

## YEARLY STATUS REPORT - 2021-2022

Part A			
Data of the	Data of the Institution		
1.Name of the Institution	PES'S MODERN COLLEGE OF ENGINEERING , PUNE		
Name of the Head of the institution	PROF. DR. (Mrs) K. R. JOSHI		
Designation	PRINCIPAL		
• Does the institution function from its own campus?	Yes		
Phone no./Alternate phone no.	020-25533638/48		
Mobile no	9011070917		
Registered e-mail	principal@moderncoe.edu.in		
Alternate e-mail	pesmcoe@gmail.com		
• Address	1186A , Shivaji Nagar , Off J.M. Road Pune 411005		
• City/Town	PUNE		
• State/UT	MAHARASHTRA		
• Pin Code	411005		
2.Institutional status			
Affiliated /Constituent	Affiliated		
Type of Institution	Co-education		
• Location	Urban		

• Financial Status	Self-financing
Name of the Affiliating University	Savitribai Phule Pune University , Pune
Name of the IQAC Coordinator	Prof. Dr. Rupali S. Kamathe
• Phone No.	25535638
Alternate phone No.	9822447228
• Mobile	9422945755
IQAC e-mail address	iqac@moderncoe.edu.in
Alternate Email address	hodcomp@moderncoe.edu.in
3.Website address (Web link of the AQAR (Previous Academic Year)	www.moderncoe.edu.in
4. Whether Academic Calendar prepared during the year?	Yes
• if yes, whether it is uploaded in the Institutional website Web link:	https://moderncoe.edu.in/academic- calender.aspx

### **5.**Accreditation Details

Cycle	Grade	CGPA	Year of Accreditation	Validity from	Validity to
Cycle 1	В	2.45	2011	27/03/2011	26/03/2016
Cycle 2	A	3.10	2017	22/02/2017	21/02/2022
Cycle 3	A++	3.66	2022	26/10/2022	25/10/2027

### 6.Date of Establishment of IQAC 05/01/2010

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

Year of award

Amount

Funding Agency

Institutional/Depa

Scheme

rtment /Faculty			8 - 1	with duration	
Computer Engineering	Refresher Program	AICTE	-ISTE	2021-22, one week	93000
Electrical Engineering	FDP	AIC	CTE	2021-22	93000
Master of Business Adm inistration	SPDC	AIC	CTE	2019-20, 3 years	1988591
Master of Business Adm inistration	VVM	SP	PU	2021-22, one day	3000
Master of Business Adm inistration & Mechanical Engineering	SPICESAICTE	AIC	CTE	2021-22	100000
8.Whether compos NAAC guidelines	ition of IQAC as pe	r latest	Yes		
• Upload latest IQAC	notification of format	ion of	View File	2	
9.No. of IQAC mee	tings held during th	ne year	4		
Were the minutes of IQAC meeting(s) and compliance to the decisions have been uploaded on the institutional website?		No			
• If No, please upload the minutes of the meeting(s) and Action Taken Report		View File	2		
=	received funding fr ncy to support its ac	-	No	I	
• If yes, menti	on the amount				

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

IQAC has encouraged departments to continue association with different Professional societies like IEEE, ASME, ACM, CSI, ARAI, WIE, ISLE, ISTE, IET, IETE, IEI, SAE, PMA and S4DS.

The institution has around 28 technical, non-technical clubs engaged in technosocial activities which include 4 different Rotaract Clubs in association with Rotary Clubs. One more Rotaract Club is established at AIML/AIDS department.

At every department Internal and External Academic Audit has been conducted successfully.

Institute has continued to participate in different techno-social / community development activities through NSS, ISR Cell and Unnat Bharat Abhiyan (UBA) 2.0.

Entrepreneurship development cell of the Institution has signed MOU with BHAU Institute (Institute of Innovation, Entrepreneurship and Leadership at Govt. COE Pune). Well-equipped Incubation Centre facility has been established at the Institute to promote start-up culture among students and faculty members.

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

Plan of Action	Achievements/Outcomes
To enhance the teaching learning process by adopting various pedagogies and blended teaching learning techniques.	Different ICT tools used as teaching methodology which helped students in learning the concept in their leisure time.
To arrange different quality improvement programs for students and faculty members.	To arrange different quality improvement programs for students and faculty members.
To encourage faculty members and students towards research and innovation by participating in IIC 4. 0, MHRD, Govt. of India	Innovative projects are being funded by the institute
To ensure industry ready approach of the students for improvements in placements, online internships and industry certifications.	Technical and Non-technical activities were conducted at every department. Activities helped students to build their managerial and technical skills and helped to build their overall personalities. Students opted for internship programs and did certification courses.
To increase entrepreneurship and skill development activities for students.	Activities in association with ED cell and IIC were executed
To conduct external academic audits for quality improvement.	External Audit helped the department to understand its weaknesses, strengths, and scope for improvement.
To prepare NBA compliance of UG E&TC and Electrical Engineering Programs, PG MCA Program and pre qualifier proposals for NBA accreditation of UG Computer, Mechanical, IT and PG MBA Programs	Meetings executed for preparation for NBA visit at E & TC and Electrical, and MCA departments and preparation for pre-qualifier initiated.
3.Whether the AQAR was placed before	Yes

Name	Date of meeting(s)
College Development Committee	06/02/2023

### 14. Whether institutional data submitted to AISHE

Year	Date of Submission
2021-2022	14/02/2023

### 15. Multidisciplinary / interdisciplinary

Curriculum provides choice based credit system. It helps in ensuring holistic academic growth of students. Students can opt for the interdisciplinary open elective subjects, audit courses and honours courses. Systematic measures are taken to inculcate multidisciplinary or interdisciplinary culture among students. They are encouraged to formulate teams from different disciplines while participating in various technical as well as nontechnical events.

### 16.Academic bank of credits (ABC):

Students are encouraged to opt for online courses through National schemes like SWAYAM, NPTEL. Obtained certification is given due consideration in the academics. We are in process of developing a system for ABC in our institute.

### 17.Skill development:

Skill development courses as designed by affiliating university, are conducted in the institute, from third semester onwards in various programs. It helps in imparting knowledge of technical hard skills as well as soft skills. Co-curricular and extracurricular activities are conducted via different platforms provided by students' associations of the institute. Hands on training sessions, spoken tutorials are conducted for all-round development of the students.

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

Students are encouraged to participate in various art and cultural activities, which are also aiming at promotion of the Indian languages. Students participate in art and cultural activities like 'Firodiya Karandak', which is a state level multiple art oriented event and 'Purushottam Karandak', a state level Marathi theatre competition. 'Vakrutwa Prabodhini', a debate club, is an institutional platform for enhancing elocution skills. Preparation of students for these events is the outcome of the training sessions on creative arts and culture, literary activity, proficiency modules

and webinars showcasing importance of regional language, which are arranged by departmental clubs on regular basis. Annual social gathering named ' Spandan ' is organized to inculcate linguistic skills and performing arts, which ultimately leads to enhancement in Indian cultural values.

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

The Institution has adopted outcome based education in all respects with clearly stated Program Outcome (PO), Program Specific Outcomes (PSO) and Course Outcomes (CO). All courses are framed by giving due consideration to the cognitive ability. Institute has well defined policy to calculate attainment of COs and POs. Learning outcomes are defined for every Course and appropriate assessment tools are used to calculate the attainments. Due attention is given to students participation in different technical and non technical activities to make them capable of contributing to environmental, social and economic wellbeing of the society.

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

Infrastructural facilities at the institution are capable of supporting online teaching. The online platforms are extensively being used for engaging classes as well as for conducting workshops and webinars. Virtual laboratories are being used for conducting online practical sessions. Institution has adopted blended mode of teaching that combines online and

offline resources. Lecture Management System is in place. Faculty members attended MOOCs, FDPs, and STTPs to strengthen the hold on the online teaching platforms and have also created academic material (videos, power point presentations, notes, lab manuals) required for online teaching and learning.

Faculty members uploaded the developed material on varied online platforms like Google classrooms, Youtube. Students undergo online courses through schemes like SWAYAM, NPTEL, COURSERA, Spoken Tutorial.

### **Extended Profile**

### 1.Programme

1.1 593

Number of courses offered by the institution across all programs

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### during the year

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

### 2.Student

2.1 4288

Number of students during the year

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

2.2

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

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

2.3

Number of outgoing/final year students during the year

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

### 3.Academic

3.1

Number of full time teachers during the year

File Description	Documents
Data Template	View File

3.2

Number of sanctioned posts during the year

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Extended Profile		
1.Programme		
1.1		593
Number of courses offered by the institution across all programs during the year		
File Description	Documents	
Data Template		<u>View File</u>
2.Student		
2.1		4288
Number of students during the year		
File Description	Documents	
Institutional Data in Prescribed Format		View File
2.2		524
Number of seats earmarked for reserved category as per GOI/ State Govt. rule during the year		
File Description	Documents	
Data Template		View File
2.3		1098
Number of outgoing/ final year students during the year		
File Description	Documents	
Data Template		View File
3.Academic		
3.1		216
Number of full time teachers during the year		
File Description	Documents	
Data Template		View File

	ENGINEERI
3.2	208
Number of sanctioned posts during the year	
File Description	Documents
Data Template	<u>View File</u>
4.Institution	
4.1	44
Total number of Classrooms and Seminar halls	
4.2	1362.01
Total expenditure excluding salary during the yealakhs)	ar (INR in
4.3	1156
Total number of computers on campus for acader	mic purposes

### Part B

### **CURRICULAR ASPECTS**

### 1.1 - Curricular Planning and Implementation

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

- P.E.S. Modern College of Engineering being affiliated to Savitribai Phule Pune University (SPPU), follows the curriculum prepared by the University.
- In adherence with the SPPU Calendar, the Institution prepares the academic calendar and planner (ACP). In line with that every department has an ACP which reflects the planning of activities like term commencement-conclusion, orientation programme, curriculum delivery review, assessments and activity planner reflecting curricular-cocurricular activities for effective curriculum delivery.
- Academic processes are streamlined with choice based teaching load distribution, Timetables and preparation of Laboratory setup.

- The faculty members are updated with the revised syllabus through orientation program.
- For effective curriculum delivery, faculty members maintain course files-curriculum booklets, lab manuals-log books etc.
- Project activities like orientation, topic approval, reviews and competition are conducted as per the project planner and recorded in the project logbook.
- The curriculum delivery is enhanced by blended teaching methods, ICT tools and well equipped laboratories.
- Feedbacks obtained from different stakeholders are analyzed and suggestions are considered for further curriculum planning-implementation.
- University results are analyzed and corrective measures are taken accordingly.

File Description	Documents
Upload relevant supporting document	<u>View File</u>
Link for Additional information	https://moderncoe.edu.in/pdf/website/IQAC/ AQAR/AQAR%202021-22/1.1.1.pdf

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

- In adherence to the SPPU's academic Calendar, the Institution prepares an academic calendar and planner for the effective conduct of Continuous Internal Evaluation (CIE).
- The Institution follows the curriculum structure designed by the SPPU which mainly consists of theory, practical, oral, seminar, project, tutorial etc.
- As per Internal Quality Assurance Cell (IQAC) policy, 20% weightage is given to internal assessment and 80% to

external assessment (SPPU examinations).

• To improve experiential learning and presentation skills, seminar and project work are evaluated continuously as a curricular activity.

The Continuous internal evaluation is done for:

- Theory courses are evaluated through different Assessment tools like Unit Test, MCQ, OBT, Assignments etc.
- Practical / Laboratory Courses are evaluated through continuous assessment, term work and mock oral/practical examinations.
- Tutorials are conducted for the courses which are mentioned in the curriculum and requires more practice for better results.
- Projects / Seminar activities are planned and executed to improve experiential learning and presentation skills and evaluated continuously as a curricular activity in the following way:
  - Project Orientation session
  - Guide allotment
  - Project Planner
  - o Project Review
  - Project exhibitions and competitions
  - Seminar and project term work assessment.

File Description	Documents
Upload relevant supporting document	<u>View File</u>
Link for Additional information	
	https://moderncoe.edu.in/pdf/website/IQAC/
	AQAR/AQAR%202021-22/1.1.2.pdf

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

### A. All of the above

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

### 1.2 - Academic Flexibility

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

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

14

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

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

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

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

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

### 2834

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

### 1.3 - Curriculum Enrichment

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

The Institution integrates Cross-Cutting issues through Regular/Elective courses in the curriculum, Projects, Audit courses, Value-Added/ Add on Courses, Co-curricular and extracurricular activities.

Finalyear projects selection is based on environmental sustainability, green energy, rural development, societal issues, health, safety issues. Institute conducts audit courses which enhances

- Awareness about different issues impacting human lives
- Skill sets to improve their employability.

Students are encouraged to enroll in Value Added Courses like NPTEL, Spoken tutorials, and skilldevelopment courses to address cross-cutting issues. Gender Equality / Sensitization: The Institution follows co-education. An equal opportunity is given toboth genders for organizing and participating in activities without gender discrimination. Environmental and Sustainability: It is inculcated among the students through regular awarenessprograms like -Tree plantation, PUC camp etc. The

Institution participates in Unnat Bharat Abhiyan for different technological interventions. Human Values: Institute takes efforts for students to make them sensitive toward societal issues byorganizing various activities. Professional Ethics are inculcated amongst students by making them aware about the importance ofplagiarism, intellectual property rights (IPR) etc. The Institution maintains an environment in which students, teaching, and non-teaching facultymembers can work together cohesively by taking care of social-moral issues.

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

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

### 171

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

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

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

### 1.4 - Feedback System

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

### A. All of the above

File Description	Documents
URL for stakeholder feedback report	https://moderncoe.edu.in/Feedback.aspx
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management	<u>View File</u>
Any additional information	<u>View File</u>

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

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

File Description	Documents
Upload any additional information	<u>View File</u>
URL for feedback report	https://moderncoe.edu.in/Feedback.aspx

### TEACHING-LEARNING AND EVALUATION

- 2.1 Student Enrollment and Profile
- 2.1.1 Enrolment Number Number of students admitted during the year
- 2.1.1.1 Number of students admitted during the year

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

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

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

### 441

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

### 2.2 - Catering to Student Diversity

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

The institution has a well-defined process for identifying advanced and slow learners. Learning levels of the students are identified by the Guardian Faculty Member, course teachers and mentor, based on student performance in:

?University Examination Results, Assignments and Class test, tutorials, Theory and Practical sessions.

Initiative taken for Advanced Learners

- Promote to enroll in various online MOOC courses like NPTEL,
   Spoken tutorial.
- Encouragement to participate in extension / outreach activities such as BAJA, SUPRA, ROBOCON etc; and competitions.
- Encouragement to opt for Audit / Honour Courses.
- Provide facilities through the Centre of Excellence.
- Motivate to undertake challenging projects and also to participate/represent in National/ state competitions.
- · Promote and maintain the spirit for paper publications.
- Insisted to implement in-house projects/apps.
- Provide funding for innovative projects.

- Arrangein-house and industry internships.
- Provide awareness and the necessary platforms for participation in competitive examinations.
- Inspire to enroll in aptitude/technical training courses.

### Efforts taken for slow learners

- Plan remedial / extra contact hours and classes.
- Provide self-learning material.
- Discussion by the subject teacher during the extra sessions.
- Conduct revision lectures.
- Arrange Mock / revision practical sessions.
- Conduct Home assignments, presentations, MCQ tests.

File Description	Documents
Paste link for additional information	http://www.moderncoe.edu.in/pdf/website/IQ AC/AQAR/AQAR%202021-22/2.2.1%20COMBINED.pd f
Upload any additional information	<u>View File</u>

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

Number of Students	Number of Teachers
4288	216

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

### 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 institute takes efforts to ensure the use of studentcentric methodologies to enrich the learning experience.

### Experiential learning.

 Experiential learning is imbibed using software tools, various professional societies, club activities, internships, industrial visits to help the students to enhance their conceptual knowledge.

- Professional Society Chapters and technical clubs encourage active learning of students and their participation in various competitions. The clubs conduct workshops, tutorials, and lectures to foster interest in various aspects.
- Community outreach programs, environmental consciousness drives are organized by ISR cell.

### Participative learning.

- To develop leadership skills; students are motivated to participate in activities in collaboration with student associations, professional society chapters, industry, cultural fest, NSS, and NGOs.
- Peer learning, think-pair-share, role play, enable students to participate in the classroom.
- Students participate in teams for project development, competitions, and technical paper writing.
- NSS helps students to work in teams and learn the importance of social, environmental aspects.

### Problem-solving.

- 'Unnat Bharat Abhiyan', 'Smart India Hackathon', 'Robocon', 'BHAU', 'BAJA' are platforms that provide opportunities for students to work on real-life problems.
- Institute has an Institution Innovation Council.
- An Incubation center under ED Cell has encouraged students to have innovative ideas, develop, and present in 'PRO-START'.

File Description	Documents
Upload any additional information	<u>View File</u>
Link for additional information	http://www.moderncoe.edu.in/pdf/website/IQ AC/AQAR/AQAR%202021-22/2.3.1%20Student%20C entric_compressed.pdf

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

### maximum of 200 words

In addition to the traditional classroom teaching; the institute encourages to use ICT-enabled tools.

Open-source software such as WEKA, Rapid-Miner, Packet-Tracer, GDB-Compiler, Scilab, and Xilinx etc, are made available during teaching. Laboratory sessions are conducted using different simulation software like JFlap, VisuAlgo, LabView, MATLAB, ETAP, AutoCAD, SolidWorks, and MasterCAM, etc. including Virtual laboratories.

Open Educational Resources (OERs) like YouTube channels and websites created by faculty members for effective curriculum delivery. Videos are uploaded on institute YouTube channel'PESMCOE' and personalized websites to share e-resources with students. Digital Library resources are also being used for effective teaching.

Google classroom is used to manage and post course-related information, learning material, quizzes, lab submissions and assignments.

To increase the involvement of students in classrooms, internal assessment of students is carried out using Google Quiz, Edmodo, and Kahoot.

Students make use of Solidworks for mechanical designing, Arduino-IDE, for microcontroller design, and Altium for PCB design to develop a product to participate in ROBOCON. Solidworks and Ansys is used in developing products for BAJA and SUPRA competitions.

Institute has state-of-the-art infrastructure, ICT-enabled classrooms, smartboards, audio systems, web cameras, and a high-speed internet connection to create interactive class environments and enrich the blended teaching-learning process.

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

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

### 2.3.3.1 - Number of mentors

185

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

### 2.4 - Teacher Profile and Quality

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

216

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

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

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

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

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

### 2.4.3.1 - Total experience of full-time teachers

### 2116 years

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

### 2.5 - Evaluation Process and Reforms

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

The institution is affiliated to Savitribai Phule Pune University (SPPU) and adheres to the Examination Scheme of SPPU.

Objectives of internal assessment:

- To understand the learning levels of students.
- To identify the slow and advanced learners to carry out special efforts / initiatives.
- To improve the performance in external examination and better attainment of course outcomes.
- Term work evaluation.

Various assessment tools for Continuous Internal Evaluation (CIE) and their frequency of conduction are decided as per need of the course for Theory, Practical, Project and Seminar.

To maintain transparency and robustness in internal assessment following points are considered:

- 1. Assessment rubrics are defined and are conveyed to students.
- 2. For Student Awareness, a question bank of oral questions, previous year university questions and MCQs is provided to the students in the Curriculum Booklet.
- 3. Verification of the question paper is carried out by the Domain or Module Coordinator.
- 4. For Assessment and Evaluation, the marking scheme and solution key are prepared by the course coordinator.
- 5. To maintain transparency, solutions and answer sheets are discussed with students for performance improvement in university examinations.
- Mode of conduction will be online/offline, objective/subjective.

Internal assessment results in improving learning abilities, better academic results, more internships and placements.

File Description	Documents
Any additional information	<u>View File</u>
Link for additional information	https://moderncoe.edu.in/pdf/website/IQAC/ AQAR/AQAR%202021-22/2.5.1.pdf

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

The Institution conducts external examinations as per the schedule given by SPPU and all internal assessments are planned and executed as per the Institution's academic planner.

The institution has a well-defined mechanism to deal with grievances related to the internal and external examinations. Various internal assessment tools are considered for Continuous Internal Evaluation (CIE). Term work evaluation is based on CIE.

Grievances raised by students:

### Internal Examination:

- Difficulties in attending the examination due to some personal genuine problem or network issues in online internal examination.
- Discrepancies in term work marks.

### External Examination:

- Issues in university exam form filling.
- Problems due to wrong elective choice given in university exam form.
- Inability to appear for examination due to participation in technical or sports' events at University / National levels.
- Data insufficiency or printing mistakes in question paper.
- Discrepancy in marks in final result.
- Scribes requirement during examinations in case of physical disabilities.

The grievances in internal examination are addressed by the Head of the Department, Guardian Faculty Members (GFM), and course teachers. For external examination, grievances are communicated through the departmental examination coordinator to the College Examination Officer (CEO). Then the CEO communicates to the university authorities to resolve it at the earliest.

File Description	Documents
Any additional information	<u>View File</u>
Link for additional information	https://moderncoe.edu.in/pdf/website/IQAC/ AQAR/AQAR%202021-22/2.5.2.pdf

### 2.6 - Student Performance and Learning Outcomes

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

Guidelines followed for framing CO statements:

 CO statements provided by the affiliated university are revised for theory and practical courses, following the guidelines given by AICTE's Examination Reforms Policy and with respect to course contents; wherever required using only one verb.

Program outcomes and well-articulated CO statements are displayed on the institute website for ready reference to all stakeholders.

Communication of POs and COs to the Teachers:

 CO statements are revised in presence of Head of the Department, accreditation coordinators, module / domain coordinators and course in-charges and shared with all faculty members.  POs and COs are included in the course file and displayed on notice boards in faculty cabins and in the department for reference.

Communication of POs and COs to the Students:

- POs are communicated to students in the Induction and Orientation programs at the commencement of the academic year.
- POs are displayed in laboratories and all notice boards.
- Course in-charge communicates the COs during the theory and practical sessions.
- Curriculum Booklet, lab manual, project log book and various study material COs are stated.

Internal assessment question paper includes the respective course outcome along with Bloom's taxonomy level.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for Additional information	https://moderncoe.edu.in/dist/documents/20 21-AQAR
Upload COs for all Programmes (exemplars from Glossary)	<u>View File</u>

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

Institute has a well-defined policy document for CO, PO and PSOs attainment.

### CO Attainment process:

CO Attainment is computed for all the theory, practical, seminar and project courses using internal and external assessment.

External Assessment: 80% weightage and based on University insemester, end-semester, oral/practical examination, term-work assessment.

Internal Assessment: 20% weightage and based on continuous assessment for theory, practical, seminar and project courses.

- 1. Theory courses: Assessment tools are unit test, MCQ test, assignments, tutorial, programming Skill Test.
- Practical/ oral/ term-work: Assessment tools are lab performance, mock practical / oral/seminar and project work presentation.

CO Attainment levels are defined as 1, 2 and 3.

### For Example:

Attainment Level 1, 2 and 3: 60%, 70% and 80% students scoring more than University average percentage marks or set attainment level in the final examination respectively.

The set attainment level is finalized as 50%. It has an average passing percentage of 40 and first class 60.

PO and PSO Attainment process:

- Direct-80% weightage and based on CO Attainment.
- In-direct-20% weightage and based on analysis of program exit survey, co-curricular and extra-curricular activities, employers' and alumni feedback.

Final PO and PSO attainment is computed by adding direct and indirect attainment.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for Additional information	https://moderncoe.edu.in/pdf/website/IQAC/ AQAR/AQAR%202021-22/2.6.2.pdf

### 2.6.3 - Pass percentage of Students during the year

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

File Description	Documents
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	<u>View File</u>
Upload any additional information	<u>View File</u>
Paste link for the annual report	https://moderncoe.edu.in/pdf/website/IQAC/ AQAR/AQAR%202021-22/2.6.3.2.pdf

### 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://moderncoe.edu.in/pdf/website/IQAC/AQAR/AQAR%202021-22/2.7. SSS 2021-22.pdf

### RESEARCH, INNOVATIONS AND EXTENSION

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

22.27

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

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

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

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

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

4

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

### 3.2 - Innovation Ecosystem

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

The Institute has created an ecosystem for research and innovation which promotes novel research/product based ideas to patent/copyright publication and then promotes towards ventures/start-ups/prototypes.

- The credit based courses related with Innovation and Entrepreneurship are offered through the curriculum. This includes Project Based Learning (PBL) course offered at FE and SE level, Mini Project and Main Project at TE and BE level. Some of the innovative ideas of PBL are carried forward to Mini and Main Project leading to prototypes, quality publications, copyright and patent registration through the institutional research funding.
- Some short-term audit courses, expert talks, seminars, workshops, Hackathons, Exhibitions, field trips are organised by the Institute in collaboration with professional societies and industries for promotion of

- Innovation and Entrepreneurship.
- The infrastructure facilities which include Technical Clubs, Incubation Centre, ED cell, IPR cell and Research Centres are used for creation and transfer of knowledge.
- The Institute has collaboration with other incubation centres like BHAU(Incubation centre at COEP, Pune) and Career-Katta.
- Major Achievements:
- 3.5-Star rated IIC by MHRD.
- Best Prototype award by IIT Bombay.
- 70+ research publications in reputed journals and conferences.
- Recipient of Smart India Hackathons-2022 award.
- 18 copyrights and 1 Patent.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://moderncoe.edu.in/ed-cell- about.aspx

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

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

45

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

### 3.3 - Research Publications and Awards

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

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

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

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

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

50

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

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

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

24

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

### 3.4 - Extension Activities

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

Social responsibility is one of the priorities of institute, imparting knowledge and skills in students and developing them as active members of social change.

The institute promotes various extension activities under National Service Scheme(NSS), Institutional Social Responsibility(ISR)
Cell, and various social clubs established at the institute. The main aim is to identify challenges in rural area and propose appropriate solutions for accelerating sustainable growth.

Entrepreneurship Development(ED) Cell at the Institute aims to encourage students to consider self-employment as a career-option. Institute has received awards in the I2I-Techno-Social-competition for innovative projects.

The main aim of the NSS-Unit is to develop a sense of social and civic responsibility in the students. Several activities are carried out such as vaccination\_drive, gender sensitization, cleanliness, tree plantation, environmental awareness and blood donation camps.

Rotaract Clubs are established under Rotary International(RI) for engaging students to welfare of society by engaging them in social activities. Other clubs organize activities for molding students into responsible citizens. Funding is received under AICTE-SPICES scheme that provides financial support to students' club for techno-social development.

The participation in extension activities helps students in sensitizing towards social issues and encourages them to provide solutions. This leads towards holistic personality development of students.

File Description	Documents
Paste link for additional information	https://moderncoe.edu.in/isr.aspx
Upload any additional information	<u>View File</u>

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

4

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

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

36

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

- 3.4.4 Number of students participating in extension activities at 3.4.3. above during year
- 3.4.4.1 Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year wise during year

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

### 3.5 - Collaboration

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

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

### 1185

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

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

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

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

### INFRASTRUCTURE AND LEARNING RESOURCES

### 4.1 - Physical Facilities

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

The Institution was established in the year 1999. It has a well-developed campus of 10.47 acres of land. Physical infrastructure like Classrooms, Tutorial Rooms, Laboratories, Machine Shop and Seminar Halls is available. In addition to this, the Institution has a distinctive auditorium (capacity 500), administrative rooms, examination control room, central and departmental libraries, a computer center, a language laboratory, and an audio/video laboratory.

### Classroom Facilities:

The Institution has 37 ICT-enabled classrooms and 7 seminar halls. All classrooms and seminar halls have Wi-Fi/LAN facility for an effective teaching-learning process. They are well equipped with green boards, LCD projectors, an audiovisual facility, e-podium, Smart boards, Webcams, and Pen tablets.

### Laboratory Facilities:

The Institution has a total 72 laboratories. Departments have laboratories consisting of the latest equipment, licensed software, and open-source tools to cater to the requirements of curriculum & industry. e-Yantra and Robotics lab in collaboration with IIT Bombay facilitates students for experiential learning.

### Computing facilities:

The Institution has state of art computing facilities with 1856 computers and servers with the latest configurations. The campus is Wi-Fi enabled and has secured an intranet facility. The Institution has an internet bandwidth of 315 Mbps. various licensed communication platforms such as Google suite and Microsoft teams are utilized effectively for the teaching-learning process.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://moderncoe.edu.in/pdf/website/IQAC/ AQAR/AQAR%202021-22/4.1.1.pdf

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

The Institution has a spacious playground of 6000 sq. m. for outdoor sports like basketball, hockey, volleyball, kabaddi and cricket. Kits for cricket, basketball, badminton, football, athletics, tennis and other sports are provided. The indoor sports complex of 200 sq. m. is available for badminton and table tennis.

### Gymnasium

The Institution has an air-conditioned gymnasium equipped with treadmills, strength machines, bars, plates, benches, jogging cycles, and double bars.

### Cultural

Art circle provides facilities required for drama, dance, and singing competitions. Various digital instruments like Tabla, Zembe Drum set with microphone, mixer, and loudspeakers are made available. Open-air theater and auditorium of 1047sq. m. with a capacity of 500 audiences is available. The Institution has a spacious, hygienic canteen of 515 sq. m. area. with Wi-Fi Connection, Mobile Charging Points and water filters.

### Additional Facilities

SAE Vehicle Pit is provided to Pegasus club where students design, fabricate and build vehicles. Training and Placement Centre of 94.09 sq. m, a Counseling center, Entrepreneurship Development Cell and an Alumni cell is also made available.

The Institution has Girl's common room, girl's hostel, sick room, parking and banking facility. Other facilities for physically challenged persons (Lift, Rampand Toilet) are available.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://moderncoe.edu.in/pdf/website/IQAC/ AQAR/AQAR%202021-22/4.1.2.pdf

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

### 44

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://moderncoe.edu.in/pdf/website/IQAC/ AQAR/AQAR%202021-22/4.1.3.pdf
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	<u>View File</u>

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

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

### 483.39814

File Description	Documents
Upload any additional information	<u>View File</u>
Upload audited utilization statements	<u>View File</u>
Upload Details of budget allocation, excluding salary during the year (Data Template	<u>View File</u>

### 4.2 - Library as a Learning Resource

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

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Library Automation: Library is automated since the year 2006 with SLIM 21 library management software and from the academic year 2020-21, the library has migrated to the cloud based 'WEBDESK ERP' library management software designed by Akron Systems. It contains different modules.

Acquisition and cataloguing - It enables the library to select and buy books, journals, and other resources and create a database of the same for easy book search.

Serial control - It enables to handle or control processes of journals such as subscription, renewals and their cancellations.

Circulation - It enables to create and manage borrower types along with keeping a tab on their book issue date, return date, dues, and fines.

Web OPAC- It enables the users to search for books, journals, or any other library materials.

Report generator- It helps to generate various reports such as book transaction report, library member report, library books summary report, etc.

Library has subscribed various e-resources such as Science Direct, J-gate, DELNET, E-books package, etc and the remote access provided through ERP. During the COVID 19 pandemic students were access these resources through ERP login.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for Additional Information	https://moderncoe.edu.in/pdf/website/IQAC/ AQAR/AQAR%202021-22/4.2.1.pdf

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

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

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

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

#### 19.75719

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

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

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

#### 274

File Description	Documents
Any additional information	<u>View File</u>
Details of library usage by teachers and students	<u>View File</u>

#### 4.3 - IT Infrastructure

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

Institute has state of the art IT facilities with latest configurations, necessary licensed software, and Wi-Fi facility.

Computing Facility: Computing facilities with latest configurations are procured. Central server room is equipped with

servers having latest configuration. Blended teaching learning facility is enhanced by procuring tablet-PCs, smart boards, web cameras and audio systems. The Institute has purchased Lenovo 12th and 10th Generation Intel i5 computer, Wi-Fi enabled Network Printer and DLP Projectors on 18/03/2022.

Software: The Institute has renewed licensed software like ETAP, AutoCAD, MATLAB, SOLIDWORKS etc, from time to time. Timely renewal of Licensed Antivirus software and firewall is carried out. The Institute has procured Google Suit and Microsoft Campus Agreement MSCA. Microsoft EDU-CLOUD is updated on 28/01/2022.

Intranet/LAN: Institute has manageable CISCO switches network with fiber connectivity. CISCO SG300 manageable switch configured and added in the network on 03/05/2022. Internet leased line of 265 MBPS is updated to 315 MBPS in year 2022. Sophos Firewall provides security with modular connectivity options for LAN, WAN, and wireless needs.

Wi-Fi Access: Institute has Wi-Fi facility in entire campus with SophosUTM and AP 55C Access Point. Sophos APX 320 Access Point were added on 10/03/2022.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://moderncoe.edu.in/pdf/website/IQAC/ AQAR/AQAR%202021-22/4.3.1.pdf

#### 4.3.2 - Number of Computers

1589

File Description	Documents
Upload any additional information	<u>View File</u>
List of Computers	<u>View File</u>

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

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

#### 4.4 - Maintenance of Campus Infrastructure

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

#### 72.84743

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

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

The institute has adequate physical, academic and support facilities. Utilization of same is planned and monitored through regular schedule. Systematic procedures and policies are defined for maintaining these facilities through in-house or external agency. Every equipment purchased is entered and monitored through dead stock register and history cards are maintained for successive records. Laboratory maintenance is supervised by lab incharge and is carried out by technical/lab assistant. In the event of any major repair/maintenance, the authorized agency is appointed. The measuring instruments are calibrated from the standard agency. Different training programmes are arranged for technical/lab assistants to enhance their skill sets. Various committees are appointed for optimum utilization of physical, academic and support facilities. The classrooms are well equipped with ICT facilities and are maintained from time to time. Stock verification of equipment and books are completed at the end of

every academic year. External agency is appointed for maintaining sports ground and gymnasium. The computing facility is maintained by external agency and internal support staff. The institute also has annual maintenance contracts for civil and other infrastructural maintenance including housekeeping, security etc

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://moderncoe.edu.in/pdf/website/IQAC/ AQAR/AQAR%202021-22/4.4.2.pdf

#### STUDENT SUPPORT AND PROGRESSION

#### **5.1 - Student Support**

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

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

2996

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

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

11

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

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

A. All of the above

File Description	Documents
Link to Institutional website	https://moderncoe.edu.in/pdf/website/IQAC/ AQAR/5.1.3%20Index.pdf
Any additional information	<u>View File</u>
Details of capability building and skills enhancement initiatives (Data Template)	<u>View File</u>

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

3845

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

3845

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

#### **5.1.5** - The Institution has a transparent

A. All of the above

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

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

#### **5.2 - Student Progression**

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

#### 5.2.1.1 - Number of outgoing students placed during the year

601

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

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

#### 5.2.2.1 - Number of outgoing student progression to higher education

24

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

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

33

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

#### 5.3 - Student Participation and Activities

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

29

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

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

The Institute ensures students' representation and engagement in various administrative, co-curricular and extracurricular activities as per the norms specified by affiliating university(SPPU). Students' have representation in IQAC, Antiraging committee, ICC, SC/ST committee and are also engaged in various committees as stated in students' council. The Student Council selection process is conducted by inviting applications from the students for the posts of President, Vice President, Ladies representative, Class representatives, and Student chapter representatives. The Class Representatives from each is selected based on academic merit in the preceding examination. Student Council helps in coordinating all the events related to cocurricular & extra-curricular activities such as national level techno management event M-Pulse, Project/Coding competitions and eminent speaker lecture series in collaboration with Professional Society Student Chapters like IEEE, ACM etc. Under student council various extra-curricular activities like Annual Social Gathering Spandan, Annual sports event - M-Sports are organized. Students are actively engaged in publication of Institutes' magazine -Karmanya, departmental Enewsletters/Magazines and project annuals etc. Apart from this Institute have various active student activity clubs like FOSS, Pegasus, Robotics, Brainstormers, Rotaract, Astrophysics club etc. Institutional Social Responsibility Cell and NSS unit conduct various activities to make students aware about their social responsibilities.

File Description	Documents
Paste link for additional information	https://moderncoe.edu.in/m-pluse.aspx
Upload any additional information	<u>View File</u>

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

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

26

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

#### 5.4 - Alumni Engagement

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

The institution has a registered Alumni Association (MCOE Alumni Cell) which provides support for the development of the institution through various collaborative activities. More than 346 alumni are registered for the MCOE Alumni Cell and the number is still growing. Our alumni have expertise in various technical/non-technical domains and they are working different sectors like IT, Communication, Automobile, Manufacturing, Embedded Industries Media, Management, Government, Finance, Armed forces etc. Alumni Cell tries to impart the technical and professional skills and wide spectrum of experience from alumni to the students. MCOE Alumni Cell creates several opportunities through which alumni can interact with the students, such as, workshops, seminars, guest lectures, webinars, project guidance and evaluation and many more. Alumni also support for the training

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and placement activities and availing industry sponsored projects, internships. The alumni activities help to a large extent to fill industry-academia gap. Regular Alumni meets are arranged which happens to be most interactive platform for exchange thoughts and ideas for the enhancement of the students. MCOE Alumni Cell strives for excellence and tries to contributes to the development of the institution with its motto of "Connect, Inspire and Grow"

File Description	Documents
Paste link for additional information	https://moderncoe.edu.in/pdf/website/IQAC/ AQAR/AQAR%202021-22/Alumni%20Activities%20 proofs_AY%202021-22.pdf
Upload any additional information	<u>View File</u>

### 5.4.2 - Alumni contribution during the year E. <1Lakhs (INR in Lakhs)

File Description	Documents
Upload any additional information	<u>View File</u>

#### GOVERNANCE, LEADERSHIP AND MANAGEMENT

#### 6.1 - Institutional Vision and Leadership

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

The Vision and Mission statements of the institution incorporates theperspective of higher education, which are inclined towardstechnical, techno-social, and ethical valuesand were framed by considering inputs from various stakeholders and internal committees.

The Institution is working towards the accomplishment of the mission statements. The leadership ensures the monitoring andenforcement of the policy statements and strategic action plans.

The Institution has an efficientmulti-layered governance structurewhich is run by "PROGRESSIVE EDUCATION SOCIETY (PES)". The Institution is well represented in the management through the Principal.TheBoard of Governors (BOG) is at theapex. TheCollege Development Committee(CDC) provides the framework of policies and

processes. Governance in all areas is achieved through active participation of teachers in BOG, CDC and IQAC. Different committees having involvement of the faculty members are constituted for smooth functioning of various activities.

TheIQAC monitors the functioning of all the committees relevant tooverall development of the institution to identify areas of improvement and suggest the necessary action plan. The coordinator of the committees plans different activities and ensures their timely execution; this reflects effective governance which is in tune with the Vision and Mission of the Institution.

File Description	Documents
Paste link for additional information	https://moderncoe.edu.in/vision.aspx
Upload any additional information	<u>View File</u>

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

The Institution promotes a culture of participative management where each unit is given fullest freedom to innovate, make a perspective development plan even though it operates through a structured organization. The Institution has formed various committees that are constituted by staff members to manage different institutional activities and to promote academic leadership.

The decentralization in working helps to execute the academic and related activities of the institution, to organize the students, faculty development programs, and to visualize, formulate perspective plans for the development and growth of the institution.

Skill building and/or skill development has been considered as one of the important aspects of employment opportunities in India and abroad. The institution has applied for SPDC sponsored by AICTE under the scheme AICTE Quality Improvement Scheme (AQIS) for the year 2020-2021 and received funding for SPDC to conduct skill and personality development sessions for SC/ST students.

A committee comprising of representatives from each department is formed to look after the efficient and effective functioning of SPDC. Various roles and responsibilities were assigned to them. The institutionhas organized many skill development programs, career guidance sessions, as per recommendations & suggestions from IQAC for many SC/ST students through this centre.

File Description	Documents
Paste link for additional information	https://moderncoe.edu.in/spdc.aspx
Upload any additional information	<u>View File</u>

#### 6.2 - Strategy Development and Deployment

#### 6.2.1 - The institutional Strategic/perspective plan is effectively deployed

The Institution prepares aStrategic/Perspective plan, which is reflected inVision and Mission statements, in line with it, each department prepares its Vision and Mission statements. IQAC plays a vital rolein the implementation of the Perspective Plan.

As per the perspective plan the Institution continuously tries to enhance collaboration with industries and organizations. This helps to create more opportunities for students' internships, projects, and placements. Currently, more than 80 Memorandum of Understanding (MoU)s are in place.

The "Establishment of Centre of excellence" is the successfully implemented activity based on the Perspective/Strategic Plan.

The institution has signed a MoU withEduSkills, to extend the Global Corporate Center of Excellence (CoE) which is exclusive to ISTE member Institutions across India with a vision to promote skilling and upskilling courses for the young generation who are ready to start their career.

Through the partnership/MOU with EduSkills institution has got opportunities to partner with IT leaders like Cisco, Networking Academy etc. to drive their global academy programs that enable learners with increased access to career opportunities. It provides online courses, interactive tools, and hands-on learning activities to help learners prepare for more opportunities in careers in every type of industry.

File Description	Documents
Strategic Plan and deployment documents on the website	<u>View File</u>
Paste link for additional information	http://moderncoe.edu.in/governance.aspx
Upload any additional information	<u>View File</u>

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

The PES Modern College of Engineering has an efficient multilayered governance structure.

#### · Governing Body

At the apex oforganizational structure is the Board of Governors. This body provides insight to the Institution's academic and administrative activities.

#### · College Development Committee

This body provides the framework of policies, structures, relationships, systems, and processes for the smooth functioning of the Institution.

#### · Administrative setup

The day-to-day administration is seen by the Principal, Vice-Principal and Professor In-charge (Administration), Administrative Officers and Heads of Departments.

#### · Committees

The various committees help in the smooth governance of the institution. Coordinators and members are nominated from faculty members for various committees for effective working of the Institution.

#### · Recruitment:

The acts and rules issued time to time by the regulatory bodies like AICTE, DTE Maharashtra state, SavitribaiPhule Pune University are adopted as guidelines for procedures, recruitment, promotional policies, and code of conduct. All other applicable State/Central Government rules and Bye-laws of Progressive Education Society are duly considered. The Institution frames all its policies in consultation with the Management and staffand the various committees.

The Institution has clearly defined policies for all administrative and academic processes which are approved by the parent body. The Institution communicates its policies, mechanisms to the various internal and external stakeholders through Institution website www.moderncoe.edu.in, Induction program for students, Institution meetings, communication with parents etc.

File Description	Documents
Paste link for additional information	http://moderncoe.edu.in/governance.aspx
Link to Organogram of the institution webpage	https://moderncoe.edu.in/pdf/website/about /Organization Chart.pdf
Upload any additional information	<u>View File</u>

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

#### A. All of the above

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

#### 6.3 - Faculty Empowerment Strategies

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

The institutionhasavarietyofwelfareschemesforteaching faculty membersand non- teachingstaff

#### Some of the welfare schemes are asfollows:

- Employee Provident Fund (EPF): The Institution contributestowardsEPF as per the norms.
- Promotions to higher posts: After completing the higher education and/or award of Ph.D., the faculties are promoted to a higher post on a priority basis as well as increments have been provided to them as per norms.
- Support for higher education: The management takes initiative to motivate the teaching and non- teaching staff for enrolling to Postgraduate and Ph.D. programs.
- Financial supports to the teaching faculty members: Teaching faculty members are motivated to attend the FDPs, conferences, STTP, institutional membership for which financial support is provided by the institution.
- Concession in the tuition fees for children of Staff members: Concession in the tuition fees of the ward of staff from any institution affiliated with parent society is provided as per norms.
- Medical insurance scheme: The medical insurance policy is taken from the Star Health Insurance Company for all staff.
- Accidental and death group insurance scheme: The master accidental and death group insurance policy is taken from the Oriental Insurance company for all staff.
- Ex gratia payment: It is an incentive given to class IV staff during Diwali.

File Description	Documents
Paste link for additional information	https://moderncoe.edu.in/pdf/website/about /PES%20MCOE%20HR%20MANUAL.pdf
Upload any additional information	<u>View File</u>

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

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

6

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

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

10

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

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

183

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

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

The Institution has a well-definedPerformance Based Appraisal System (PBA).

1)Performance Based Appraisal System for Teaching Staff:

The Performance Appraisal process will endeavor to improve communication between the employee and the management through HOD/IQAC/Principal by giving an opportunity to provide feedback to individual employees on their job performance.

ØParameters of Evaluation: This evaluation is based on the following major criteria:

- 1. Teaching, Learning, and Evaluation Related Activities:-
- 2. Examination duties assigned and performed
- 3.Co-curricular, Extracurricular and professional development related activities
- 4. Research, Publications and academic contributions

ØProcess of Performance Appraisal: Faculty members are asked to fill out and submit duly signed appraisal forms. The HODreviews each faculty performance evaluation formand then submits the performance evaluation summary withrecommendations to the IQAC Incharge. IQAC in charge submits the final recommendations through the Principal for approval to CDC. Upon approval from CDC, faculties are awarded with annual increment in salary and/or

promotion to higher cadre, incentive /Prize money, appreciation letters.

#### 2) Evaluation System for Non-Teaching Staff:

Evaluation System for non-teaching staff is monitored on the parameters like work assigned and completed by staff, discipline, etc. The HoDassesses the performance and the Principal reviews the remarks. Based on the reviews, the report is submitted to the CDC for further necessary action.

File Description	Documents
Paste link for additional information	https://moderncoe.edu.in/pdf/website/about /PES%20MCOE%20HR%20MANUAL.pdf
Upload any additional information	<u>View File</u>

#### 6.4 - Financial Management and Resource Mobilization

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

The Institution has a well-defined procedure to monitor effective and efficient utilization of available financial resources. The budgetis prepared every year after compiling requirements regarding recurring and non-recurring expenditures.

- · All the major financial transactions are monitored by the CDC. The resolutions of the CDC regarding approval for the budget are forwarded to the Managing Committee and Governing Council of the Society for final approval of the budget to be spent during the academic year under various heads.
- · Internal Audit: The internal audit is a continuous process. Qualified Internal Auditors and their team from external resources have been appointed by the parent society for verification of all types of transactions that are carried out in each financial year on an accrual basis system.
- · Statutory Audit: Statutory financial audit is conducted in month of June/July as per the standard norms of financial audit and Government regulations. Discrepancies identified, if any, by the audit team are immediately corrected / rectified and thereafter precautionary steps are taken to avoid recurrence of such errors

in the future.

• The audited report is submitted to the competent authority by the Accountant. The audited financial statements are uploaded on the institution's website.

File Description	Documents
Paste link for additional information	https://moderncoe.edu.in/pdf/website/IQAC/ FinancialStatements/ScanIncome%20and%20Exp 2021-22.pdf
Upload any additional information	<u>View File</u>

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

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

#### 9.738

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

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

As we are a self-financed Institution; the major source of funding is raised through students' fees. The Institution prepares annual budget in order to manage the financial resources effectively. The deficit, if any is managed through the support of the Parent Society. The Institution also has an adequate corpus in form of fixed deposits to tide over administrative and salary requirements of more than six months. The institutionhas a well-formulated financial policy that ensures effective and optimal utilization of finances for academic, administrative, and development purposes.

All the Heads of Departments and other in-charges submit their budgetary requirement for various categories of expenditure under 'recurring' and 'non-recurring' heads before the commencement of every academic year. The budgetary heads include procurement of new equipment, maintenance/servicing of existing equipment etc. for each department based on the syllabus revisions, research and development, and other activities. The utilization of the budget is carried out as per the identified priorities.

• Utilization of funds from Government agencies, affiliating University

Funds availed from AICTE, SPPU etc. are used for faculty developmental activities, the development of the infrastructure. The utilization of the funds is as per the identified priorities, norms laid down by the competent agencies.

File Description	Documents
Paste link for additional information	https://moderncoe.edu.in/pdf/website/IQAC/ AQAR/AQAR%202021-22/6.4.3%20Mobilzation%20 of%20Funds.pdf
Upload any additional information	<u>View File</u>

#### 6.5 - Internal Quality Assurance System

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

The IQAC plays an important role in the implementation of quality assurance strategies and processes related to- ? Academics and other student-centric activities ? Research and development ? Extension and outreachactivities ? Administrative and other support services. Practice I: Skill development programs for faculty and students. Skill development programs are organized with objectives to improve the professional/employability skills of students and to enhance the teaching-learning skills of teachers. ? Organize in-house technical hands-on workshops and expert talks in collaboration with industries. ? Institutions tieup with training institutes for soft skill training. ? Provide Audit courses. ? Develop a Centre of Excellence. ? Motivate faculty to attend Faculty development programs. ? Training to teaching and non-teaching staff for quality enhancement. Practice II: Techno Social Collaboration Objective behind the Techno Social Collaboration are to collaborate with different professional societies and Industries for technical/professional development of students and to collaborate with different social activity

clubs/organizations and participate in national initiatives to support the community. ? IQAC has encouraged every department to establish association with different Professional societies ? Technical and Non-technical clubs to organize activities. ? Institution has an active NSS unit. ? The institution actively participates in flagship events Unnat Bharat Abhiyan (UBA) 2.0 and Institution Innovation Council (IIC). ? Institution has an active Entrepreneurship development cell.

File Description	Documents
Paste link for additional information	https://moderncoe.edu.in/pdf/website/IQAC/ AQAR/6.5.1.pdf
Upload any additional information	<u>View File</u>

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

The IQAC plays a vital role in ensuring the implementation of effective teaching-learning processes, conducting student-centric activities, and recording the learning outcomes as per the systematic processes defined. All the academic, co-curricular extra-curricular activities are organized considering the Program Outcomes (POs) and Program Specific Outcomes (PSOs). Example 1: Implementation of Outcome Based Education (OBE) The attainment of Course Outcomes (COs), POs, and PSOs are recorded through the designed Outcome Based Education (OBE) Policy document by IQAC considering the AICTE Examination Reforms Policy document. Suitable assessment tools are identified and executed for all courses. Attainment level is measured by considering student performance in internal assessments for Course Outcomes and performance in the University examination. Example 2: Annual Internal and External Academic Audit IQAC has also initiated Internal and External Academic Audit process to encourage the programmes to evaluate their quality processes and standards based on predetermined benchmarks. Internal Audit is conducted twice a year by each programme. This audit is conducted once in a year at the end of Semester II of the academic year. The external Auditor is appointed from other university. The remarks and suggestions by the auditor for every programme are taken into consideration by the IQAC for further improvements.

File Description	Documents
Paste link for additional information	https://moderncoe.edu.in/pdf/website/IQAC/ AQAR/6.5.2_evidences_2021-22.pdf
Upload any additional information	<u>View File</u>

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

#### A. All of the above

File Description	Documents
Paste web link of Annual reports of Institution	https://moderncoe.edu.in/pdf/website/about /Annual%20Report%202021-22.pdf
Upload e-copies of the accreditations and certifications	<u>View File</u>
Upload any additional information	<u>View File</u>
Upload details of Quality assurance initiatives of the institution (Data Template)	<u>View File</u>

#### 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

The Institute ensures equal concern for girls and boys in all curricular, co-curricular activities. Institute has organized various activities like sessions on Creating a Safe and a Positive Workplace, Gender Equality awareness and Stress Management etc. Institute has the student council committee which has equal participation of girls and boys.

Following facilities are provided specially for women on campus:

Safety and security-24 hours working CCTV Surveillance system is available in campus. Overall security of the campus is ensured by external agency, duly appointed by the institute. Entry is permitted by verifying I-cards at security check. The institute has collaboration with Damini Pathak, which can provide necessary support to the girl students, whenever necessary.

Counselling -To address the issues of students, each department has mentor-mentee system. In addition to this Institute has MOU with Psychology Department, Modern college of Arts, Science and commerce, Pune to provide counselling sessions. Senior police officers and cyber security experts are invited for conducting sessions on self-defence, cyber security awareness etc.

Common Rooms-Institute has well-equipped girls' common room and boys' common facility.

File Description	Documents
Annual gender sensitization action plan	https://moderncoe.edu.in/pdf/website/IQAC/ AQAR/AQAR%202021-22/7.1.1%20Annual%20Gende r%20action%20plan%202021-22.pdf
Specific facilities provided for women in terms of:a. Safety and security b. Counseling c. Common Rooms d. Day care center for young children e. Any other relevant information	https://moderncoe.edu.in/pdf/website/IOAC/ AOAR/AOAR%202021-22/7.1.1%20Specific%20Fac ilities%20provided%20for%20women.pdf

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

A. 4 or All of the above

File Description	Documents
Geo tagged Photographs	<u>View File</u>
Any other relevant information	<u>View File</u>

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

Institute gives due consideration to effective disposal of degradable and non-degradable waste. To support the National mission on "Clean and Green Environment" the Institution has taken various initiatives like solid waste

management, Plastic ban, Recycling of used water, Paper recycling, E-waste management and so on.

Through these initiatives, the Institution tries to support the global cause of environment protection. The Institution has effectively adopted a policy of reduce, recycle and reuse to resolve the problem of waste management. The Institution is committed to make the campus plastic free.

Biogas and Vermiculture plants are installed and are fully functioning. Biogas plant has the capacity of 35 kilograms and the generated gas is used in canteen. The institute has practice to separate wet waste and dry waste. The wet waste is used in Vermiculture plant. The institution is committed to make campus plastic free and is recognized as 'Swachcha Action Plan Institution' under MGNCRE, Govt. of India. A Sewage Treatment Plant (STP) of capacity 20000 liters is available at the campus, for recycling of used water from toilets

In the laboratories, non-hazardous chemicals are used and are diluted before disposal.

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

7.1.4 - Water conservation facilities available A. Any 4 or all of the above 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

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

#### 7.1.5 - Green campus initiatives include

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

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

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

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

A. Any 4 or all of the above

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

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

A. Any 4 or all of the above

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

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

he Institution takes various initiatives for promoting tolerance and harmony towards cultural, regional, linguistic, communal, socio-economic and other diversities. The Institution believes in equality of all cultures and traditions as is evident from the fact that students belonging to different caste, religion, regions are studying without any discrimination.

Different festivals are celebrated with zeal and enthusiasm. With great fervor the birth anniversaries and memorials of great regional and national personalities are celebrated and various motivational seminars, lectures and talks are organized to honor their contribution towards the nation and the society.

Students from diverse backgrounds participate in the annual cultural festival, 'Spandan' and various drama competitions and have won prizes. Institutional annual magazine 'Karmanya' includes articles from different languages to promote linguistic diversity.

The central library facilitates the Book Bank Scheme to provide books for economically weaker and SC/ST students. Skill and Personality Development Committee (SPDC) organizes special sessions on skill development, English conversation etc. specifically for SC/ST students.

For the promotion of unity in diversity, the National Service Scheme (NSS) Cell of the Institution organizes many programs which aim at strengthening the unity and integrity of India.

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

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

The institute gives due consideration to inculcate values, rights, duties and responsibilities as per presumptions of the constitution of India. This is very well reflected in Vision and Mission statements of the parent body as well as of the institute. Curriculum includes courses like Introduction to Constitution, which lay a strong foundation for students to become better human beings. The institute has undertaken following activities to achieve this goal:

- Constitution Pledge by students and staff, on Constitution day
- Celebration of national days like Independence day, Republic

day etc.

- NSS activities for community service, which include rural development, tree plantation programs.
- Expert lectures and webinars to guide the students about the professional ethics and moral values
- The Student Grievance Redressal Committee is constituted in the Institution to address the grievances of the students.
- An Internal Complaints Cell ensures a safe working environment in the Institution.
- Activities under Institutional Social Responsibility (ISR) and students' forums as well as clubs
- Students actively participated in 'Develop Village Develop India Program' where they design and evaluate solutions for identified societal problems

Participation of students into various activities imparts ethical practices and develops moral values among them.

File Description	Documents
Details of activities that inculcate values; necessary to render students in to responsible citizens	https://moderncoe.edu.in/pdf/website/IQAC/ AQAR/AQAR%202021-22/7.1.9%20Details%20of%2 0Activities_2021-22.pdf
Any other relevant information	https://moderncoe.edu.in/pdf/website/IOAC/ AOAR/AOAR%202021-22/7.1.9%20Any%20relevent %20info.pdf

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

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

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

The Institution celebrates all national festivals and days with great enthusiasm to inculcate a sense of patriotism and responsibility in the students. The resource persons from various fields are invited on the occasion of Independence Day and Republic Day to share their experience and to motivate young minds to contribute in building the nation.

The Institution commemorates the anniversaries of great Indian personalities namely Chatrapati

Shivaji Maharaj, Rajmata Jijabai, Swami Vivekananda, Mahatma Gandhi, Netaji Subhash Chandra Bose, Shahid Bhagat Singh, Bharatratna Dr. Babasaheb Ambedkar, Swatantryaveer Sawarkar, Dr. A.P.J. Abdul Kalam, Dr. Sarvepalli Radhakrishnan, Sir Mokshagundam Visvesvaraya, Sir C. V.Raman, Mr. S. R. Ranganathan etc

On such occasions renowned speakers are invited who share the teachings of these eminent personalities through their speeches.

Various national festivals such as Ganesh Utsav, Akshay tritiya, Gudi padwa, Ayudh Pooja on the occasion of Khande Navami, Diwali etc. are celebrated by the students and staff with great enthusiasm.

Women's day, International Yoga day, Marathi Bhasha Din etc are celebrated to spread awareness in the society.

The departments in the Institution organize various talks, seminars on national events and commemorative days.

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

#### 7.2 - Best Practices

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

Title1: Innovation and Creativity

Objective: To encourage continuous learning, creative thinking and innovation among faculty and students.

Context: The Institution has defined various policies and procedures to promote research activities among students and faculty members.

Practice: The Institution promotes innovation and creativity through the various technical and non-technical activities conducted by Innovation cell, ED cell and IPR cell of the Institution and clubs etc.

Evidence of Success: The institute has received various awards and recognition from renowned organizations

Problems Encountered and Resources: Dedicated work place, finance, advanced technology, faculty etc.

#### Title2: Institution's Publications

Objective: To disseminate Vision, Mission, POs, PSOs, PEOs, technical and non-technical literature, the important activities and initiatives of the Institution/individual programs to the stakeholders.

Context: To circulate the information regarding initiatives, facilities and achievements of the institution to all the stakeholder various publications are made available.

Practice: The Institution publishes annual and biannual Newsletters, magazines, project annual, E- Curriculum booklet etc to disseminate learning resources, achievements, artistic creativity and important information.

Evidence of Success: The publications help to gather the information at one place and dissemination to the stakeholders.

Problems Encountered and Resources Required: Compilation, editing and publication is usually time consuming and challenging

File Description	Documents
Best practices in the Institutional website	https://moderncoe.edu.in/pdf/website/IQAC/ AQAR/AQAR%202021-22/7.2.1%20Best%20Practic es%202021-22.pdf
Any other relevant information	https://moderncoe.edu.in/pdf/website/IOAC/ AOAR/AOAR%202021-22/7.2.1%20Any%200ther%20 relevant%20information.pdf

#### 7.3 - Institutional Distinctiveness

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

The Institution strives hard to provide techno-social solutions for the day-to-day problems of the community. It is evident from the Mission of the Institution which focuses on being responsive to changes in technology, socio-economic and environmental conditions. The spirit of social responsibility towards community development is inculcated through ISR, NSS, ED cell and various technical and social clubs.

Develop Village Develop India

The Program aims to assist the rural community for their sustainable development to ameliorate their health, nutrition, and sanitation. The activities were undertaken in collaboration with 'Ignited Innovators of India' (I2I) initiatives.

#### IT Awareness Program

Sessions on pronunciation and communication skills were organized for school students.

#### Pandemic Specific Initiatives

During the pandemic, the Institution organized various expert sessions about Covid-19 disease and its vaccination. A vaccination drive was organized at the Institution.

#### Social Talk Program

The objective is to stimulate personal and professional growth through discussions about attitudes, feelings, and experiences by organizing Expert lectures, group discussion, audio-visual materials etc.

#### Each One ... Plant One

It is a tree plantation program organised by students and faculty members of the Institution wherein they went to different places in Pune for tree plantation.

#### Part B

#### **CURRICULAR ASPECTS**

#### 1.1 - Curricular Planning and Implementation

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

- P.E.S. Modern College of Engineering being affiliated to Savitribai Phule Pune University (SPPU), follows the curriculum prepared by the University.
- In adherence with the SPPU Calendar, the Institution prepares the academic calendar and planner (ACP). In line with that every department has an ACP which reflects the planning of activities like term commencement-conclusion, orientation programme, curriculum delivery review, assessments and activity planner reflecting curricular-cocurricular activities for effective curriculum delivery.
- Academic processes are streamlined with choice based teaching load distribution, Timetables and preparation of Laboratory setup.
- The faculty members are updated with the revised syllabus through orientation program.
- For effective curriculum delivery, faculty members maintain course files-curriculum booklets, lab manualslog books etc.
- Project activities like orientation, topic approval, reviews and competition are conducted as per the project planner and recorded in the project logbook.
- The curriculum delivery is enhanced by blended teaching methods, ICT tools and well equipped laboratories.
- Feedbacks obtained from different stakeholders are analyzed and suggestions are considered for further curriculum planning-implementation.
- University results are analyzed and corrective measures

#### are taken accordingly.

File Description	Documents
Upload relevant supporting document	<u>View File</u>
Link for Additional information	https://moderncoe.edu.in/pdf/website/IQAC /AOAR/AOAR%202021-22/1.1.1.pdf

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

- In adherence to the SPPU's academic Calendar, the Institution prepares an academic calendar and planner for the effective conduct of Continuous Internal Evaluation (CIE).
- The Institution follows the curriculum structure designed by the SPPU which mainly consists of theory, practical, oral, seminar, project, tutorial etc.
- As per Internal Quality Assurance Cell (IQAC) policy, 20% weightage is given to internal assessment and 80% to external assessment (SPPU examinations).
- To improve experiential learning and presentation skills, seminar and project work are evaluated continuously as a curricular activity.

#### The Continuous internal evaluation is done for:

- Theory courses are evaluated through different Assessment tools like Unit Test, MCQ, OBT, Assignments etc.
- Practical / Laboratory Courses are evaluated through continuous assessment, term work and mock oral/practical examinations.
- Tutorials are conducted for the courses which are mentioned in the curriculum and requires more practice

for better results.

- Projects / Seminar activities are planned and executed to improve experiential learning and presentation skills and evaluated continuously as a curricular activity in the following way:
  - Project Orientation session
  - Guide allotment
  - Project Planner
  - Project Review
  - Project exhibitions and competitions
  - Seminar and project term work assessment.

File Description	Documents
Upload relevant supporting document	<u>View File</u>
Link for Additional information	https://moderncoe.edu.in/pdf/website/IQAC /AQAR/AQAR%202021-22/1.1.2.pdf

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

#### A. All of the above

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

### 1.2 - Academic Flexibility

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

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

14

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

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

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

78

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

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

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

#### 1.3 - Curriculum Enrichment

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

The Institution integrates Cross-Cutting issues through Regular/Elective courses in the curriculum, Projects, Audit courses, Value-Added/ Add on Courses, Co-curricular and extracurricular activities.

Finalyear projects selection is based on environmental sustainability, green energy, rural development, societal issues, health, safety issues. Institute conducts audit courses which enhances

- Awareness about different issues impacting human lives
- Skill sets to improve their employability.

Students are encouraged to enroll in Value Added Courses like NPTEL, Spoken tutorials, and skilldevelopment courses to address cross-cutting issues. Gender Equality / Sensitization: The Institution follows co-education. An equal opportunity is given toboth genders for organizing and participating in activities without gender discrimination. Environmental and Sustainability: It is inculcated among the students through regular awarenessprograms like -Tree plantation, PUC camp etc. The Institution participates in Unnat Bharat Abhiyan for different technological interventions. Human Values: Institute takes efforts for students to make them sensitive toward societal issues byorganizing various activities. Professional Ethics are inculcated amongst students by making them aware about the importance ofplagiarism, intellectual property rights (IPR) etc. The Institution maintains an environment in which students, teaching, and non-teaching facultymembers can work together cohesively by taking care of social-moral issues.

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

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

#### 171

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

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

### 4117

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

### 1.4 - Feedback System

# **1.4.1 - Institution obtains feedback on the syllabus and its transaction at the**

#### A. All of the above

### institution from the following stakeholders Students Teachers Employers Alumni

File Description	Documents
URL for stakeholder feedback report	https://moderncoe.edu.in/Feedback.aspx
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management	<u>View File</u>
Any additional information	<u>View File</u>

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

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

File Description	Documents
Upload any additional information	<u>View File</u>
URL for feedback report	https://moderncoe.edu.in/Feedback.aspx

#### TEACHING-LEARNING AND EVALUATION

#### 2.1 - Student Enrollment and Profile

### 2.1.1 - Enrolment Number Number of students admitted during the year

### 2.1.1.1 - Number of students admitted during the year

1360

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

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

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

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

### 2.2 - Catering to Student Diversity

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

The institution has a well-defined process for identifying advanced and slow learners. Learning levels of the students are identified by the Guardian Faculty Member, course teachers and mentor, based on student performance in:

?University Examination Results, Assignments and Class test, tutorials, Theory and Practical sessions.

#### Initiative taken for Advanced Learners

- Promote to enroll in various online MOOC courses like NPTEL, Spoken tutorial.
- Encouragement to participate in extension / outreach activities such as BAJA, SUPRA, ROBOCON etc; and competitions.
- Encouragement to opt for Audit / Honour Courses.
- Provide facilities through the Centre of Excellence.
- Motivate to undertake challenging projects and also to participate/represent in National/ state competitions.
- Promote and maintain the spirit for paper publications.
- Insisted to implement in-house projects/apps.
- Provide funding for innovative projects.
- Arrangein-house and industry internships.
- Provide awareness and the necessary platforms for participation in competitive examinations.
- Inspire to enroll in aptitude/technical training courses.

#### Efforts taken for slow learners

- Plan remedial / extra contact hours and classes.
- Provide self-learning material.
- Discussion by the subject teacher during the extra sessions.
- Conduct revision lectures.
- Arrange Mock / revision practical sessions.

Conduct Home assignments, presentations, MCQ tests.

File Description	Documents
Paste link for additional information	http://www.moderncoe.edu.in/pdf/website/I OAC/AOAR/AOAR%202021-22/2.2.1%20COMBINED. pdf
Upload any additional information	<u>View File</u>

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

Number of Students	Number of Teachers
4288	216

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

### 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 institute takes efforts to ensure the use of studentcentric methodologies to enrich the learning experience.

#### Experiential learning.

- Experiential learning is imbibed using software tools, various professional societies, club activities, internships, industrial visits to help the students to enhance their conceptual knowledge.
- Professional Society Chapters and technical clubs encourage active learning of students and their participation in various competitions. The clubs conduct workshops, tutorials, and lectures to foster interest in various aspects.
- Community outreach programs, environmental consciousness drives are organized by ISR cell.

Participative learning.

- To develop leadership skills; students are motivated to participate in activities in collaboration with student associations, professional society chapters, industry, cultural fest, NSS, and NGOs.
- Peer learning, think-pair-share, role play, enable students to participate in the classroom.
- Students participate in teams for project development, competitions, and technical paper writing.
- NSS helps students to work in teams and learn the importance of social, environmental aspects.

#### Problem-solving.

- 'Unnat Bharat Abhiyan', 'Smart India Hackathon', 'Robocon', 'BHAU', 'BAJA' are platforms that provide opportunities for students to work on real-life problems.
- Institute has an Institution Innovation Council.
- An Incubation center under ED Cell has encouraged students to have innovative ideas, develop, and present in 'PRO-START'.

File Description	Documents
Upload any additional information	<u>View File</u>
Link for additional information	http://www.moderncoe.edu.in/pdf/website/I QAC/AQAR/AQAR%202021-22/2.3.1%20Student%2 0Centric_compressed.pdf

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

In addition to the traditional classroom teaching; the institute encourages to use ICT-enabled tools.

Open-source software such as WEKA, Rapid-Miner, Packet-Tracer, GDB-Compiler, Scilab, and Xilinx etc, are made available during teaching. Laboratory sessions are conducted using different simulation software like JFlap, VisuAlgo, LabView, MATLAB, ETAP, AutoCAD, SolidWorks, and MasterCAM, etc. including Virtual laboratories.

Open Educational Resources (OERs) like YouTube channels and websites created by faculty members for effective curriculum delivery. Videos are uploaded on institute YouTube channel'PESMCOE' and personalized websites to share e-resources with students. Digital Library resources are also being used for effective teaching.

Google classroom is used to manage and post course-related information, learning material, quizzes, lab submissions and assignments.

To increase the involvement of students in classrooms, internal assessment of students is carried out using Google Quiz, Edmodo, and Kahoot.

Students make use of Solidworks for mechanical designing, Arduino-IDE, for microcontroller design, and Altium for PCB design to develop a product to participate in ROBOCON. Solidworks and Ansys is used in developing products for BAJA and SUPRA competitions.

Institute has state-of-the-art infrastructure, ICT-enabled classrooms, smartboards, audio systems, web cameras, and a high-speed internet connection to create interactive class environments and enrich the blended teaching-learning process.

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

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

# 2.3.3.1 - Number of mentors 185

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

### 2.4 - Teacher Profile and Quality

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

#### 216

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

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

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

50

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

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

### 2.4.3.1 - Total experience of full-time teachers

#### 2116 years

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

#### 2.5 - Evaluation Process and Reforms

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

The institution is affiliated to Savitribai Phule Pune University (SPPU) and adheres to the Examination Scheme of SPPU.

Objectives of internal assessment:

- To understand the learning levels of students.
- To identify the slow and advanced learners to carry out special efforts / initiatives.
- To improve the performance in external examination and better attainment of course outcomes.
- Term work evaluation.

Various assessment tools for Continuous Internal Evaluation (CIE) and their frequency of conduction are decided as per need of the course for Theory, Practical, Project and Seminar.

To maintain transparency and robustness in internal assessment following points are considered:

- 1. Assessment rubrics are defined and are conveyed to students.
- For Student Awareness, a question bank of oral questions, previous year university questions and MCQs is provided to the students in the Curriculum Booklet.
- 3. Verification of the question paper is carried out by the Domain or Module Coordinator.
- 4. For Assessment and Evaluation, the marking scheme and solution key are prepared by the course coordinator.
- 5. To maintain transparency, solutions and answer sheets are discussed with students for performance improvement in university examinations.

6. Mode of conduction will be online/offline, objective/subjective.

Internal assessment results in improving learning abilities, better academic results, more internships and placements.

File Description	Documents
Any additional information	<u>View File</u>
Link for additional information	
	https://moderncoe.edu.in/pdf/website/IQAC
	/AQAR/AQAR%202021-22/2.5.1.pdf

### 2.5.2 - Mechanism to deal with internal examination related grievances is transparent, timebound and efficient

The Institution conducts external examinations as per the schedule given by SPPU and all internal assessments are planned and executed as per the Institution's academic planner.

The institution has a well-defined mechanism to deal with grievances related to the internal and external examinations. Various internal assessment tools are considered for Continuous Internal Evaluation (CIE). Term work evaluation is based on CIE.

Grievances raised by students:

### Internal Examination:

- Difficulties in attending the examination due to some personal genuine problem or network issues in online internal examination.
- Discrepancies in term work marks.

#### External Examination:

- Issues in university exam form filling.
- Problems due to wrong elective choice given in university exam form.
- Inability to appear for examination due to participation in technical or sports' events at University / National levels.
- Data insufficiency or printing mistakes in question
- Discrepancy in marks in final result.

 Scribes requirement during examinations in case of physical disabilities.

The grievances in internal examination are addressed by the Head of the Department, Guardian Faculty Members (GFM), and course teachers. For external examination, grievances are communicated through the departmental examination coordinator to the College Examination Officer (CEO). Then the CEO communicates to the university authorities to resolve it at the earliest.

File Description	Documents
Any additional information	<u>View File</u>
Link for additional information	
	https://moderncoe.edu.in/pdf/website/IQAC
	/AOAR/AOAR%202021-22/2.5.2.pdf

### 2.6 - Student Performance and Learning Outcomes

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

Guidelines followed for framing CO statements:

 CO statements provided by the affiliated university are revised for theory and practical courses, following the guidelines given by AICTE's Examination Reforms Policy and with respect to course contents; wherever required using only one verb.

Program outcomes and well-articulated CO statements are displayed on the institute website for ready reference to all stakeholders.

Communication of POs and COs to the Teachers:

- CO statements are revised in presence of Head of the Department, accreditation coordinators, module / domain coordinators and course in-charges and shared with all faculty members.
- POs and COs are included in the course file and displayed on notice boards in faculty cabins and in the department for reference.

Communication of POs and COs to the Students:

- POs are communicated to students in the Induction and Orientation programs at the commencement of the academic year.
- POs are displayed in laboratories and all notice boards.
- Course in-charge communicates the COs during the theory and practical sessions.
- Curriculum Booklet, lab manual, project log book and various study material COs are stated.

Internal assessment question paper includes the respective course outcome along with Bloom's taxonomy level.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for Additional information	https://moderncoe.edu.in/dist/documents/2 021-AQAR
Upload COs for all Programmes (exemplars from Glossary)	<u>View File</u>

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

Institute has a well-defined policy document for CO, PO and PSOs attainment.

#### CO Attainment process:

CO Attainment is computed for all the theory, practical, seminar and project courses using internal and external assessment.

External Assessment: 80% weightage and based on University insemester, end-semester, oral/practical examination, term-work assessment.

Internal Assessment: 20% weightage and based on continuous assessment for theory, practical, seminar and project courses.

- 1. Theory courses: Assessment tools are unit test, MCQ test, assignments, tutorial, programming Skill Test.
- 2. Practical/ oral/ term-work: Assessment tools are lab

performance, mock practical / oral/seminar and project work presentation.

CO Attainment levels are defined as 1, 2 and 3.

#### For Example:

Attainment Level 1, 2 and 3: 60%, 70% and 80% students scoring more than University average percentage marks or set attainment level in the final examination respectively.

The set attainment level is finalized as 50%. It has an average passing percentage of 40 and first class 60.

PO and PSO Attainment process:

- Direct-80% weightage and based on CO Attainment.
- In-direct-20% weightage and based on analysis of program exit survey, co-curricular and extra-curricular activities, employers' and alumni feedback.

Final PO and PSO attainment is computed by adding direct and indirect attainment.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for Additional information	https://moderncoe.edu.in/pdf/website/IQAC /AQAR/AQAR%202021-22/2.6.2.pdf

### 2.6.3 - Pass percentage of Students during the year

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

File Description	Documents
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	<u>View File</u>
Upload any additional information	<u>View File</u>
Paste link for the annual report	https://moderncoe.edu.in/pdf/website/IQAC /AQAR/AQAR%202021-22/2.6.3.2.pdf

### 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://moderncoe.edu.in/pdf/website/IQAC/AQAR/AQAR%202021-22/2.7.SSS 2021-22.pdf

#### RESEARCH, INNOVATIONS AND EXTENSION

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

22.27

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

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

### 3.1.2.1 - Number of teachers recognized as research guides

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

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

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

4

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

#### 3.2 - Innovation Ecosystem

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

The Institute has created an ecosystem for research and innovation which promotes novel research/product based ideas to patent/copyright publication and then promotes towards ventures/start-ups/prototypes.

- The credit based courses related with Innovation and Entrepreneurship are offered through the curriculum. This includes Project Based Learning (PBL) course offered at FE and SE level, Mini Project and Main Project at TE and BE level. Some of the innovative ideas of PBL are carried forward to Mini and Main Project leading to prototypes, quality publications, copyright and patent registration through the institutional research funding.
- Some short-term audit courses, expert talks, seminars, workshops, Hackathons, Exhibitions, field trips are organised by the Institute in collaboration with

- professional societies and industries for promotion of Innovation and Entrepreneurship.
- The infrastructure facilities which include Technical Clubs, Incubation Centre, ED cell, IPR cell and Research Centres are used for creation and transfer of knowledge.
- The Institute has collaboration with other incubation centres like BHAU(Incubation centre at COEP, Pune) and Career-Katta.
- Major Achievements:
- 3.5-Star rated IIC by MHRD.
- Best Prototype award by IIT Bombay.
- 70+ research publications in reputed journals and conferences.
- Recipient of Smart India Hackathons-2022 award.
- 18 copyrights and 1 Patent.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://moderncoe.edu.in/ed-cell- about.aspx

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

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

45

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

#### 3.3 - Research Publications and Awards

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

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

#### 11

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

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

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

50

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

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

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

24

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

#### 3.4 - Extension Activities

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

Social responsibility is one of the priorities of institute, imparting knowledge and skills in students and developing them as active members of social change.

The institute promotes various extension activities under National Service Scheme(NSS), Institutional Social Responsibility(ISR) Cell, and various social clubs established at the institute. The main aim is to identify challenges in rural area and propose appropriate solutions for accelerating sustainable growth.

Entrepreneurship Development(ED) Cell at the Institute aims to encourage students to consider self-employment as a career-option. Institute has received awards in the I2I-Techno-Social-competition for innovative projects.

The main aim of the NSS-Unit is to develop a sense of social and civic responsibility in the students. Several activities are carried out such as vaccination\_drive, gender sensitization, cleanliness, tree plantation, environmental awareness and blood donation camps.

Rotaract Clubs are established under Rotary International(RI) for engaging students to welfare of society by engaging them in social activities. Other clubs organize activities for molding students into responsible citizens. Funding is received under AICTE-SPICES scheme that provides financial support to students' club for techno-social development.

The participation in extension activities helps students in sensitizing towards social issues and encourages them to provide solutions. This leads towards holistic personality development of students.

File Description	Documents
Paste link for additional information	https://moderncoe.edu.in/isr.aspx
Upload any additional information	<u>View File</u>

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

4

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

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

36

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

- 3.4.4 Number of students participating in extension activities at 3.4.3. above during year
- 3.4.4.1 Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year wise during year

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

### 3.5 - Collaboration

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

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

1185

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

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

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

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

#### INFRASTRUCTURE AND LEARNING RESOURCES

#### 4.1 - Physical Facilities

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

The Institution was established in the year 1999. It has a well-developed campus of 10.47 acres of land. Physical infrastructure like Classrooms, Tutorial Rooms, Laboratories, Machine Shop and Seminar Halls is available. In addition to this, the Institution has a distinctive auditorium (capacity 500), administrative rooms, examination control room, central and departmental libraries, a computer center, a language laboratory, and an audio/video laboratory.

#### Classroom Facilities:

The Institution has 37 ICT-enabled classrooms and 7 seminar halls. All classrooms and seminar halls have Wi-Fi/LAN facility for an effective teaching-learning process. They are well equipped with green boards, LCD projectors, an audiovisual facility, e-podium, Smart boards, Webcams, and Pen tablets.

#### Laboratory Facilities:

The Institution has a total 72 laboratories. Departments have laboratories consisting of the latest equipment, licensed software, and open-source tools to cater to the requirements of curriculum & industry. e-Yantra and Robotics lab in collaboration with IIT Bombay facilitates students for experiential learning.

#### Computing facilities:

The Institution has state of art computing facilities with 1856 computers and servers with the latest configurations. The campus is Wi-Fi enabled and has secured an intranet facility. The Institution has an internet bandwidth of 315 Mbps. various licensed communication platforms such as Google suite and Microsoft teams are utilized effectively for the teaching-learning process.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://moderncoe.edu.in/pdf/website/IQAC /AQAR/AQAR%202021-22/4.1.1.pdf

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

The Institution has a spacious playground of 6000 sq. m. for outdoor sports like basketball, hockey, volleyball, kabaddi and cricket. Kits for cricket, basketball, badminton, football, athletics, tennis and other sports are provided. The indoor sports complex of 200 sq. m. is available for badminton and table tennis.

#### Gymnasium

The Institution has an air-conditioned gymnasium equipped with treadmills, strength machines, bars, plates, benches, jogging cycles, and double bars.

#### Cultural

Art circle provides facilities required for drama, dance, and singing competitions. Various digital instruments like Tabla, Zembe Drum set with microphone, mixer, and loudspeakers are made available. Open-air theater and auditorium of 1047sq. m. with a capacity of 500 audiences is available. The Institution has a spacious, hygienic canteen of 515 sq. m. area. with Wi-Fi Connection, Mobile Charging Points and water filters.

#### Additional Facilities

SAE Vehicle Pit is provided to Pegasus club where students design, fabricate and build vehicles. Training and Placement Centre of 94.09 sq. m, a Counseling center, Entrepreneurship Development Cell and an Alumni cell is also made available.

The Institution has Girl's common room, girl's hostel, sick room, parking and banking facility. Other facilities for physically challenged persons (Lift, Rampand Toilet) are available.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://moderncoe.edu.in/pdf/website/IQAC /AQAR/AQAR%202021-22/4.1.2.pdf

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

#### 44

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://moderncoe.edu.in/pdf/website/IQAC /AOAR/AQAR%202021-22/4.1.3.pdf
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	<u>View File</u>

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

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

### 483.39814

File Description	Documents
Upload any additional information	<u>View File</u>
Upload audited utilization statements	<u>View File</u>
Upload Details of budget allocation, excluding salary during the year (Data Template	<u>View File</u>

### 4.2 - Library as a Learning Resource

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

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Library Automation: Library is automated since the year 2006 with SLIM 21 library management software and from the academic year 2020-21, the library has migrated to the cloud based 'WEBDESK ERP' library management software designed by Akron Systems. It contains different modules.

Acquisition and cataloguing - It enables the library to select and buy books, journals, and other resources and create a database of the same for easy book search.

Serial control - It enables to handle or control processes of journals such as subscription, renewals and their cancellations.

Circulation - It enables to create and manage borrower types along with keeping a tab on their book issue date, return date, dues, and fines.

Web OPAC- It enables the users to search for books, journals, or any other library materials.

Report generator- It helps to generate various reports such as book transaction report, library member report, library books summary report, etc.

Library has subscribed various e-resources such as Science Direct, J-gate, DELNET, E-books package, etc and the remote access provided through ERP. During the COVID 19 pandemic students were access these resources through ERP login.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for Additional Information	https://moderncoe.edu.in/pdf/website/IQAC /AOAR/AOAR%202021-22/4.2.1.pdf

### 4.2.2 - The institution has subscription for the following e-resources e-journals e-ShodhSindhu Shodhganga Membership ebooks Databases Remote access toeresources

A. Any 4 or more of the above

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

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

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

#### 19.75719

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

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

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

#### 274

File Description	Documents
Any additional information	<u>View File</u>
Details of library usage by teachers and students	<u>View File</u>

### 4.3 - IT Infrastructure

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

Institute has state of the art IT facilities with latest configurations, necessary licensed software, and Wi-Fi facility.

Computing Facility: Computing facilities with latest

configurations are procured. Central server room is equipped with servers having latest configuration. Blended teaching learning facility is enhanced by procuring tablet-PCs, smart boards, web cameras and audio systems. The Institute has purchased Lenovo 12th and 10th Generation Intel i5 computer, Wi-Fi enabled Network Printer and DLP Projectors on 18/03/2022.

Software: The Institute has renewed licensed software like ETAP, AutoCAD, MATLAB, SOLIDWORKS etc, from time to time. Timely renewal of Licensed Antivirus software and firewall is carried out. The Institute has procured Google Suit and Microsoft Campus Agreement MSCA. Microsoft EDU-CLOUD is updated on 28/01/2022.

Intranet/LAN: Institute has manageable CISCO switches network with fiber connectivity. CISCO SG300 manageable switch configured and added in the network on 03/05/2022. Internet leased line of 265 MBPS is updated to 315 MBPS in year 2022. Sophos Firewall provides security with modular connectivity options for LAN, WAN, and wireless needs.

Wi-Fi Access: Institute has Wi-Fi facility in entire campus with SophosUTM and AP 55C Access Point. Sophos APX 320 Access Point were added on 10/03/2022.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://moderncoe.edu.in/pdf/website/IQAC /AQAR/AQAR%202021-22/4.3.1.pdf

### **4.3.2 - Number of Computers**

File Description	Documents
Upload any additional information	<u>View File</u>
List of Computers	<u>View File</u>

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

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

### 4.4 - Maintenance of Campus Infrastructure

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

72.84743

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

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

The institute has adequate physical, academic and support facilities. Utilization of same is planned and monitored through regular schedule. Systematic procedures and policies are defined for maintaining these facilities through in-house or external agency. Every equipment purchased is entered and monitored through dead stock register and history cards are maintained for successive records. Laboratory maintenance is supervised by lab in-charge and is carried out by technical/lab assistant. In the event of any major repair/maintenance, the authorized agency is appointed. The measuring instruments are calibrated from the standard agency. Different training programmes are arranged for technical/lab assistants to enhance their skill sets. Various committees are appointed for optimum utilization of physical, academic and support facilities. The classrooms are well equipped with ICT facilities and are

maintained from time to time. Stock verification of equipment and books are completed at the end of every academic year. External agency is appointed for maintaining sports ground and gymnasium. The computing facility is maintained by external agency and internal support staff. The institute also has annual maintenance contracts for civil and other infrastructural maintenance including housekeeping, security etc

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://moderncoe.edu.in/pdf/website/IQAC /AQAR/AQAR%202021-22/4.4.2.pdf

#### STUDENT SUPPORT AND PROGRESSION

### 5.1 - Student Support

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

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

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

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

#### 11

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

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

A. All of the above

File Description	Documents
Link to Institutional website	https://moderncoe.edu.in/pdf/website/IQAC /AQAR/5.1.3%20Index.pdf
Any additional information	<u>View File</u>
Details of capability building and skills enhancement initiatives (Data Template)	<u>View File</u>

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

3845

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

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

5.1.5 - The Institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases Implementation of guidelines of statutory/regulatory bodies Organization wide awareness and undertakings on policies with zero tolerance Mechanisms for submission of online/offline students' grievances Timely redressal of the grievances through appropriate committees

### A. All of the above

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

### 5.2 - Student Progression

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

### 5.2.1.1 - Number of outgoing students placed during the year

601

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

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

### 5.2.2.1 - Number of outgoing student progression to higher education

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

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

33

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

### 5.3 - Student Participation and Activities

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

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

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

The Institute ensures students' representation and engagement in various administrative, co-curricular and extracurricular activities as per the norms specified by affiliating university(SPPU). Students' have representation in IQAC, Antiraging committee, ICC, SC/ST committee and are also engaged in various committees as stated in students' council. The Student Council selection process is conducted by inviting applications from the students for the posts of President, Vice President, Ladies representative, Class representatives, and Student chapter representatives. The Class Representatives from each is selected based on academic merit in the preceding examination. Student Council helps in coordinating all the events related to cocurricular & extra-curricular activities such as national level techno management event M-Pulse, Project/Coding competitions and eminent speaker lecture series in collaboration with Professional Society Student Chapters like IEEE, ACM etc. Under student council various extra-curricular activities like Annual Social Gathering Spandan, Annual sports event - M-Sports are organized. Students are actively engaged in publication of Institutes' magazine - Karmanya, departmental Enewsletters/Magazines and project annuals etc. Apart from this Institute have various active student activity clubs like FOSS, Pegasus, Robotics, Brainstormers, Rotaract, Astrophysics club etc. Institutional Social Responsibility Cell and NSS unit conduct various activities to make students aware about their social responsibilities.

File Description	Documents
Paste link for additional information	https://moderncoe.edu.in/m-pluse.aspx
Upload any additional information	<u>View File</u>

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

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

26

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

### 5.4 - Alumni Engagement

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

The institution has a registered Alumni Association (MCOE Alumni Cell) which provides support for the development of the institution through various collaborative activities. More than 346 alumni are registered for the MCOE Alumni Cell and the number is still growing. Our alumni have expertise in various technical/non-technical domains and they are working different sectors like IT, Communication, Automobile, Manufacturing, Embedded Industries Media, Management, Government, Finance, Armed forces etc. Alumni Cell tries to impart the technical and professional skills and wide spectrum of experience from alumni to the students. MCOE Alumni Cell creates several opportunities through which alumni can interact with the students, such as, workshops, seminars, guest lectures, webinars, project guidance and evaluation and many more. Alumni also support for the

training and placement activities and availing industry sponsored projects, internships. The alumni activities help to a large extent to fill industry-academia gap. Regular Alumni meets are arranged which happens to be most interactive platform for exchange thoughts and ideas for the enhancement of the students. MCOE Alumni Cell strives for excellence and tries to contributes to the development of the institution with its motto of "Connect, Inspire and Grow"

File Description	Documents
Paste link for additional information	https://moderncoe.edu.in/pdf/website/IQAC /AQAR/AQAR%202021-22/Alumni%20Activities% 20proofs_AY%202021-22.pdf
Upload any additional information	<u>View File</u>

### **5.4.2 - Alumni contribution during the year** (INR in Lakhs)

E. <1Lakhs

File Description	Documents
Upload any additional information	<u>View File</u>

#### GOVERNANCE, LEADERSHIP AND MANAGEMENT

### 6.1 - Institutional Vision and Leadership

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

The Vision and Mission statements of the institution incorporates theperspective of higher education, which are inclined towardstechnical, techno-social, and ethical values and were framed by considering inputs from various stakeholders and internal committees.

The Institution is working towards the accomplishment of the mission statements. The leadership ensures the monitoring andenforcement of the policy statements and strategic action plans.

The Institution has an efficientmulti-layered governance structurewhich is run by "PROGRESSIVE EDUCATION SOCIETY (PES)". The Institution is well represented in the management through the Principal. The Board of Governors (BOG) is at the apex.

TheCollege Development Committee(CDC) provides the framework of policies and processes. Governance in all areas is achieved through active participation of teachers in BOG, CDC and IQAC. Different committees having involvement of the faculty members are constituted for smooth functioning of various activities.

TheIQAC monitors the functioning of all the committees relevant tooverall development of the institution to identify areas of improvement and suggest the necessary action plan. The coordinator of the committees plans different activities and ensures their timely execution; this reflects effective governance which is in tune with the Vision and Mission of the Institution.

File Description	Documents
Paste link for additional information	https://moderncoe.edu.in/vision.aspx
Upload any additional information	<u>View File</u>

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

The Institution promotes a culture of participative management where each unit is given fullest freedom to innovate, make a perspective development plan even though it operates through a structured organization. The Institution has formed various committees that are constituted by staff members to manage different institutional activities and to promote academic leadership.

The decentralization in working helps to execute the academic and related activities of the institution, to organize the students, faculty development programs, and to visualize, formulate perspective plans for the development and growth of the institution.

Skill building and/or skill development has been considered as one of the important aspects of employment opportunities in India and abroad. The institution has applied for SPDC sponsored by AICTE under the scheme AICTE Quality Improvement Scheme (AQIS) for the year 2020-2021 and received funding for SPDC to conduct skill and personality development sessions for SC/ST students.

A committee comprising of representatives from each department is formed to look after the efficient and effective functioning of SPDC. Various roles and responsibilities were assigned to them. The institutionhas organized many skill development programs, career guidance sessions, as per recommendations & suggestions from IQAC for many SC/ST students through this centre.

File Description	Documents
Paste link for additional information	https://moderncoe.edu.in/spdc.aspx
Upload any additional information	<u>View File</u>

### **6.2 - Strategy Development and Deployment**

### 6.2.1 - The institutional Strategic/perspective plan is effectively deployed

The Institution prepares aStrategic/Perspective plan, which is reflected inVision and Mission statements, in line with it, each department prepares its Vision and Mission statements. IQAC plays a vital rolein the implementation of the Perspective Plan.

As per the perspective plan the Institution continuously tries to enhance collaboration with industries and organizations. This helps to create more opportunities for students' internships, projects, and placements. Currently, more than 80 Memorandum of Understanding (MoU)s are in place.

The "Establishment of Centre of excellence" is the successfully implemented activity based on the Perspective/Strategic Plan.

The institution has signed a MoU withEduSkills, to extend the Global Corporate Center of Excellence (CoE) which is exclusive to ISTE member Institutions across India with a vision to promote skilling and upskilling courses for the young generation who are ready to start their career.

Through the partnership/MOU with EduSkills institution has got opportunities to partner with IT leaders like Cisco, Networking Academy etc. to drive their global academy programs that enable learners with increased access to career opportunities. It provides online courses, interactive tools, and hands-on learning activities to help learners prepare for more opportunities in careers in every type of industry.

File Description	Documents
Strategic Plan and deployment documents on the website	<u>View File</u>
Paste link for additional information	http://moderncoe.edu.in/governance.aspx
Upload any additional information	<u>View File</u>

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

The PES Modern College of Engineering has an efficient multilayered governance structure.

Governing Body

At the apex oforganizational structure is the Board of Governors. This body provides insight to the Institution's academic and administrative activities.

· College Development Committee

This body provides the framework of policies, structures, relationships, systems, and processes for the smooth functioning of the Institution.

Administrative setup

The day-to-day administration is seen by the Principal, Vice-Principal and Professor In-charge (Administration), Administrative Officers and Heads of Departments.

· Committees

The various committees help in the smooth governance of the institution. Coordinators and members are nominated from faculty members for various committees for effective working of the Institution.

· Recruitment:

The acts and rules issued time to time by the regulatory bodies like AICTE, DTE Maharashtra state, SavitribaiPhule Pune University are adopted as guidelines for procedures,

recruitment, promotional policies, and code of conduct. All other applicable State/Central Government rules and Bye-laws of Progressive Education Society are duly considered. The Institution frames all its policies in consultation with the Management and staffand the various committees.

The Institution has clearly defined policies for all administrative and academic processes which are approved by the parent body. The Institution communicates its policies, mechanisms to the various internal and external stakeholders through Institution website www.moderncoe.edu.in, Induction program for students, Institution meetings, communication with parents etc.

File Description	Documents
Paste link for additional information	http://moderncoe.edu.in/governance.aspx
Link to Organogram of the institution webpage	https://moderncoe.edu.in/pdf/website/abou t/Organization Chart.pdf
Upload any additional information	<u>View File</u>

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

A. All of the above

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

### **6.3 - Faculty Empowerment Strategies**

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

The institutionhasavarietyofwelfareschemesforteaching faculty

membersand non- teachingstaff

Some of the welfare schemes are asfollows:

- Employee Provident Fund (EPF): The Institution contributestowardsEPF as per the norms.
- Promotions to higher posts: After completing the higher education and/or award of Ph.D., the faculties are promoted to a higher post on a priority basis as well as increments have been provided to them as per norms.
- Support for higher education: The management takes initiative to motivate the teaching and non-teaching staff for enrolling to Postgraduate and Ph.D. programs.
- Financial supports to the teaching faculty members: Teaching faculty members are motivated to attend the FDPs, conferences, STTP, institutional membership for which financial support is provided by the institution.
- Concession in the tuition fees for children of Staff members: Concession in the tuition fees of the ward of staff from any institution affiliated with parent society is provided as per norms.
- Medical insurance scheme: The medical insurance policy is taken from the Star Health Insurance Company for all staff.
- Accidental and death group insurance scheme: The master accidental and death group insurance policy is taken from the Oriental Insurance company for all staff.
- Ex gratia payment: It is an incentive given to class IV staff during Diwali.

File Description	Documents
Paste link for additional information	https://moderncoe.edu.in/pdf/website/abou t/PES%20MCOE%20HR%20MANUAL.pdf
Upload any additional information	<u>View File</u>

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

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

6

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

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

10

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

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

183

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

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

The Institution has a well-definedPerformance Based Appraisal System (PBA).

1)Performance Based Appraisal System for Teaching Staff:

The Performance Appraisal process will endeavor to improve communication between the employee and the management through HOD/IQAC/Principal by giving an opportunity to provide feedback to individual employees on their job performance.

ØParameters of Evaluation: This evaluation is based on the following major criteria:

- 1. Teaching, Learning, and Evaluation Related Activities:-
- 2. Examination duties assigned and performed
- 3.Co-curricular, Extracurricular and professional development relate dactivities
- 4. Research, Publications and academic contributions

ØProcess of Performance Appraisal: Faculty members are asked to fill out and submit duly signed appraisal forms. The HODreviews each faculty performance evaluation formand then submits the performance evaluation summary withrecommendations to the IQAC In-charge. IQAC in charge submits the final recommendations through the Principal for approval to CDC. Upon approval from

CDC, faculties are awarded with annual increment in salary and/or promotion to higher cadre, incentive /Prize money, appreciation letters.

2) Evaluation System for Non-Teaching Staff:

Evaluation System for non-teaching staff is monitored on the parameters like work assigned and completed by staff, discipline, etc. The HoDassesses the performance and the Principal reviews the remarks. Based on the reviews, the report is submitted to the CDC for further necessary action.

File Description	Documents
Paste link for additional information	https://moderncoe.edu.in/pdf/website/abou t/PES%20MCOE%20HR%20MANUAL.pdf
Upload any additional information	<u>View File</u>

### 6.4 - Financial Management and Resource Mobilization

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

The Institution has a well-defined procedure to monitor effective and efficient utilization of available financial resources. The budgetis prepared every year after compiling requirements regarding recurring and non-recurring expenditures.

- · All the major financial transactions are monitored by the CDC. The resolutions of the CDC regarding approval for the budget are forwarded to the Managing Committee and Governing Council of the Society for final approval of the budget to be spent during the academic year under various heads.
- · Internal Audit: The internal audit is a continuous process. Qualified Internal Auditors and their team from external resources have been appointed by the parent society for verification of all types of transactions that are carried out in each financial year on an accrual basis system.
- · Statutory Audit: Statutory financial audit is conducted in month of June/July as per the standard norms of financial audit and Government regulations. Discrepancies identified, if any,

by the audit team are immediately corrected / rectified and thereafter precautionary steps are taken to avoid recurrence of such errors in the future.

• The audited report is submitted to the competent authority by the Accountant. The audited financial statements are uploaded on the institution's website.

File Description	Documents
Paste link for additional information	https://moderncoe.edu.in/pdf/website/IQAC /FinancialStatements/ScanIncome%20and%20E xp.2021-22.pdf
Upload any additional information	<u>View File</u>

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

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

### 9.738

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

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

As we are a self-financed Institution; the major source of funding is raised through students' fees. The Institution prepares annual budget in order to manage the financial resources effectively. The deficit, if any is managed through the support of the Parent Society. The Institution also has an adequate corpus in form of fixed deposits to tide over administrative and salary requirements of more than six months. The institutionhas a well-formulated financial policy that ensures effective and optimal utilization of finances for

academic, administrative, and development purposes.

All the Heads of Departments and other in-charges submit their budgetary requirement for various categories of expenditure under 'recurring' and 'non-recurring' heads before the commencement of every academic year. The budgetary heads include procurement of new equipment, maintenance/servicing of existing equipment etc. for each department based on the syllabus revisions, research and development, and other activities. The utilization of the budget is carried out as per the identified priorities.

 Utilization of funds from Government agencies, affiliating University

Funds availed from AICTE, SPPU etc. are used for faculty developmental activities, the development of the infrastructure. The utilization of the funds is as per the identified priorities, norms laid down by the competent agencies.

File Description	Documents
Paste link for additional information	https://moderncoe.edu.in/pdf/website/IQAC /AQAR/AQAR%202021-22/6.4.3%20Mobilzation% 20of%20Funds.pdf
Upload any additional information	<u>View File</u>

### **6.5 - Internal Quality Assurance System**

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

The IQAC plays an important role in the implementation of quality assurance strategies and processes related to-? Academics and other student-centric activities? Research and development? Extension and outreachactivities? Administrative and other support services. Practice I: Skill development programs for faculty and students. Skill development programs are organized with objectives to improve the professional/employability skills of students and to enhance the teaching-learning skills of teachers.? Organize in-house technical hands-on workshops and expert talks in collaboration with industries.? Institutions tie-up with training institutes for soft skill training.? Provide Audit courses.? Develop a

Centre of Excellence. ? Motivate faculty to attend Faculty development programs. ? Training to teaching and non-teaching staff for quality enhancement. Practice II: Techno Social Collaboration Objective behind the Techno Social Collaboration are to collaborate with different professional societies and Industries for technical/professional development of students and to collaborate with different social activity clubs/organizations and participate in national initiatives to support the community. ? IQAC has encouraged every department to establish association with different Professional societies ? Technical and Non-technical clubs to organize activities. ? Institution has an active NSS unit. ? The institution actively participates in flagship events Unnat Bharat Abhiyan (UBA) 2.0 and Institution Innovation Council (IIC). ? Institution has an active Entrepreneurship development cell.

File Description	Documents
Paste link for additional information	https://moderncoe.edu.in/pdf/website/IQAC /AQAR/6.5.1.pdf
Upload any additional information	<u>View File</u>

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

The IQAC plays a vital role in ensuring the implementation of effective teaching-learning processes, conducting studentcentric activities, and recording the learning outcomes as per the systematic processes defined. All the academic, cocurricular extra-curricular activities are organized considering the Program Outcomes (POs) and Program Specific Outcomes(PSOs). Example 1: Implementation of Outcome Based Education (OBE) The attainment of Course Outcomes (COs), POs, and PSOs are recorded through the designed Outcome Based Education (OBE) Policy document by IQAC considering the AICTE Examination Reforms Policy document. Suitable assessment tools are identified and executed for all courses. Attainment level is measured by considering student performance in internal assessments for Course Outcomes and performance in the University examination. Example 2: Annual Internal and External Academic Audit IQAC has also initiated Internal and External Academic Audit process to encourage the programmes to evaluate their quality processes and standards based on predetermined

benchmarks. Internal Audit is conducted twice a year by each programme. This audit is conducted once in a year at the end of Semester II of the academic year. The external Auditor is appointed from other university. The remarks and suggestions by the auditor for every programme are taken into consideration by the IQAC for further improvements.

File Description	Documents
Paste link for additional information	https://moderncoe.edu.in/pdf/website/IQAC /AQAR/6.5.2_evidences_2021-22.pdf
Upload any additional information	<u>View File</u>

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

### A. All of the above

File Description	Documents
Paste web link of Annual reports of Institution	https://moderncoe.edu.in/pdf/website/abou t/Annual%20Report%202021-22.pdf
Upload e-copies of the accreditations and certifications	<u>View File</u>
Upload any additional information	<u>View File</u>
Upload details of Quality assurance initiatives of the institution (Data Template)	View File

### INSTITUTIONAL VALUES AND BEST PRACTICES

### 7.1 - Institutional Values and Social Responsibilities

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

The Institute ensures equal concern for girls and boys in all curricular, co-curricular activities. Institute has organized various activities like sessions on Creating a Safe and a Positive Workplace, Gender Equality awareness and Stress Management etc. Institute has the student council committee which has equal participation of girls and boys.

Following facilities are provided specially for women on campus:

Safety and security-24 hours working CCTV Surveillance system is available in campus. Overall security of the campus is ensured by external agency, duly appointed by the institute. Entry is permitted by verifying I-cards at security check. The institute has collaboration with Damini Pathak, which can provide necessary support to the girl students, whenever necessary.

Counselling -To address the issues of students, each department has mentor-mentee system. In addition to this Institute has MOU with Psychology Department, Modern college of Arts, Science and commerce, Pune to provide counselling sessions. Senior police officers and cyber security experts are invited for conducting sessions on self-defence, cyber security awareness etc.

Common Rooms-Institute has well-equipped girls' common room and boys' common facility.

File Description	Documents
Annual gender sensitization action plan	https://moderncoe.edu.in/pdf/website/IOAC /AOAR/AOAR%202021-22/7.1.1%20Annual%20Gen der%20action%20plan%202021-22.pdf
Specific facilities provided for women in terms of:a. Safety and security b. Counseling c. Common Rooms d. Day care center for young children e. Any other relevant information	https://moderncoe.edu.in/pdf/website/IQAC/AQAR/AQAR%202021-22/7.1.1%20Specific%20Facilities%20provided%20for%20women.pdf

# 7.1.2 - The Institution has facilities for alternate sources of energy and energy conservation measures Solar energy Biogas plant Wheeling to the Grid Sensor-based energy conservation

A. 4 or All of the above

# Use of LED bulbs/ power efficient equipment

File Description	Documents
Geo tagged Photographs	<u>View File</u>
Any other relevant information	<u>View File</u>

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

Institute gives due consideration to effective disposal of degradable and non-degradable waste. To support the National mission on "Clean and Green Environment" the Institution has taken various initiatives like solid waste

management, Plastic ban, Recycling of used water, Paper recycling, E-waste management and so on.

Through these initiatives, the Institution tries to support the global cause of environment protection. The Institution has effectively adopted a policy of reduce, recycle and reuse to resolve the problem of waste management. The Institution is committed to make the campus plastic free.

Biogas and Vermiculture plants are installed and are fully functioning. Biogas plant has the capacity of 35 kilograms and the generated gas is used in canteen. The institute has practice to separate wet waste and dry waste. The wet waste is used in Vermiculture plant. The institution is committed to make campus plastic free and is recognized as 'Swachcha Action Plan Institution' under MGNCRE, Govt. of India. A Sewage Treatment Plant (STP) of capacity 20000 liters is available at the campus, for recycling of used water from toilets

In the laboratories, non-hazardous chemicals are used and are diluted before disposal.

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

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

A. Any 4 or all of the above

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

### 7.1.5 - Green campus initiatives include

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

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

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

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

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

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

A. Any 4 or all of the above

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

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

he Institution takes various initiatives for promoting tolerance and harmony towards cultural, regional, linguistic, communal, socio-economic and other diversities. The Institution believes in equality of all cultures and traditions as is evident from the fact that students belonging to different caste, religion, regions are studying without any discrimination.

Different festivals are celebrated with zeal and enthusiasm. With great fervor the birth anniversaries and memorials of great regional and national personalities are celebrated and various motivational seminars, lectures and talks are organized to honor their contribution towards the nation and the society.

Students from diverse backgrounds participate in the annual cultural festival, 'Spandan' and various drama competitions and have won prizes. Institutional annual magazine 'Karmanya' includes articles from different languages to promote linguistic diversity.

The central library facilitates the Book Bank Scheme to provide books for economically weaker and SC/ST students. Skill and Personality Development Committee (SPDC) organizes special sessions on skill development, English conversation etc. specifically for SC/ST students.

For the promotion of unity in diversity, the National Service Scheme (NSS) Cell of the Institution organizes many programs which aim at strengthening the unity and integrity of India.

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

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

The institute gives due consideration to inculcate values, rights, duties and responsibilities as per presumptions of the constitution of India. This is very well reflected in Vision and Mission statements of the parent body as well as of the institute. Curriculum includes courses like Introduction to Constitution, which lay a strong foundation for students to become better human beings. The institute has undertaken following activities to achieve this goal:

- Constitution Pledge by students and staff, on Constitution day
- Celebration of national days like Independence day,
   Republic day etc.
- NSS activities for community service, which include rural development, tree plantation programs.
- Expert lectures and webinars to guide the students about the professional ethics and moral values
- The Student Grievance Redressal Committee is constituted in the Institution to address the grievances of the students.
- An Internal Complaints Cell ensures a safe working environment in the Institution.
- Activities under Institutional Social Responsibility (ISR) and students' forums as well as clubs
- Students actively participated in 'Develop Village Develop India Program' where they design and evaluate solutions for identified societal problems

Participation of students into various activities imparts ethical practices and develops moral values among them.

File Description	Documents
Details of activities that inculcate values; necessary to render students in to responsible citizens	https://moderncoe.edu.in/pdf/website/IQAC /AQAR/AQAR%202021-22/7.1.9%20Details%20of %20Activities 2021-22.pdf
Any other relevant information	https://moderncoe.edu.in/pdf/website/IQAC /AQAR/AQAR%202021-22/7.1.9%20Any%20releve nt%20info.pdf

# 7.1.10 - The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and

A. All of the above

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

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

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

The Institution celebrates all national festivals and days with great enthusiasm to inculcate a sense of patriotism and responsibility in the students. The resource persons from various fields are invited on the occasion of Independence Day and Republic Day to share their experience and to motivate young minds to contribute in building the nation.

The Institution commemorates the anniversaries of great Indian personalities namely Chatrapati

Shivaji Maharaj, Rajmata Jijabai, Swami Vivekananda, Mahatma Gandhi, Netaji Subhash Chandra Bose, Shahid Bhagat Singh, Bharatratna Dr. Babasaheb Ambedkar, Swatantryaveer Sawarkar, Dr. A.P.J. Abdul Kalam, Dr. Sarvepalli Radhakrishnan, Sir Mokshagundam Visvesvaraya, Sir C. V.Raman, Mr. S. R. Ranganathan etc

On such occasions renowned speakers are invited who share the teachings of these eminent personalities through their speeches.

Various national festivals such as Ganesh Utsav, Akshay tritiya, Gudi padwa, Ayudh Pooja on the occasion of Khande Navami, Diwali etc. are celebrated by the students and staff with great enthusiasm.

Women's day, International Yoga day, Marathi Bhasha Din etc are celebrated to spread awareness in the society.

The departments in the Institution organize various talks, seminars on national events and commemorative days.

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

### 7.2 - Best Practices

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

Title1: Innovation and Creativity

Objective: To encourage continuous learning, creative thinking and innovation among faculty and students.

Context: The Institution has defined various policies and procedures to promote research activities among students and faculty members.

Practice: The Institution promotes innovation and creativity through the various technical and non-technical activities conducted by Innovation cell, ED cell and IPR cell of the Institution and clubs etc.

Evidence of Success: The institute has received various awards and recognition from renowned organizations

Problems Encountered and Resources: Dedicated work place, finance, advanced technology, faculty etc.

### Title2: Institution's Publications

Objective: To disseminate Vision, Mission, POs, PSOs, PEOs, technical and non-technical literature, the important activities and initiatives of the Institution/individual programs to the stakeholders.

Context: To circulate the information regarding initiatives, facilities and achievements of the institution to all the stakeholder various publications are made available.

Practice: The Institution publishes annual and biannual Newsletters, magazines, project annual, E- Curriculum booklet etc to disseminate learning resources, achievements, artistic creativity and important information.

Evidence of Success: The publications help to gather the information at one place and dissemination to the stakeholders.

Problems Encountered and Resources Required:Compilation, editing and publication is usually time consuming and challenging

File Description	Documents
Best practices in the Institutional website	https://moderncoe.edu.in/pdf/website/IQAC /AQAR/AQAR%202021-22/7.2.1%20Best%20Pract ices%202021-22.pdf
Any other relevant information	https://moderncoe.edu.in/pdf/website/IQAC /AQAR/AQAR%202021-22/7.2.1%20Any%20Other% 20relevant%20information.pdf

### 7.3 - Institutional Distinctiveness

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

The Institution strives hard to provide techno-social solutions for the day-to-day problems of the community. It is evident from the Mission of the Institution which focuses on being responsive to changes in technology, socio-economic and environmental conditions. The spirit of social responsibility towards community development is inculcated through ISR, NSS, ED cell and various technical and social clubs.

### Develop Village Develop India

The Program aims to assist the rural community for their sustainable development to ameliorate their health, nutrition, and sanitation. The activities were undertaken in collaboration with 'Ignited Innovators of India' (I2I) initiatives.

### IT Awareness Program

Sessions on pronunciation and communication skills were organized for school students.

### Pandemic Specific Initiatives

During the pandemic, the Institution organized various expert sessions about Covid-19 disease and its vaccination. A vaccination drive was organized at the Institution.

### Social Talk Program

The objective is to stimulate personal and professional growth through discussions about attitudes, feelings, and experiences by organizing Expert lectures, group discussion, audio-visual materials etc.

#### Each One ... Plant One

It is a tree plantation program organised by students and faculty members of the Institution wherein they went to different places in Pune for tree plantation.

File Description	Documents
Appropriate web in the Institutional website	<u>View File</u>
Any other relevant information	<u>View File</u>

### 7.3.2 - Plan of action for the next academic year

- To organize different quality improvement programs for students and faculty members.
- To conduct technical workshops and seminars to understand the needs of Industry.
- To encourage faculty members and students to participate in activities conducted in association with IIC and MHRD, Govt. of India and the institute ED cell in order to

- promote the research environment and build entrepreneurial skills.
- To inculcate social beliefs among students by organizing and executing events in association with NSS, ISR and Rotaract.
- To inculcate an industrial environment by encouraging students to actively participate in placement related activities, complete internship programs and opt for sponsored projects.
- To enhance the institute infrastructure and other facilities for supporting increased intake.
- To conduct interdepartmental Internal Audits and External academic audits for quality improvement.
- To conduct webinars and FDP's for awareness regarding autonomy of the institute.
- To conduct a quality improvement program to create awareness about National Education Policy (NEP) and its implementation.