documents/Accreditation/AQAR/6.2.2%20Organogram%20of%20spce.pdf">https://www.spce.ac.in/Documents/Accreditation/AQAR/6.2.2%20Organogram%20of%20spce.pdf</a>
Upload any additional information	<a href="#">View File</a>
Paste link for additional Information	Nil

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

C. Any two of the above

File Description	Documents
ERP (Enterprise Resource Planning) Documen	<a href="#">View File</a>
Screen shots of user interfaces	<a href="#">View File</a>
Details of implementation of e-governance in areas of operation	<a href="#">View File</a>
Any additional information	No File Uploaded

### 6.3 - Faculty Empowerment Strategies

6.3.1 - The institution has effective welfare measures for teaching and non-teaching staff and avenues for their career development/ progression

The college has "Staff Welfare Fund (SWF)". Through this fund, faculty members have been provided with 50% of travel expenses or Rs. 50,000/- whichever is less. This is in addition to TEQIP funds budgeted for attending national/ international conferences. For any emergency or for any event of domestic importance, advance amount to the extent of Rs. 40,000/- is being provided to the staff member. The institution also support Group Medical Insurance to employees. As an average, 30% of employees avail of the advance/reimbursement facility.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

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

13

File Description	Documents
Upload any additional information	No File Uploaded
Details of teachers provided with financial support to attend conference, workshops etc during the year (Data Template)	<a href="#">View File</a>

**6.3.3 - Number of professional development / administrative training programmes organized**

**by the Institution for its teaching and non-teaching staff during the year**

11

File Description	Documents
Reports of the Human Resource Development Centres (UGC HRDC/ASC or other relevant centres)	<a href="#">View File</a>
Upload any additional information	No File Uploaded

**6.3.4 - Number of teachers who have undergone online/ face-to-face Faculty Development Programmes during the year: (Professional Development Programmes, Orientation / Induction Programmes, Refresher Courses, Short-Term Course, etc.)**

10

File Description	Documents
Summary of the IQAC report	No File Uploaded
Reports of the Human Resource Development Centres (UGC ASC or other relevant centers)	<a href="#">View File</a>
Upload any additional information	No File Uploaded

**6.4 - Financial Management and Resource Mobilization****6.4.1 - Institution conducts internal and external financial audits regularly**

The institute ensures strong adherence to financial transparency. Regular audits are a part of the process. The HEI appoints internal and external auditors annually. The external auditor is a statutory auditor who carries out half-yearly and yearly audits. The internal auditor makes quarterly balance sheets. In addition to this, a separate audit is carried out by the regional office of the Directorate of Technical Education and by "Audit General (AG)" of the state government. for the grant-related fund provided by the state governmen

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil



**6.4.2 - Funds / Grants received from non-government bodies, individuals, and philanthropists during the year (not covered in Criterion III and V) (INR in lakhs)**

0

File Description	Documents
Annual statements of accounts	No File Uploaded
Details of funds / grants received from non-government bodies, individuals, philanthropists during the year	No File Uploaded
Any additional information	No File Uploaded

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

The HEI has been well recognized for various testing consultancy assignments in the Civil Engineering Department. Resource generation is also done through organizing On-Line examinations for various external agencies. Each of the three departments takes an active part in organizing continuing education programs for industry/institute personnel. This adds to resource mobilization. The HEI has conducted third party verification for the projects completed by Municipal Corporation. The HEI has appointed Finance Committee & also Dean Finance, as per the UGC guidelines. Generally, the meetings of this committee are scheduled in every quarter. Approval of budget, monitoring of expenditure, purchase of major equipment, analysis of balance sheet, tackling of financial related college level issues, a recommendation for appointment of internal and external financial auditors, in-time compliances for financial audit points, etc. are well handled by Dean Finance & this committee. The committee provides specific guidelines to the Principal for effective implementations. At the Principal's level, a separate central purchase committee has been constituted which meets weekly. The purchase committee prepares analytical comments on comparative statements prepared by the proposer. These recommendations are then approved, with changes if required by the Principal. The local financial auditor prepares periodic audit reports for submission to the Principal and the Finance Committee.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	Nil

## 6.5 - Internal Quality Assurance System

6.5.1 - Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing quality assurance strategies and processes visible in terms of incremental improvements made during the preceding year with regard to quality (in case of the First Cycle): Incremental improvements made during the preceding year with regard to quality and post-accreditation quality initiatives (Second and subsequent cycles)

SPCE believes in improving quality consistently and continuously in all facets of Technical education. An academic audit of departments is conducted. Internal examination audits are conducted twice in a year at the end of each semester. The internal audit is conducted by an audit committee appointed by the Principal. Typically internal academic auditors are faculty chosen from various departments of the college. The schedule of the audit is declared in advance. The faculties are provided with parameters of academic assessment. The assessment parameters include mapping of course outcomes with program outcomes, course delivery, in-semester evaluation planned and executed, Performance of Engaging lectures, Performance of Attendance of students, Counseling, quality of question papers, attainment of course outcomes, and result-analysis. The auditors are also provided with evaluation format and it is submitted to Chairman IQAC. Chairman IQAC compiles all the evaluations by the auditors and prepares a consolidated audit report which is sent to all departments. Heads of the department take cognizance of the report and necessary corrective measures to address the non-conformities. This is supported by an external academic audit. The committee for external academic audit is composed of academic experts from various autonomous colleges. The external academic audit is done usually once in two / three years.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

6.5.2 - The institution reviews its teaching-learning process, structures and methodologies of operation and learning outcomes at periodic intervals through its IQAC as per norms

The information related to the progress of the teaching-learning process, implementation of academic and administrative operations, and learning/program outcomes are gathered through corresponding statutory committees. This information is reviewed by IQAC periodically and the observations and comments are shared with administrative heads for possible corrective action.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	<a href="https://www.spce.ac.in/Documents/Accreditation/AQAR/A9%20iqac%20mom%20signed.pdf">https://www.spce.ac.in/Documents/Accreditation/AQAR/A9%20iqac%20mom%20signed.pdf</a>

**6.5.3 - Quality assurance initiatives of the institution include Regular meeting of the IQAC Feedback collected, analysed and used for improvement of the institution Collaborative quality initiatives with other institution(s) Participation in NIRF Any other quality audit recognized by state, national or international agencies (such as ISO Certification)**

**B. Any 3 of the above**

File Description	Documents
Paste the web link of annual reports of the Institution	<a href="https://www.spce.ac.in/Documents/Accreditation/AQAR/6.5.3%20Annual%20report%202020-21.pdf">https://www.spce.ac.in/Documents/Accreditation/AQAR/6.5.3%20Annual%20report%202020-21.pdf</a>
Upload e-copies of accreditations and certification	<a href="#">View File</a>
Upload details of quality assurance initiatives of the institution	<a href="#">View File</a>
Upload any additional information	No File Uploaded

## INSTITUTIONAL VALUES AND BEST PRACTICES

### 7.1 - Institutional Values and Social Responsibilities

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

SPCE treats all students, staff and supporting staff equally. SPCE has always paid great attention to ensure and promote gender equity. In our institute, all academic and non-academic committees of the college have a good representation of both the genders. The institute has a student welfare and ICC on the campus to empower girl students, to sensitize everyone with regard to issues related to women, and to make the college campus a safe place for them. The institute has male and female counsellors to whom students can go and discuss their psychological, emotional, education-related issues as well as for career counselling. To facilitate our female students, the campus has established a spacious girl's common room where girls can relax, study, do informal discussions in the free time available. Female students appreciate this facility at a great deal. Programs/workshops related to self-defence are conducted in which trained faculties from this field give important tips related to self-defence along with demonstrations. A suggestion box is placed at strategic locations so that if anyone has any issue related to gender equity they can drop complaints or suggestions. The box is opened once every month and due action is taken to resolve the issue.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	Nil

**7.1.2 - The Institution has facilities for alternate sources of energy and energy conservation: Solar energy plant Wheeling to the Grid power-efficient equipment**

**D. Any 1of the above**

File Description	Documents
Geotagged Photographs	<a href="#">View File</a>
Any other relevant information	No File Uploaded

7.1.3 - Describe the facilities in the institution for the management of the following types of degradable and non-degradable waste (within a maximum of 200 words)

SPCE solid waste audit is carried out once in a year by either

students or NGOs such as StriMuktiSangathan (The report is being attached as annexure).Based on this report compost pits were set up in the college however due to less staff it is not properly functional.

At present there is provision for dry and wet waste bins is done . All the wet waste is being put in compost pits provided in campus. At the end of 1.5 months manure is produced which can be used in gardens or sold

Waste Audit 2019 is attached.

- **E-waste management:**We have a tie up with EPRI for e-waste collection . Obsolescence of used computers is taken up and sold to buyers. Workshops and e-waste collection drives are conducted in campus.
- **Hazardous chemicals and radioactive waste management:**Chemistry and environmental laboratories generate Hazardous waste in the form of alkalis and acids. Dilution and reduction of acidity and alkalinity by neutralization is taken up. Experiments like COD have been modified to closed reflux to reduce or avoid use of mercuric sulphate. IThe solvents are stored in container before sending it tohazardous waste management facility.Dilution or neutralization could be done

File Description	Documents
Relevant documents like agreements/MoUs with Government and other approved agencies	<a href="#">View File</a>
Geotagged photographs of the facilities	No File Uploaded
Any other relevant information	<a href="#">View File</a>

**7.1.4 - Water conservation facilities available in the Institution:** Rain water harvesting Bore well /Open well recharge Construction of tanks and bunds Waste water recycling Maintenance of water bodies and distribution system in the campus B. Any 3 of the above

File Description	Documents
Geotagged photographs / videos of the facilities	No File Uploaded
Any other relevant information	<a href="#">View File</a>

**7.1.5 - Green campus initiatives include**

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

**B. Any 3 of the above**

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

File Description	Documents
Geotagged photos / videos of the facilities	No File Uploaded
Various policy documents / decisions circulated for implementation	No File Uploaded
Any other relevant documents	<a href="#">View File</a>

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

**7.1.6.1 - The institution’s initiatives to preserve and improve the environment and harness energy are confirmed through the following:**

**D. Any 1 of the above**

- 1. Green audit**
- 2. Energy audit**
- 3. Environment audit**
- 4. Clean and green campus recognitions/awards**
- 5. Beyond the campus environmental promotional activities**

File Description	Documents
Reports on environment and energy audits submitted by the auditing agency	<a href="#">View File</a>
Certification by the auditing agency	No File Uploaded
Certificates of the awards received	No File Uploaded
Any other relevant information	No File Uploaded

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

File Description	Documents
Geotagged photographs / videos of facilities	<a href="#">View File</a>
Policy documents and brochures on the support to be provided	No File Uploaded
Details of the software procured for providing assistance	No File Uploaded
Any other relevant information	No File Uploaded

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

Being a government-aided institute, we have students coming from various backgrounds, cultural, regional, linguistic, socio-economic, etc. However, they are treated equally, once they entered SPCE. The language of instruction and evaluation is English.

We have EESA/MESA/CESA/TESA students associations where students of the same discipline come together and organize many Intra and inter-college activities. We have different clubs for robocon, racing, wave where students from different departments come together and prepare for participation at the national level. Participation in such groups depends on the choice and interest of the individual.

Many technical, and cultural activities are organized by the student council. The student council is formed seeing the interest, choices, and capacity of individuals.

All national festivals and days such as voters-day, yoga-day, teacher's day, etc are celebrated where faculty, students, and supporting staff are actively involved. The college magazine is another platform where all stakeholders present their interests. The articles, poems, and stories in various languages are included.

The success of yearly activities like the technical festival SPECTRA, cultural festival SPACE, and sports week for the SPCE cup show the harmony towards diversity.

The courses Constitution of India and Indian Traditional Knowledge are mandatory in the curriculum.

File Description	Documents
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	No File Uploaded

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

Sardar Patel College of Engineering sensitizes the students and the employees of the institution to the constitutional obligations about values, rights, duties, and responsibilities of citizens which enables them to conduct as responsible citizens.

A summary of such initiatives for sensitization of students and employees to constitutional obligation is as follows. A further description is available in the attached document.

To provide an effective, supportive, safe, accessible, and



affordable learning environment.

To participate in various programs on culture, traditions, values, duties, and responsibilities through various co-curricular and extracurricular activities.

To conduct awareness programs on the ban on plastics, cleanliness, Swachh Bharat Abhiyan, etc.

To establish policies that reflect core values. Code of conduct is prepared for students and staff.

To include the essence of Indian Traditional Knowledge as a mandatory course

To conduct a mandatory Induction Program to imbibe the importance of Integrity, sanitation, living standards of life, and personality

To promote activities to serve society such as blood donation, and bone marrow donation through the participation of eminent hospitals in Mumbai. E

To arrange workshops by eminent personalities are invited to conduct workshops and deliver lectures on ethics, values, duties, Gender sensitization, etc.

File Description	Documents
Details of activities that inculcate values necessary to transform students into responsible citizens	No File Uploaded
Any other relevant information	<a href="#">View File</a>

**7.1.10 - The institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic sensitization programmes in this regard: The Code of Conduct is displayed on the website There is a committee to monitor adherence to the Code of Conduct Institution organizes professional ethics programmes for students, teachers, administrators and other staff Annual awareness programmes on the Code of Conduct are organized** D. Any 1 of the above

File Description	Documents
Code of Ethics - policy document	<a href="#">View File</a>
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programmes, etc. in support of the claims	No File Uploaded
Any other relevant information	No File Uploaded

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

The following events are organized/celebrated in online/offline mode in AY 2020-2021.

1. Voters' Day: We celebrated voters day on 25/01/2021 by setting up a voter's id booth. This was a joint task done by the Rotaract club of our college alongside the student council. This day was commenced by our principal, Dr. Murudi who spoke about the importance of voting and what we can do as we are the youth of our nation. Students took this moment to showcase their penmanship and oration skills by orating their own point of view on the importance of voters day and talked about spreading awareness on the subject of voting
2. Republic Day, 26/01/2021
3. Independence Day, 15/08/2020, 15/08/2021
4. Yoga Day: 30/10/2021 Online mode: Yoga Session was held for the fitness and body & mind balance of SPCE girls.
5. Sardar Vallabhbhai Patel Jayanti: 31/10/2021 online mode: The celebration began by reciting the Saraswati van dana, after which a few words were spoken in the memory of our former deputy Prime Minister Sardar Vallabhbhai Patel and our founder, Dr.K.M.Munshi. Various clubs of SPCE were also present during the celebration of National Unity Day. An art and essay competition was organized on the day.

File Description	Documents
Annual report of the celebrations and commemorative events for during the year	<a href="#">View File</a>
Geotagged photographs of some of the events	No File Uploaded
Any other relevant information	No File Uploaded

## 7.2 - Best Practices

7.2.1 - Provide the weblink on the Institutional website regarding the Best practices as per the prescribed format of NAAC

Two of the institutional best practices are listed below. The description of these in the prescribed format is provided on the institutional website.

Title of Best Practice 1: Continued Academic Support to students

Objectives of the Practice 1:

1. To prepare technically strong students
2. Improve employability
3. Inculcate ethical values

Title of Best Practice 2: Significant curriculum reforms

Objectives of the Practice 2:

1. To prepare students ready to join the industry
2. To prepare students for research
3. To prepare students for higher education

File Description	Documents
Best practices in the Institutional website	<a href="https://www.spce.ac.in/Documents/Accreditation/AQAR/7.2.1%20best%20practices%20of%20institute.pdf">https://www.spce.ac.in/Documents/Accreditation/AQAR/7.2.1%20best%20practices%20of%20institute.pdf</a>
Any other relevant information	Nil

## 7.3 - Institutional Distinctiveness

7.3.1 - Highlight the performance of the institution in an area distinct to its priority and thrust (within a maximum of 200 words)

The institute aims to create professionals with competence and motivate research for the progress of the nation.

Our curriculum is reviewed by experts from industry and academicians regularly which has improved the employability.

The curriculum, workshops and training programs conducted for students, has enhanced their participation and performance in national level technical competitions such as e yantra, robocon, car racing etc.

The curriculum maps with GATE syllabus which help students to qualify GATE which has improved the number of students joining M. Tech programmes in reputed institutes.

Approximately 60% of our faculty has completed Ph. D. from reputed institutes in diverse areas and almost all of the rest are pursuing the same which help the institute to enhance research activities. Over the years research based activities such as publications, patents, allotment of research projects by government agencies, consultancy are improving.

Due to the constant efforts of SPCE start up cell, the projects under taken by final year students are promoting innovative ideas that can be converted into products.

## Part B

### CURRICULAR ASPECTS

#### 1.1 - Curriculum Design and Development

1.1.1 - Curricula developed and implemented have relevance to the local, national, regional and global developmental needs which are reflected in Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) of the various Programmes offered by the Institution.

To maintain relevance to the local, national, regional, and global developmental needs, the institute involves stakeholders from diverse backgrounds in curriculum development. The following three committees review the curriculum and its alignment with PO/PSO/CO before its implementation.

1. Industry Consultation Committee (ICC): ICC comprising of industry experts is formed for each domain. The inputs from the industry experts are considered while designing the curriculum, the outcome of which is Industry 4.0 related courses are included in the curriculum
2. Board of Studies (BoS): Each department has a separate BoS for UG and PG programs. BoS has members from industry, and reputed academic institutes along with department faculty and students' representatives.
3. Academic Council (AC): Academic Council is formed as per university guidelines for the approval of curriculum and rules related to academic processes.

The curriculum structure has following new features.

1. Mandatory courses of zero credit
2. Major/Minor certification for fast learners
3. Remedial classes and bridge courses for slow learners
4. Industry internship as a credit course
5. SWAYAM/NPTEL online courses can appear on students' grade sheet.
6. Professional/Open elective course groups
7. Value-added courses (zero credits) to gain of technical-skills and life-skills.

File Description	Documents
Upload additional information, if any	<a href="#">View File</a>
Link for additional information	Nil

**1.1.2 - Number of Programmes where syllabus revision was carried out during the year**

8

File Description	Documents
Minutes of relevant Academic Council/BOS meeting	<a href="#">View File</a>
Details of syllabus revision during the year	<a href="#">View File</a>
Any additional information	No File Uploaded

**1.1.3 - Number of courses focusing on employability/entrepreneurship/ skill development offered by the Institution during the year**

145

File Description	Documents
Curriculum / Syllabus of such courses	<a href="#">View File</a>
Minutes of the Boards of Studies/ Academic Council meetings with approval for these courses	<a href="#">View File</a>
MoUs with relevant organizations for these courses, if any	<a href="#">View File</a>
Any additional information	No File Uploaded

**1.2 - Academic Flexibility****1.2.1 - Number of new courses introduced across all programmes offered during the year**

4

File Description	Documents
Minutes of relevant Academic Council/BoS meetings	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>
Institutional data in prescribed format (Data Template)	<a href="#">View File</a>

### 1.2.2 - Number of Programmes offered through Choice Based Credit System (CBCS)/Elective Course System

8

File Description	Documents
Minutes of relevant Academic Council/BoS meetings	<a href="#">View File</a>
Any additional information	No File Uploaded
List of Add on /Certificate programs (Data Template)	<a href="#">View File</a>

### 1.3 - Curriculum Enrichment

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

#### (a) Environment and Sustainability

The curriculum of Mechanical Engineering department deals with health, safety & environmental norms for industrial applications and Green Manufacturing. The curriculum of Civil Engineering Department takes into account the problems related with environment, water quality, air quality, pollution and includes topic on green ambience. The curriculum of Electrical Engineering Department deals with utilization of electrical energy efficiently & environmental impact of electric installations.

#### (b) Gender, Human Values and Professional Ethics

The curriculum of programs includes two mandatory courses which integrate Gender, Human Values and Professional Ethics into the curriculum. These mandatory courses are 'Indian Traditional Knowledge' and 'Constitution of India'.

The 'Constitution of India' course enables students to

understand constitutional ethos and principles, and inculcate and pursue the values of civic life. The course reinforces the concepts of gender equality and human values which are the thematic backbone of Indian constitution.

The 'Indian Traditional Knowledge' course aims at imparting basic principles of thought process, reasoning and inferencing. Sustainability is at the core of Indian Traditional knowledge systems connecting society and nature. Holistic life style of yogic science and wisdom capsules in Sanskrit literature are also important in modern society.

File Description	Documents
Upload the list and description of the courses which address issues related to Gender, Environment and Sustainability, Human Values and Professional Ethics in the curriculum	<a href="#">View File</a>
Any additional information	No File Uploaded

### 1.3.2 - Number of value-added courses for imparting transferable and life skills offered during the year

2

File Description	Documents
List of value-added courses	<a href="#">View File</a>
Brochure or any other document relating to value-added courses	<a href="#">View File</a>
Any additional information	No File Uploaded

### 1.3.3 - Number of students enrolled in the courses under 1.3.2 above

100

File Description	Documents
List of students enrolled	<a href="#">View File</a>
Any additional information	No File Uploaded

### 1.3.4 - Number of students undertaking field work/projects/ internships / student projects



286

File Description	Documents
List of programmes and number of students undertaking field projects / internships / student projects	<a href="#">View File</a>
Any additional information	No File Uploaded

**1.4 - Feedback System**

**1.4.1 - Structured feedback and review of the syllabus (semester-wise / year-wise) is obtained from 1) Students 2) Teachers 3) Employers and 4) Alumni**

A. All 4 of the above

File Description	Documents
Provide the URL for stakeholders' feedback report	Nil
Upload the Action Taken Report of the feedback as recorded by the Governing Council / Syndicate / Board of Management	<a href="#">View File</a>
Any additional information	No File Uploaded

**1.4.2 - The feedback system of the Institution comprises the following**

B. Feedback collected, analysed and action taken

File Description	Documents
Provide URL for stakeholders' feedback report	Nil
Any additional information	<a href="#">View File</a>

**TEACHING-LEARNING AND EVALUATION****2.1 - Student Enrollment and Profile****2.1.1 - Enrolment of Students****2.1.1.1 - Number of students admitted (year-wise) during the year**

1063

File Description	Documents
Any additional information	<a href="#">View File</a>
Institutional data in prescribed format	<a href="#">View File</a>

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

570

File Description	Documents
Any additional information	<a href="#">View File</a>
Number of seats filled against seats reserved (Data Template)	<a href="#">View File</a>

## 2.2 - Catering to Student Diversity

2.2.1 - The institution assesses students' learning levels and organises special programmes for both slow and advanced learners.

### Assessment of students' learning levels:

The HEI has a very good mechanism for continuous evaluation and monitoring the progress of students. The syllabus is well balanced with theory, laboratory and tutorial courses. Theory courses are evaluated by conducting two in semester tests and end semester examination. The laboratory experiments and tutorials are evaluated based on rubrics defined. Most of the laboratory courses require students to complete mini projects and presentations in subject domain, on technical paper during tutorials. The final year project (one year) is evaluated in stages : topic selection, literature survey, implementation. Faculty conducts quizzes, discussions for term work evaluation.

#### For slow learners:

1. Bridge Courses :
2. Remedial Coaching :
3. Value Added Courses or workshops :

#### For advanced learners:

1. Value Added Courses :
2. Online courses:

The study material provided by faculty, guest lectures, industry visits etc. help for better understanding of the course.

\*Detailing is uploaded

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	<a href="https://www.spce.ac.in/UG.php">https://www.spce.ac.in/UG.php</a>

### 2.2.2 - Student – Teacher (full-time) ratio

Year	Number of Students	Number of Teachers
10/02/2022	1132	51

File Description	Documents
Upload any additional information	No File Uploaded

### 2.3 - Teaching- Learning Process

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

The students admitted experiences enhancing learning through the following components from very first day of entry

1. Induction Program
2. Curriculum
3. Students' Festivals: Festivals include cultural as well as technical
4. Students' Clubs: Various students club such as ROBOCON, WAVE, Speaker's club, SPCE racing along with department students' associations namely EESA, CESA, MESA, TESA are active throughout the year.
5. Start up cell
6. Training and Placement Office TPO
7. Internship: As institute strictly follows academic calendar, students plan and complete internship during vacation slot. The internship gives hands on experience to the students \*Detailed information with links in uploaded file

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Link for additional Information	Nil

### 2.3.2 - Teachers use ICT-enabled tools including online resources for effective teaching and learning

All classrooms are provided with digital boards. Teachers are trained to use the same due to which the teaching-learning process has become interesting and interactive.

In the year 2020-2021 the classes were conducted online. The laptops and digital writing pads were provided to all faculty members. The lectures were conducted on google meet.

The google classrooms were used to post course material, assignments, quizzes, etc. Google Classroom is also used for the evaluation of laboratory work and tutorials.

File Description	Documents
Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process	Nil
Upload any additional information	<a href="#">View File</a>

### 2.3.3 - Ratio of students to mentor for academic and other related issues

#### 2.3.3.1 - Number of mentors

51

File Description	Documents
Upload year-wise number of students enrolled and full-time teachers on roll	<a href="#">View File</a>
Circulars with regard to assigning mentors to mentees	<a href="#">View File</a>

### 2.3.4 - Preparation and adherence to Academic Calendar and Teaching Plans by the institution

#### Academic Calendar

The HEI prepares the academic calendar for UG and PG separately before the beginning of every academic year and is displayed on the department notice boards as well as on the college website. Academic calendar mentions the days of delivery of academic instruction, schedule for conduct of in semester and end-semester examinations, assessment stages, declaration of results, other institute level events (co-curricular and extra-curricular) and the holidays. In the year 2020-2021 the separate calendar is prepared for lateral entry (direct second year students), First Year and PG students due to delay in admission process. The separate examination, library and placement calendars are prepared detailing the related activities.

#### Teaching Plans

The curricular is designed with the help of Industry Consultation committee and approved by Board of Studies and Academic Council. The course objectives and outcomes are defined for each course. Theory courses are divided into seven modules and each module is assigned with number of hours required to teach the same. The list of experiments and the time required are also included in course content of laboratory course. Based on this individual teacher prepares lecture plan, mode of teaching used for particular topic, assignments etc. In the very first lecture the students are explained about course objectives, outcomes, contentment, evaluation etc. All faculty members maintain and update course files which are useful for same faculty delivering the course or new faculty to prepare his/ her teaching plan.

File Description	Documents
Upload the Academic Calendar and Teaching Plans during the year	<a href="#">View File</a>

### 2.4 - Teacher Profile and Quality

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

51

File Description	Documents
Year-wise full-time teachers and sanctioned posts for the year	<a href="#">View File</a>
List of the faculty members authenticated by the Head of HEI	No File Uploaded
Any additional information	<a href="#">View File</a>

#### 2.4.2 - Number of full-time teachers with PhD/ D.M. / M.Ch. / D.N.B Super-Specialty / DSc / DLitt during the year

28

File Description	Documents
List of number of full-time teachers with PhD./ D.M. / M.Ch. / D.N.B Super-Specialty / D.Sc. / D.Litt. and number of full-time teachers for 5 years	<a href="#">View File</a>
Any additional information	No File Uploaded

#### 2.4.3 - Total teaching experience of full-time teachers in the same institution: (Full-time teachers' total teaching experience in the current institution)

836

File Description	Documents
List of teachers including their PAN, designation, Department and details of their experience	<a href="#">View File</a>
Any additional information	No File Uploaded

#### 2.5 - Evaluation Process and Reforms

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

25

File Description	Documents
List of Programmes and the date of last semester-end / year-end examinations and the date of declaration of result	<a href="#">View File</a>
Any additional information	No File Uploaded

### 2.5.2 - Number of students' complaints/grievances against evaluation against the total number who appeared in the examinations during the year

0

File Description	Documents
Upload the number of complaints and total number of students who appeared for exams during the year	<a href="#">View File</a>
Upload any additional information	No File Uploaded

2.5.3 - IT integration and reforms in the examination procedures and processes including Continuous Internal Assessment (CIA) have brought in considerable improvement in the Examination Management System (EMS) of the Institution

#### Response:

The college has an integrated examination platform, that is, Examination Section office. All examinations are conducted centrally by Examination Section. Examination section has been housed in a secure room with restricted access. The civil infrastructure of the Examination section consists of Strong room, Office cabin for controller of examination, assessment hall for assessing answer-books and working space for supporting staff. Conventional and Wi-Fi net connectivity, adequate number of computer systems and printers as well as a photocopying machine

#### Examination Reforms

The examination of SPCE functions as per the directions issued by academic council and departments. The followings are the important reforms in the examination systems which are further described in the attached document.

- Assessed answer books are shown to each student

- Exam. calendar and its publication on the website
- Continuous evaluation of the student
- Grading is decided based on mixed absolute and relative grading system.
- To avoid duplication of the grade sheets various security features are introduced in the grade sheets.
- Audit of the examination process for continuous improvements

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional Information	Nil

## 2.6 - Student Performance and Learning Outcomes

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

The college has defined Program Outcomes (POs), Program Specific Outcomes (PSOs) for each program and Course Outcomes for each course. These are displayed on website and communicated to teachers and students through display at classrooms and prominent locations of college. The POs define the capabilities the students of a program are expected to achieve at the time of graduation. The PSOs define the additional outcomes offered by the college for each program; these are unique to each program and are framed based on competencies of faculty, regional needs and inputs from alumni/employers. Since POs and PSOs are met through the attainment of course outcomes (COs) of various courses of curriculum, COs for all courses are also accurately defined.

POs, PSOs and COs are made available to respective stakeholders by following means. The POs, PSOs and COs are reviewed in the meetings of Board of Studies and Academic Council at the beginning of every academic year. The faculty explains the outcomes expected from the students in the orientation classes / beginning lecture of every semester. The course contents which are accessible to students, contain COs for each course.

<https://www.spce.ac.in/civil.php>

<https://www.spce.ac.in/mechanical.php>



<https://www.spce.ac.in/electrical.php>

<https://www.spce.ac.in/UG.php>

<https://www.spce.ac.in/PG.php>

File Description	Documents
Upload COs for all courses (exemplars from the Glossary)	<a href="#">View File</a>
Upload any additional information	No File Uploaded
Link for additional Information	Nil

### 2.6.2 - Attainment of Programme Outcomes and Course Outcomes as evaluated by the institution

All direct and indirect assessment tools are used by all faculty members of all programs throughout the semester. The attainment of course outcomes is computed by all faculty members for their respective courses through direct assessment tools with a weightage of 80% and Course Exit Survey with a weightage of 20%. The Program Coordinator of each program collects this information from Coordinators and computes the attainment of POs/PSOs. The details of this process is given in the attached document.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional Information	Nil

### 2.6.3 - Pass Percentage of students

#### 2.6.3.1 - Total number of final year students who passed in the examinations conducted by Institution

214

File Description	Documents
Upload list of Programmes and number of students appear for and passed in the final year examinations	<a href="#">View File</a>
Upload any additional information	No File Uploaded
Paste link for the annual report	Nil

## 2.7 - Student Satisfaction Survey

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

<https://www.spce.ac.in/Documents/Accreditation/AQAR/2.7.1%20Student%20Satisfaction%20Survey%20report%202021%20graduates.pdf>

## RESEARCH, INNOVATIONS AND EXTENSION

### 3.1 - Promotion of Research and Facilities

3.1.1 - The institution's research facilities are frequently updated and there is a well-defined policy for promotion of research which is uploaded on the institutional website and implemented

The college continuously upgrades and renews its research infrastructure for strengthening its research facilities. Department-wise budget is allocated for laboratory development and regular laboratory updating is carried out. Recently, many of the laboratories are modernized under the TEQIP project. The new laboratories such as renewable energy, HV engineering, etc. are developed and new experiments are set up. The necessary simulation software such as MATLAB, ETAP, ANSYS, and FEM are available and used in laboratory assignments.

The research policy of the institute is available at [https://www.spce.ac.in/Documents/RnD/promotional%20policy/Research%20Promotion%20Policy\\_SPCE\\_v11.pdf](https://www.spce.ac.in/Documents/RnD/promotional%20policy/Research%20Promotion%20Policy_SPCE_v11.pdf)

File Description	Documents
Upload the Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption	No File Uploaded
Provide URL of policy document on promotion of research uploaded on the website	<a href="https://www.spce.ac.in/Documents/RnD/promotional%20policy/Research%20Promotion%20Policy_SPCE_v11.pdf">https://www.spce.ac.in/Documents/RnD/promotional%20policy/Research%20Promotion%20Policy_SPCE_v11.pdf</a>
Any additional information	<a href="#">View File</a>

### 3.1.2 - The institution provides seed money to its teachers for research

#### 3.1.2.1 - Seed money provided by the institution to its teachers for research during the year (INR in lakhs)

1

File Description	Documents
Minutes of the relevant bodies of the institution regarding seed money	No File Uploaded
Budget and expenditure statements signed by the Finance Officer indicating seed money provided and utilized	No File Uploaded
List of teachers receiving grant and details of grant received	No File Uploaded
Any additional information	No File Uploaded

### 3.1.3 - Number of teachers who were awarded national / international fellowship(s) for advanced studies/research during the year

0

File Description	Documents
e-copies of the award letters of the teachers	No File Uploaded
List of teachers and details of their international fellowship(s)	No File Uploaded
Any additional information	No File Uploaded

### 3.2 - Resource Mobilization for Research

#### 3.2.1 - Grants received from Government and Non-Governmental agencies for research projects, endowments, Chairs during the year (INR in Lakhs)

6.15

File Description	Documents
e-copies of the grant award letters for research projects sponsored by non-governmental agencies/organizations	<a href="#">View File</a>
List of projects and grant details	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>

#### 3.2.2 - Number of teachers having research projects during the year

7

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional Information	<a href="https://www.spce.ac.in/teqip_new_1.php">https://www.spce.ac.in/teqip_new_1.php</a>
List of research projects during the year	<a href="#">View File</a>

#### 3.2.3 - Number of teachers recognised as research guides

16

File Description	Documents
Upload copies of the letter of the university recognizing teachers as research guides	<a href="#">View File</a>
Institutional data in Prescribed format	<a href="#">View File</a>

### 3.2.4 - Number of departments having research projects funded by Government and Non-Government agencies during the year

2

File Description	Documents
Supporting document from Funding Agencies	<a href="#">View File</a>
Paste link to funding agencies' website	<a href="http://www.npiu.nic.in/teqip3twinninginstitutions.html">http://www.npiu.nic.in/teqip3twinninginstitutions.html</a>
Any additional information	<a href="#">View File</a>

### 3.3 - Innovation Ecosystem

3.3.1 - Institution has created an ecosystem for innovations and creation and transfer of knowledge supported by dedicated centres for research, entrepreneurship, community orientation, incubation, etc.

SPCE Start-Up Cell was established in January 2018 to develop a vibrant and ideal entrepreneurial ecosystem in the institute. The main objective of this cell is to build entrepreneurial culture, support student innovations, identify the entrepreneurial potential of students and transform them into start-up entrepreneurs.

The institute is an active participant in the UMA and UBA through problem solutions for Rural populations. The institute is focusing on field public-oriented problems by analyzing various day-to-day social and developmental problems in the state of Maharashtra with active participation by faculty and UG/PG/PhD. students. (For example, rural sanitation, toilets, drainage management, drinking water, road development, evaluation and reinforcement of roads, water conservation, fuel and energy, health, drought, etc.).

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	<a href="https://www.spce.ac.in/SPCE%20Start%20Up%20Cell.php">https://www.spce.ac.in/SPCE%20Start%20Up%20Cell.php</a>

### 3.3.2 - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR), Entrepreneurship and Skill Development during the year

3

File Description	Documents
Report of the events	<a href="#">View File</a>
List of workshops/seminars conducted during the year	<a href="#">View File</a>
Any additional information	No File Uploaded

### 3.4 - Research Publications and Awards

**3.4.1 - The Institution ensures implementation of its Code of Ethics for Research uploaded in the website through the following: Research Advisory Committee Ethics Committee Inclusion of Research Ethics in the research methodology course work Plagiarism check through authenticated software**

**B. Any 3 of the above**

File Description	Documents
Code of Ethics for Research, Research Advisory Committee and Ethics Committee constitution and list of members of these committees, software used for plagiarism check	<a href="#">View File</a>
Any additional information	No File Uploaded

**3.4.2 - Number of PhD candidates registered per teacher (as per the data given with regard to recognized PhD guides/ supervisors provided in Metric No. 3.2.3) during the year**

**3.4.2.1 - Number of PhD students registered during the year**

19

File Description	Documents
URL to the research page on HEI website	<a href="https://www.spce.ac.in/rnd_1.php">https://www.spce.ac.in/rnd_1.php</a>
List of PhD scholars and details like name of the guide, title of thesis, and year of registration	<a href="#">View File</a>
Any additional information	No File Uploaded

### 3.4.3 - Number of research papers per teacher in CARE Journals notified on UGC website during the year

0.78

File Description	Documents
List of research papers by title, author, department, and year of publication	<a href="#">View File</a>
Any additional information	No File Uploaded

### 3.4.4 - Number of books and chapters in edited volumes / books published per teacher during the year

0.32

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	Nil

### 3.4.5 - Bibliometrics of the publications during the year based on average Citation Index in Scopus/ Web of Science/PubMed

#### 3.4.5.1 - Total number of Citations in Scopus during the year

182

File Description	Documents
Any additional information	No File Uploaded
Bibliometrics of the publications during the year	<a href="#">View File</a>

### 3.4.6 - Bibliometrics of the publications during the year based on Scopus/ Web of Science – h-Index of the University

#### 3.4.6.1 - h-index of Scopus during the year

23

File Description	Documents
Bibliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	<a href="#">View File</a>
Any additional information	No File Uploaded

### 3.5 - Consultancy

#### 3.5.1 - Revenue generated from consultancy and corporate training during the year (INR in lakhs)

59.134

File Description	Documents
Audited statements of accounts indicating the revenue generated through consultancy and corporate training	<a href="#">View File</a>
List of consultants and revenue generated by them	<a href="#">View File</a>
Any additional information	No File Uploaded

#### 3.5.2 - Total amount spent on developing facilities, training teachers and clerical/project staff for undertaking consultancy during the year

0



File Description	Documents
Audited statements of accounts indicating the expenditure incurred on developing facilities and training teachers and staff for undertaking consultancy	No File Uploaded
List of training programmes, teachers and staff trained for undertaking consultancy	No File Uploaded
List of facilities and staff available for undertaking consultancy	No File Uploaded
Any additional information	No File Uploaded

### 3.6 - Extension Activities

3.6.1 - Extension activities carried out in the neighbourhood sensitising students to social issues for their holistic development, and the impact thereof during the year

Sardar Patel College of Engineering Andheri (West), Mumbai is an active participant in the Unnat Maharashtra Abhiyan (UMA) and Unnat Bharat Abhiyan (UBA) through problem solutions for rural populations. SPCE Mumbai is focusing on field public-oriented problems by analyzing various day-to-day social and developmental problems in the state of Maharashtra with active participation by faculty and UG/PG/Ph.D. students. (For example, rural sanitation, toilets, drainage management, drinking water, road development, evaluation and reinforcement of roads, water conservation, fuel and energy, health, drought, etc.).

The institute has started a new course Ubuntu for experiential learning to students about social issues. "Ubuntu" is a Nguni Bantu term meaning "humanity". It is often used in a more philosophical sense to mean "the belief in a universal bond of sharing that connects all humanity; namely the underprivileged children from schools as well as the Engineering students who mentor these children. The objective of the course is to explore experiencing the joy of giving and develop a life of being a contributor as an integral part of one universe. The course aims to give experiential learning to the students by sending them to schools to help underprivileged children learn in the selected thematic areas.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	Nil

### 3.6.2 - Number of awards and recognition received by the Institution, its teachers and students for extension activities from Government / Government-recognised bodies during the year

0

File Description	Documents
Number of awards for extension activities in during the year	No File Uploaded
e-copy of the award letters	No File Uploaded
Any additional information	No File Uploaded

### 3.6.3 - Number of extension and outreach programmes conducted by the institution through NSS/NCC/Red Cross/YRC, etc. during the year (including Government-initiated programmes such as Swachh Bharat, AIDS Awareness, and Gender Sensitization and those organised in collaboration with industry, community and NGOs)

0.0

File Description	Documents
Reports of the events organized	No File Uploaded
Any additional information	No File Uploaded

### 3.6.4 - Number of students participating in extension activities listed in 3.6.3 during the year

0.0

File Description	Documents
Reports of the events	No File Uploaded
Any additional information	No File Uploaded

### 3.7 - Collaboration

**3.7.1 - Number of collaborative activities during the year for research/ faculty exchange/ student exchange/ internship/ on-the-job training/ project work**

16

File Description	Documents
Copies of documents highlighting collaboration	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>

**3.7.2 - Number of functional MoUs with institutions of national and/or international importance, other universities, industries, corporate houses, etc. during the year (only functional MoUs with ongoing activities to be considered)**

3

File Description	Documents
e-copies of the MoUs with institution/ industry/ corporate house	<a href="#">View File</a>
Details of functional MoUs with institutions of national, international importance, other institutions etc. during the year	<a href="#">View File</a>
Any additional information	No File Uploaded

**INFRASTRUCTURE AND LEARNING RESOURCES****4.1 - Physical Facilities**

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

The college maintains a policy for an appropriate teaching and learning environment. Classrooms are equipped with Smartboards. The premises are wifi enabled. e-learning classrooms are developed in the library. Special Purpose CNC lab, NDT lab, and artificial intelligence laboratory have been developed to improve employability. Renewable energy lab, Robotics, and embedded system lab have been developed. Switchgear lab and Power system Lab are equipped with a generator motor and WANS unit respectively. A 24X7 reading room facility is given in the library. Central computing facilities and research labs are well equipped with the requisite software to carry out research activities. The seminar hall and conference hall are designed to

conduct industry expert sessions, seminars, conclaves, etc. for professional development. Central mechanical workshop facilities are available to carry out the fabrication activities for the completion of projects/devices needed by the students and the ROBOCON.SPCE racing, and Wave( Aerodynamic Modelling) teams.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	Nil

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

SPCE believes in the all-around development of students. Sports not only build better athletes but also better people with a team spirit. SPCE has taken the initiative to start its Sports Club, SPIKE, to ensure the student's all-around development. SPIRIT, the annual sports fest of SPCE, Andheri is conducted in the month of February wherein various sports are played by students participating from various colleges all over Mumbai. The institute also has a course on stress management through Yoga for PG students where sessions are taken by Yoga experts. Institute organizes yoga sessions in the induction program. Institute is part of Bhavan's Campus, Andheri where the organization -Yoga Bharati conducts yoga scientifically for better health. Institute promotes cultural activities through a power-packed SPACE Annual Cultural Festival. Competitions are organized in various aspects of culture and students from other institutions also participate in the same. The institution has a speakers club, debating society, and magazine for developing the relevant talent in the students. The Bhavan's Campus has a Nature Park, Adventure Park, Playgrounds, Volley Ball Court, lakefront quipped with joggers track, and benches all of which are available for students to energize and refresh themselves.

File Description	Documents
Geotagged pictures	<a href="#">View File</a>
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

**4.1.3 - Number of classrooms and seminar halls with ICT-enabled facilities**

26

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	<a href="#">View File</a>

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

155.80

File Description	Documents
Upload audited utilization statements	<a href="#">View File</a>
Details of Expenditure, excluding salary, during the years	<a href="#">View File</a>
Any additional information	No File Uploaded

**4.2 - Library as a Learning Resource****4.2.1 - Library is automated using Integrated Library Management System (ILMS)****Name of the ILMS software****Nature of automation (fully or partially)****Version****Year of automation****Software for Library Management System (SLIM)****Fully automated****1.7.1 (iSLIM)****1996 (Upgraded to web version in 2020)**

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	Nil

**4.2.2 - Institution has access to the following: e-journals e-ShodhSindhu Shodhganga Membership e-books Databases Remote access to e-resources**

**A. Any 4 or more of the above**

File Description	Documents
Details of subscriptions like e-journals, e-books, e-ShodhSindhu, Shodhganga membership	<a href="#">View File</a>
Upload any additional information	No File Uploaded

**4.2.3 - Expenditure on purchase of books/ e-books and subscription to journals/e-journals during the year (INR in lakhs)**

**11.56**

File Description	Documents
Audited statements of accounts	<a href="#">View File</a>
Any additional information	No File Uploaded
Details of annual expenditure for purchase of books/e-books and journals/e- journals during the year (Data Template)	<a href="#">View File</a>

**4.2.4 - Usage of library by teachers and students (footfalls and login data for online access)**

**4.2.4.1 - Number of teachers and students using the library per day during the year**

**0.33**

File Description	Documents
Upload details of library usage by teachers and students	<a href="#">View File</a>
Any additional information	No File Uploaded

### 4.3 - IT Infrastructure

4.3.1 - Institution has an IT policy covering Wi-Fi, cyber security, etc. and has allocated budget for updating its IT facilities

**IT FACILITIES**

- Website:www.spce.ac.in.
- Mail Server and Client: All the faculty members, staff, and students are given e-mail ID on spce.ac.in domain
- Internet:100 MBPS Internet bandwidth through a dedicated Leased Line. This internet is available to students even beyond office hours.
- DSPACE (Digital Repository): Important documents are hosted.
- NPTEL Server: The Institute has dedicated NPTEL Server and the NPTEL Videos are hosted.
- Software Packages: Various technical softwares such as MATLAB, Simulink, CATIA, Ansys, AutoCAD, MS Office Suite, project management, etc.
- Computer, Laptop, Printer, Projector: There are more than 500 High End Desktop PCs available. All the faculty members are provided with a digital writing pad, printer and a personal desktop as well as laptop. All the classrooms are equipped with Digital Boards and LCD Projectors.
- Wi-Fi facility:The entire campus including hostel is Wi-Fi enabled with more than 47 WiFi access points.
- LAN: A gigabyte LAN with fibre optics backbone having more than 500 nodes.
- CCTV Surveillance: Implemented campus wide CCTV

Surveillance system for safety and security.

- **Biometric Attendance System:**An iris based biometric attendance system for faculty/staff.
- **IT Infrastructure Committee:** In order to manage this IT Infrastructure, institute has also constituted an IT Infrastructure Management Committee.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	Nil

**4.3.2 - Student - Computer ratio**

Number of Students	Number of Computers
868	427

File Description	Documents
Upload any additional information	<a href="#">View File</a>

<b>4.3.3 - Bandwidth of internet connection in the Institution and the number of students on campus</b>	<b>A. 750 Mbps</b>
---	--------------------

File Description	Documents
Details of bandwidth available in the Institution	<a href="#">View File</a>
Upload any additional information	No File Uploaded

<b>4.3.4 - Institution has facilities for e-content development: Facilities available for e-content development Media Centre Audio-Visual Centre Lecture Capturing System (LCS) Mixing equipments and software for editing</b>	<b>E. None of the above</b>
--	-----------------------------



File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil
List of facilities for e-content development (Data Template)	No File Uploaded

#### 4.4 - Maintenance of Campus Infrastructure

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

63.44

File Description	Documents
Audited statements of accounts	<a href="#">View File</a>
Upload any additional information	No File Uploaded

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

The institute has well-established systems and procedures for maintaining and utilizing physical, academic, and support facilities. These are described in the maintenance manual attached with this report. Building and Infrastructure committee plays a vital role in maintaining the infrastructure of the institute. A review of the Building and Infrastructure committee is done every week for resolving the various issues.

It is common practice to prepare and submit budget proposals for equipment procurement and departmental refurbishment by the individual department every year. The proposals are scrutinized and funds are sanctioned for the subsequent year for the optimal utilization of funds. IT infrastructure committee comprising the system administrator maintains the website and all ICT-based systems on premises. The housekeeping services are provided to ensure cleanliness and sanitation across all classrooms, laboratories, and campus premises. The central facilities are common areas for all the institutional components and are organized, developed, and maintained by institute-level building planning and maintenance cells.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	Nil

**STUDENT SUPPORT AND PROGRESSION**

**5.1 - Student Support**

**5.1.1 - Number of students benefitted by scholarships and freeships provided by the Government during the year**

464

File Description	Documents
Upload self-attested letters with the list of students receiving scholarships	No File Uploaded
Upload any additional information	<a href="#">View File</a>

**5.1.2 - Number of students benefitted by scholarships and freeships provided by the institution and non-government agencies during the year**

0

File Description	Documents
Upload any additional information	No File Uploaded
Institutional data in prescribed format	No File Uploaded

<b>5.1.3 - The following Capacity Development and Skill Enhancement activities are organised for improving students' capabilities Soft Skills Language and Communication Skills Life Skills (Yoga, Physical fitness, Health and Hygiene) Awareness of Trends in Technology</b>	<b>B. Any 3 of the above</b>
--	------------------------------

File Description	Documents
Link to Institutional website	<a href="https://www.spce.ac.in/CCE.php">https://www.spce.ac.in/CCE.php</a>
Details of capability development and schemes	<a href="#">View File</a>
Any additional information	No File Uploaded

#### 5.1.4 - Number of students benefitted from guidance/coaching for competitive examinations and career counselling offered by the institution during the year

180

File Description	Documents
Any additional information	No File Uploaded
Number of students benefitted by guidance for competitive examinations and career counseling during the year (Data Template)	<a href="#">View File</a>

**5.1.5 - The institution adopts the following mechanism for redressal of students' grievances, including sexual harassment and ragging: Implementation of guidelines of statutory/regulatory bodies Creating awareness and implementation of policies with zero tolerance Mechanism for submission of online/offline students' grievances Timely redressal of grievances through appropriate committees**

A. All of the above

File Description	Documents
Minutes of the meetings of students' grievance redressal committee, prevention of sexual harassment committee and Anti-ragging committee	No File Uploaded
Details of student grievances including sexual harassment and ragging cases	No File Uploaded
Upload any additional information	No File Uploaded

<b>5.2 - Student Progression</b>	
<b>5.2.1 - Number of outgoing students who got placement during the year</b>	
92	
<b>File Description</b>	<b>Documents</b>
Self-attested list of students placed	<a href="#">View File</a>
Upload any additional information	No File Uploaded
<b>5.2.2 - Number of outgoing students progressing to higher education</b>	
32	
<b>File Description</b>	<b>Documents</b>
Upload supporting data for students/alumni	No File Uploaded
Details of students who went for higher education	<a href="#">View File</a>
Any additional information	No File Uploaded
<b>5.2.3 - Number of students qualifying in state/ national/ international level examinations during the year</b>	
<b>5.2.3.1 - Number of students who qualified in state/ national/ international examinations (e.g.: IIT-JAM/NET/SET/JRF/ GATE /GMAT /CAT/ GRE/ TOEFL/Civil Services/State government examinations) during the year</b>	
72	
<b>File Description</b>	<b>Documents</b>
Upload supporting data for students/alumni	<a href="#">View File</a>
Any additional information	No File Uploaded
<b>5.3 - Student Participation and Activities</b>	
<b>5.3.1 - Number of awards/medals for outstanding performance in sports and/or cultural activities at inter-university / state /national / international events (award for a team event should be counted as one) during the year</b>	
0	

File Description	Documents
e-copies of award letters and certificates	No File Uploaded
Any additional information	No File Uploaded

### 5.3.2 - Presence of an active Student Council and representation of students in academic and administrative bodies/committees of the institution

The student council is very active and a summary of its activities are presented as an attachment to this report. The student members are present in academic bodies such as Board of Studies and Academic Council.

Many guest lectures, workshops, and training programs are organized for students with the help of industry experts, alumni, and academic institutes (e Cell IITB). Industry visits are arranged for students. Sardar Patel Automation and Robotics K'lub (SPARK) represents working in designing and fabricating Robots for students.

The grooming of students for participation in various national and regional events is nurtured through different student bodies such as Student Council, CESA/EESA/MESA/TESA, IIIIE-SPCE Student Chapter, Robocon Club, SPCE Racing team in collaboration with SAEIndia, SPCE Wave club, ISHRAE chapter, SPCE Start-Up Cell, Speakers Club, Magazine Committee, Photography Magazine team and some more.

The students also organize the annual cultural event SPACE. Students participate in the technical festival SPECTRA which involves various competitions testing technical knowledge. The SPCE racing, WAVE, and ROBOCON teams enable the students to apply their learning and participate in various national-level completions. Their efforts are reflected in the position they secure in such competitions.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	<a href="https://www.spce.ac.in/StudentsCouncil.php">https://www.spce.ac.in/StudentsCouncil.php</a>

**5.3.3 - Number of sports and cultural events / competitions organised by the institution**

8

File Description	Documents
Report of the event	<a href="#">View File</a>
List of sports and cultural events / competitions organised per year	<a href="#">View File</a>
Upload any additional information	No File Uploaded

**5.4 - Alumni Engagement**

5.4.1 - The Alumni Association and its Chapters (registered and functional) contribute significantly to the development of the institution through financial and other support services

SPCE Alumni committee is working to create a platform to interact with SPCE alumni. They are connected to the institute and hence the networking between the students and alumni is possible. To interact with the alumni, the committee is formed consisting of SPCE teachers and alumni members.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	<a href="https://www.spce.ac.in/alumni.php">https://www.spce.ac.in/alumni.php</a>

**5.4.2 - Alumni's financial contribution during the year**

**E. <2 Lakhs**

File Description	Documents
Upload any additional information	No File Uploaded

**GOVERNANCE, LEADERSHIP AND MANAGEMENT****6.1 - Institutional Vision and Leadership**

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

**The vision of HEI:**

SARDAR PATEL COLLEGE OF ENGINEERING (SPCE) ASPIRES TO BE AN INSTITUTION OF NATIONAL REPUTE THAT WILL CREATE PROFESSIONALS WITH COMPETENCE AND MOTIVATE RESEARCH FOR THE PROGRESS OF THE NATION.

The mission of HEI

To impart quality education through time relevant curriculum in academic programs.

To enhance career opportunities for students through industry-institute interaction & value-added courses.

To promote excellence by encouraging innovative ideas and lateral thinking.

To inculcate a sense of discipline and responsibility towards society

All the programmes in its structure and in its contents are in line with societal and industry needs. The institute offers PhD programme in Civill Engineering, Electrical Engineering and also in Mechanical Engineering. The Institute offers fiveMTech Programmes in alignment with industry requirements. The Civil Engineering department of the college is recognized as a QIP center for Ph .D research. The college also has various MoUs with industries to enable students to get very good exposure to industries. This enables students to secure their bright future. Students do participate in competitive events wherein they exhibit their critical thinking and creativity. Students along with faculty have to their credit a few patents and numerous research papers at national and international forums.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	<a href="https://www.spce.ac.in/institute-vision-mission.php">https://www.spce.ac.in/institute-vision-mission.php</a>

6.1.2 - Effective leadership is reflected in various institutional practices such as decentralization and participative management

The organization has good decentralization of authorities, and the overall improvements are closely monitored. The

administrative, academic and financial policies are designed at the Administrative Council level, however inputs for the policy-making are derived from various stakeholders namely; internal faculty, staff, students, University, Directorate of Technical Education, Alumni, Recruiters, Faculty experts from other institutes, Industries, Research Organizations, etc.

This HEI practices participative management at various levels through various positions and various committees

Various positions: Dean (Academics), Dean (Finance), Dean (R&D), PG chairman, Head of departments (Civil Mechanical, Electrical, first year), PG coordinators, Ph. D. coordinators, Electrical Maintenance In-charge, Water Maintenance In-charge, Hostel wardens, Rector, Security Incharge, Canteen In-charge, TEQIP Coordinator, etc.

Various Committees: Institute Development Committee (IDC), IQAC, Board of Studies (UG. PG: Civil Mechanical, Electrical), Academic council, Finance committee, Internal Compliance Committee, Purchase Committee, Research Committee.

The committee meetings are conducted regularly in which faculty, students, supporting staff, academicians, industry experts, and alumni are involved. Every week, Institute Development Committee (IDC) meets to review various activities including monitoring and resolving various issues in a participative manner. Matters pertaining to each department are discussed with the staff during department meetings and their collective decisions and opinions are considered in HODs meetings

File Description	Documents
Upload strategic plan and deployment documents on the website	No File Uploaded
Upload any additional information	No File Uploaded
Paste link for additional Information	Nil

## 6.2 - Strategy Development and Deployment

6.2.1 - The institutional Strategic/ Perspective plan has been clearly articulated and implemented



The HEI has a perspective plan focused on the following broad areas. The plan is articulated with stakeholders during various academic and administrative forums. The overall implementation is monitored by the Board of Governors.

- Teaching and learning
- Research and development
- Community Services
- Industry interaction

The details are described in the attached document.

File Description	Documents
Strategic Plan and deployment documents on the website	<a href="#">View File</a>
Paste link for additional information	Nil
Upload any additional information	<a href="#">View File</a>

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

The HEI has a well-framed administrative setup conforming to the norms of the regulatory bodies.

The Chairman, Board of Governors in consultation with other members of the BOG designs policies on administration, finance, HR, and Research activities and communicates to the Principal for implementation. The Principal conveys and monitors these activities in consultation with the Institute Development Committee(IDC) members.

The IDC is composed of the following members under the chairmanship of the Principal: All Deans, TPO, all Heads of Department, Controller of Exams (CoE), IT coordinator, Librarian, Hostel Rector, and TEQIP Coordinator. IDC members discuss their opinions regarding implementing various policies.

The following statutory committees are functioning to look after the administrative and academic procedures as per the norms stipulated by the University Grants Commission (UGC): Board of Governance (BoG) Academic Council, Board of Studies Finance Committee, Institute Development Committee (IDC).

Additionally, the HEI has the following Non-statutory committees. IQAC, Information Committee, Anti-ragging Committee, Anti-Sexual Harassment Committee, Disciplinary Committee, Purchase Committee Grievance, Redressal Committee, Library Committee, Student Council, Alumni Committee, etc. The HEI has set up a separate grievances redressal cell. Through students' Council meetings many complaints are well attended. The mentors for students are available in each department.

File Description	Documents
Paste link to Organogram on the institution webpage	<a href="https://www.spce.ac.in/Documents/Accreditation/AQAR/6.2.2%20Organogram%20of%20spce.pdf">https://www.spce.ac.in/Documents/Accreditation/AQAR/6.2.2%20Organogram%20of%20spce.pdf</a>
Upload any additional information	<a href="#">View File</a>
Paste link for additional Information	Nil

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

C. Any two of the above

File Description	Documents
ERP (Enterprise Resource Planning) Document	<a href="#">View File</a>
Screen shots of user interfaces	<a href="#">View File</a>
Details of implementation of e-governance in areas of operation	<a href="#">View File</a>
Any additional information	No File Uploaded

### 6.3 - Faculty Empowerment Strategies

6.3.1 - The institution has effective welfare measures for teaching and non-teaching staff and avenues for their career development/ progression

The college has "Staff Welfare Fund (SWF)". Through this fund, faculty members have been provided with 50% of travel expenses or Rs. 50,000/- whichever is less. This is in addition to TEQIP funds budgeted for attending national/ international conferences. For any emergency or for any event of domestic

importance, advance amount to the extent of Rs. 40,000/- is being provided to the staff member. The institution also support Group Medical Insurance to employees. As an average, 30% of employees avail of the advance/reimbursement facility.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

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

13

File Description	Documents
Upload any additional information	No File Uploaded
Details of teachers provided with financial support to attend conference, workshops etc during the year (Data Template)	<a href="#">View File</a>

### 6.3.3 - Number of professional development / administrative training programmes organized by the Institution for its teaching and non-teaching staff during the year

11

File Description	Documents
Reports of the Human Resource Development Centres (UGC HRDC/ASC or other relevant centres)	<a href="#">View File</a>
Upload any additional information	No File Uploaded

### 6.3.4 - Number of teachers who have undergone online/ face-to-face Faculty Development Programmes during the year: (Professional Development Programmes, Orientation / Induction Programmes, Refresher Courses, Short-Term Course, etc.)

10

File Description	Documents
Summary of the IQAC report	No File Uploaded
Reports of the Human Resource Development Centres (UGC ASC or other relevant centers)	<a href="#">View File</a>
Upload any additional information	No File Uploaded

#### 6.4 - Financial Management and Resource Mobilization

##### 6.4.1 - Institution conducts internal and external financial audits regularly

The institute ensures strong adherence to financial transparency. Regular audits are a part of the process. The HEI appoints internal and external auditors annually. The external auditor is a statutory auditor who carries out half-yearly and yearly audits. The internal auditor makes quarterly balance sheets. In addition to this, a separate audit is carried out by the regional office of the Directorate of Technical Education and by "Audit General (AG)" of the state government. for the grant-related fund provided by the state government

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

##### 6.4.2 - Funds / Grants received from non-government bodies, individuals, and philanthropists during the year (not covered in Criterion III and V) (INR in lakhs)

0

File Description	Documents
Annual statements of accounts	No File Uploaded
Details of funds / grants received from non-government bodies, individuals, philanthropists during the year	No File Uploaded
Any additional information	No File Uploaded

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

The HEI has been well recognized for various testing consultancy assignments in the Civil Engineering Department. Resource generation is also done through organizing On-Line examinations for various external agencies. Each of the three departments takes an active part in organizing continuing education programs for industry/institute personnel. This adds to resource mobilization. The HEI has conducted third party verification for the projects completed by Municipal Corporation. The HEI has appointed Finance Committee & also Dean Finance, as per the UGC guidelines. Generally, the meetings of this committee are scheduled in every quarter. Approval of budget, monitoring of expenditure, purchase of major equipment, analysis of balance sheet, tackling of financial related college level issues, a recommendation for appointment of internal and external financial auditors, in-time compliances for financial audit points, etc. are well handled by Dean Finance & this committee. The committee provides specific guidelines to the Principal for effective implementations. At the Principal's level, a separate central purchase committee has been constituted which meets weekly. The purchase committee prepares analytical comments on comparative statements prepared by the proposer. These recommendations are then approved, with changes if required by the Principal. The local financial auditor prepares periodic audit reports for submission to the Principal and the Finance Committee.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	Nil

### 6.5 - Internal Quality Assurance System

6.5.1 - Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing quality assurance strategies and processes visible in terms of incremental improvements made during the preceding year with regard to quality (in case of the First Cycle): Incremental improvements made during the preceding year with regard to quality and post-accreditation quality initiatives (Second and subsequent cycles)

SPCE believes in improving quality consistently and continuously in all facets of Technical education. An academic audit of departments is conducted. Internal examination audits are conducted twice in a year at the end of each semester. The internal audit is conducted by an audit committee appointed by

the Principal. Typically internal academic auditors are faculty chosen from various departments of the college. The schedule of the audit is declared in advance. The faculties are provided with parameters of academic assessment. The assessment parameters include mapping of course outcomes with program outcomes, course delivery, in-semester evaluation planned and executed, Performance of Engaging lectures, Performance of Attendance of students, Counseling, quality of question papers, attainment of course outcomes, and result-analysis. The auditors are also provided with evaluation format and it is submitted to Chairman IQAC. Chairman IQAC compiles all the evaluations by the auditors and prepares a consolidated audit report which is sent to all departments. Heads of the department take cognizance of the report and necessary corrective measures to address the non-conformities. This is supported by an external academic audit. The committee for external academic audit is composed of academic experts from various autonomous colleges. The external academic audit is done usually once in two / three years.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

6.5.2 - The institution reviews its teaching-learning process, structures and methodologies of operation and learning outcomes at periodic intervals through its IQAC as per norms

The information related to the progress of the teaching-learning process, implementation of academic and administrative operations, and learning/program outcomes are gathered through corresponding statutory committees. This information is reviewed by IQAC periodically and the observations and comments are shared with administrative heads for possible corrective action.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	<a href="https://www.spce.ac.in/Documents/Accreditation/AOAR/A9%20iqac%20mom%20signed.pdf">https://www.spce.ac.in/Documents/Accreditation/AOAR/A9%20iqac%20mom%20signed.pdf</a>

<p><b>6.5.3 - Quality assurance initiatives of the institution include Regular meeting of the IQAC Feedback collected, analysed and used for improvement of the institution Collaborative quality initiatives with other institution(s) Participation in NIRF Any other quality audit recognized by state, national or international agencies (such as ISO Certification)</b></p>	<p><b>B. Any 3 of the above</b></p>
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File Description	Documents
<p>Paste the web link of annual reports of the Institution</p>	<p><a href="https://www.spce.ac.in/Documents/Accreditation/AQAR/6.5.3%20Annual%20report%202020-21.pdf">https://www.spce.ac.in/Documents/Accreditation/AQAR/6.5.3%20Annual%20report%202020-21.pdf</a></p>
<p>Upload e-copies of accreditations and certification</p>	<p><a href="#">View File</a></p>
<p>Upload details of quality assurance initiatives of the institution</p>	<p><a href="#">View File</a></p>
<p>Upload any additional information</p>	<p>No File Uploaded</p>

**INSTITUTIONAL VALUES AND BEST PRACTICES**

**7.1 - Institutional Values and Social Responsibilities**

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

SPCE treats all students, staff and supporting staff equally. SPCE has always paid great attention to ensure and promote gender equity. In our institute, all academic and non-academic committees of the college have a good representation of both the genders. The institute has a student welfare and ICC on the campus to empower girl students, to sensitize everyone with regard to issues related to women, and to make the college campus a safe place for them. The institute has male and female counsellors to whom students can go and discuss their psychological, emotional, education-related issues as well as for career counselling. To facilitate our female students, the campus has established a spacious girl's common room where girls can relax, study, do informal discussions in the free time available. Female students appreciate this facility at a great deal. Programs/workshops related to self-defence are conducted in which trained faculties from this field give

important tips related to self-defence along with demonstrations. A suggestion box is placed at strategic locations so that if anyone has any issue related to gender equity they can drop complaints or suggestions. The box is opened once every month and due action is taken to resolve the issue.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	Nil

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

D. Any 1of the above

File Description	Documents
Geotagged Photographs	<a href="#">View File</a>
Any other relevant information	No File Uploaded

7.1.3 - Describe the facilities in the institution for the management of the following types of degradable and non-degradable waste (within a maximum of 200 words)

SPCE solid waste audit is carried out once in a year by either students or NGOs such as StriMuktiSangathan (The report is being attached as annexure).Based on this report compost pits were set up in the college however due to less staff it is not properly functional.

At present there is provision for dry and wet waste bins is done . All the wet waste is being put in compost pits provided in campus. At the end of 1.5 months manure is produced which can be used in gardens or sold

Waste Audit 2019 is attached.

- E-waste management:We have a tie up with EPRI for e-waste collection . Obsolescence of used computers is taken up and sold to buyers. Workshops and e-waste collection drives are conducted in campus.



- Hazardous chemicals and radioactive waste management:** Chemistry and environmental laboratories generate Hazardous waste in the form of alkalies and acids. Dilution and reduction of acidity and alkalinity by neutralization is taken up. Experiments like COD have been modified to closed reflux to reduce or avoid use of mercuric sulphate. The solvents are stored in container before sending it to hazardous waste management facility. Dilution or neutralization could be done

File Description	Documents
Relevant documents like agreements/MoUs with Government and other approved agencies	<a href="#">View File</a>
Geotagged photographs of the facilities	No File Uploaded
Any other relevant information	<a href="#">View File</a>

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

B. Any 3 of the above

File Description	Documents
Geotagged photographs / videos of the facilities	No File Uploaded
Any other relevant information	<a href="#">View File</a>

**7.1.5 - Green campus initiatives include**

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

1. Restricted entry of automobiles
2. Use of bicycles/ Battery-powered vehicles
3. Pedestrian-friendly pathways

B. Any 3 of the above

<p><b>4. Ban on use of plastic</b> <b>5. Landscaping</b></p>	
File Description	Documents
Geotagged photos / videos of the facilities	No File Uploaded
Various policy documents / decisions circulated for implementation	No File Uploaded
Any other relevant documents	<a href="#">View File</a>
<p><b>7.1.6 - Quality audits on environment and energy undertaken by the institution</b></p>	
<p><b>7.1.6.1 - The institution’s initiatives to preserve and improve the environment and harness energy are confirmed through the following:</b></p> <ol style="list-style-type: none"> <li><b>1. Green audit</b></li> <li><b>2. Energy audit</b></li> <li><b>3. Environment audit</b></li> <li><b>4. Clean and green campus recognitions/awards</b></li> <li><b>5. Beyond the campus environmental promotional activities</b></li> </ol>	<p>D. Any 1 of the above</p>
File Description	Documents
Reports on environment and energy audits submitted by the auditing agency	<a href="#">View File</a>
Certification by the auditing agency	No File Uploaded
Certificates of the awards received	No File Uploaded
Any other relevant information	No File Uploaded
<p><b>7.1.7 - The Institution has a disabled-friendly and barrier-free environment: Ramps/lifts for easy access to classrooms and centres Disabled-friendly washrooms Signage including tactile path lights, display boards and signposts Assistive technology and facilities for persons with</b></p>	<p>B. Any 3 of the above</p>

**disabilities: accessible website, screen-reading software, mechanized equipment, etc. Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading materials, screen reading, etc.**

File Description	Documents
Geotagged photographs / videos of facilities	<a href="#">View File</a>
Policy documents and brochures on the support to be provided	No File Uploaded
Details of the software procured for providing assistance	No File Uploaded
Any other relevant information	No File Uploaded

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

Being a government-aided institute, we have students coming from various backgrounds, cultural, regional, linguistic, socio-economic, etc. However, they are treated equally, once they entered SPCE. The language of instruction and evaluation is English.

We have EESA/MESA/CESA/TESA students associations where students of the same discipline come together and organize many Intra and inter-college activities. We have different clubs for robocon, racing, wave where students from different departments come together and prepare for participation at the national level. Participation in such groups depends on the choice and interest of the individual.

Many technical, and cultural activities are organized by the student council. The student council is formed seeing the interest, choices, and capacity of individuals.

All national festivals and days such as voters-day, yoga-day, teacher's day, etc are celebrated where faculty, students, and supporting staff are actively involved. The college magazine is another platform where all stakeholders present their interests. The articles, poems, and stories in various

languages are included.

The success of yearly activities like the technical festival SPECTRA, cultural festival SPACE, and sports week for the SPCE cup show the harmony towards diversity.

The courses Constitution of India and Indian Traditional Knowledge are mandatory in the curriculum.

File Description	Documents
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	No File Uploaded

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

Sardar Patel College of Engineering sensitizes the students and the employees of the institution to the constitutional obligations about values, rights, duties, and responsibilities of citizens which enables them to conduct as responsible citizens.

A summary of such initiatives for sensitization of students and employees to constitutional obligation is as follows. A further description is available in the attached document.

To provide an effective, supportive, safe, accessible, and affordable learning environment.

To participate in various programs on culture, traditions, values, duties, and responsibilities through various co-curricular and extracurricular activities.

To conduct awareness programs on the ban on plastics, cleanliness, Swachh Bharat Abhiyan, etc.

To establish policies that reflect core values. Code of conduct is prepared for students and staff.

To include the essence of Indian Traditional Knowledge as a mandatory course

To conduct a mandatory Induction Program to imbibe the

importance of Integrity, sanitation, living standards of life, and personality

To promote activities to serve society such as blood donation, and bone marrow donation through the participation of eminent hospitals in Mumbai. E

To arrange workshops by eminent personalities are invited to conduct workshops and deliver lectures on ethics, values, duties, Gender sensitization, etc.

File Description	Documents
Details of activities that inculcate values necessary to transform students into responsible citizens	No File Uploaded
Any other relevant information	<a href="#">View File</a>

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

D. Any 1 of the above

File Description	Documents
Code of Ethics - policy document	<a href="#">View File</a>
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programmes, etc. in support of the claims	No File Uploaded
Any other relevant information	No File Uploaded

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

## events and festivals

The following events are organized/celebrated in online/offline mode in AY 2020-2021.

1. Voters' Day: We celebrated voters day on 25/01/2021 by setting up a voter's id booth. This was a joint task done by the Rotaract club of our college alongside the student council. This day was commenced by our principal, Dr. Murudi who spoke about the importance of voting and what we can do as we are the youth of our nation. Students took this moment to showcase their penmanship and oration skills by orating their own point of view on the importance of voters day and talked about spreading awareness on the subject of voting
2. Republic Day, 26/01/2021
3. Independence Day, 15/08/2020, 15/08/2021
4. Yoga Day: 30/10/2021 Online mode: Yoga Session was held for the fitness and body & mind balance of SPCE girls.
5. Sardar Vallabhbhai Patel Jayanti: 31/10/2021 online mode: The celebration began by reciting the Saraswati van dana, after which a few words were spoken in the memory of our former deputy Prime Minister Sardar Vallabhbhai Patel and our founder, Dr.K.M.Munshi. Various clubs of SPCE were also present during the celebration of National Unity Day. An art and essay competition was organized on the day.

File Description	Documents
Annual report of the celebrations and commemorative events for during the year	<a href="#">View File</a>
Geotagged photographs of some of the events	No File Uploaded
Any other relevant information	No File Uploaded

## 7.2 - Best Practices

7.2.1 - Provide the weblink on the Institutional website regarding the Best practices as per the prescribed format of NAAC

Two of the institutional best practices are listed below. The description of these in the prescribed format is provided on

the institutional website.

**Title of Best Practice 1: Continued Academic Support to students**

**Objectives of the Practice 1:**

1. To prepare technically strong students
2. Improve employability
3. Inculcate ethical values

**Title of Best Practice 2: Significant curriculum reforms**

**Objectives of the Practice 2:**

1. To prepare students ready to join the industry
2. To prepare students for research
3. To prepare students for higher education

File Description	Documents
Best practices in the Institutional website	<a href="https://www.spce.ac.in/Documents/Accreditation/AQAR/7.2.1%20best%20practices%20of%20institute.pdf">https://www.spce.ac.in/Documents/Accreditation/AQAR/7.2.1%20best%20practices%20of%20institute.pdf</a>
Any other relevant information	Nil

### 7.3 - Institutional Distinctiveness

7.3.1 - Highlight the performance of the institution in an area distinct to its priority and thrust (within a maximum of 200 words)

The institute aims to create professionals with competence and motivate research for the progress of the nation.

Our curriculum is reviewed by experts from industry and academicians regularly which has improved the employability.

The curriculum, workshops and training programs conducted for students, has enhanced their participation and performance in national level technical competitions such as e yantra, robocon, car racing etc.

The curriculum maps with GATE syllabus which help students to qualify GATE which has improved the number of students joining

**M. Tech programmes in reputed institutes.**

Approximately 60% of our faculty has completed Ph. D. from reputed institutes in diverse areas and almost all of the rest are pursuing the same which help the institute to enhance research activities. Over the years research based activities such as publications, patents, allotment of research projects by government agencies, consultancy are improving.

Due to the constant efforts of SPCE start up cell, the projects under taken by final year students are promoting innovative ideas that can be converted into products.

File Description	Documents
Appropriate link in the institutional website	Nil
Any other relevant information	No File Uploaded

**7.3.2 - Plan of action for the next academic year****Plan of Action for AY 2022-2023****1. Curricular Aspects**

- Revision of curriculum to include few features on NEP 2020
- Start of Minor and Honors degree programmes at UG level

**2. Teaching Learning and Evaluation**

- Credits gain through SWAYAM courses
- Innovation in evaluation process as per NEP 2020
- Plans for qualification upgradation of faculty and supporting staff

**3. Research Innovation and Execution**

- Enhancement in research and consultancy activities
- Utilization of funds received from different agencies
- Proposals for gaining new funds from different agencies to enhance research activities
- In campus organization of international conference

**4. Infrastructure and Learning Resources**



- New laboratory set up suggested by NAAC committee
- Execution of IONCUDOS for OBE implementation
- Execution of ERP by SAMARTh

#### 5. Students Support and Progression

- Induction Programme
- Trainings for students to improve employability
- Efforts to enhance industry institute interaction
- Inclusion of more technical/ non technical value added courses
- More participation of students to solve environment issues, for social cause

#### 6. Governance, Leadership, Management

- IQAC calendar preparation
- Training need analysis before start of AY
- Planning faculty development, professional development and administrative training
- Calendar for audits at different levels

#### 7. Institutional values and best practices

- Planning of workshops for students and staff for gender sensitization
- Project implementation in the area of renewable energy for alternate energy generation
- Enhancement in implementation of waste management system
- Enhancement in activities for green campus
- More participation of students and staff in celebration of national and international days by organizing activities, competitions for them