



SELF STUDY REPORT
FOR
4th CYCLE OF ACCREDITATION

**MAHARSHI KARVE STREE SHIKSHAN SANSTHA'S
CUMMINS COLLEGE OF ENGINEERING FOR WOMEN**

**MKSSSS CUMMINS COLLEGE OF ENGINEERING FOR WOMEN KARVENAGAR, PUNE
411052**

www.cumminscollege.org

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Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

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Executive Summary

Introduction:

Cummins College of Engineering for Women (CCEW) is governed by Maharshi Karve Stree Shikshan Samstha (MKSSS). Bharatratna awardee Maharshi Dhondo Keshav Karve started MKSSS in 1896. For the last 126 years MKSSS is empowering women through education. Cummins College is the first all women engineering college in India established in the year 1991 with support from Cummins Diesel (India) Foundation.

The organizational structure of CCEW aims for accountability and transparency in the system. CCEW believes in imparting quality education and providing good governance. Hence, it goes through periodic quality audit of academics and governance conducted by premier national accreditation agencies, the National Board of Accreditation (NBA) and the National Assessment and Accreditation Council (NAAC). CCEW programs have completed three to six cycles of NBA accreditation, received 'A' grade in the third cycle of NAAC accreditation and has been ranked among top 250 engineering colleges in the NIRF ranking.

In the year 2016-17, Cummins College became an autonomous institute. As an autonomous institute it offers curriculum as per the industry needs. Autonomy has enabled CCEW to provide academic freedom to the faculty in designing and teaching courses.

CCEW has a strong association with the industry and is recognized for providing quality recruits for the industry. On an average 80% to 85% students are placed through placements cell every year.

CCEW students participate in national level co-curricular and extra-curricular competitions regularly. They have also won awards in such competitions.

The college enjoys unique association with Cummins Incorporation and Cummins India ltd. Cummins

has declared the college as its signature project and supports CCEW students and faculty development initiatives. Such an association thus represents a quite exceptional example of industry-institute linkage.

Vision:

The percentage of women professional in the engineering and technology sector is very low globally. Considering this scenario, the vision of the college is to impart quality education exclusively to women. The college also aims at the holistic development of the students including their leadership abilities. This way the college ensures that the graduates will not only be technically competent, but also will be the leaders in engineering and technology. In alignment with this thought process, the vision of the college is —

“To be a globally renowned institute for imparting quality education and to develop women leaders in engineering and technology”.

Mission:

The college aims to impart quality education and to achieve global recognition for developing women professionals who are academically as well as technically competent. To develop these competencies, the curriculum framed by the college is as per the global trends in technology. The college develops technical competencies through the provision of the state-of-the-art laboratories, industry-institute interactions, internships and project opportunities. Academic and co-curricular activities help imbibe professional ethics among the students along with the overall development. In alignment with this thought process, the mission of the college is —

“To develop women professionals who are academically and technically competent with strong professional ethics.”

SWOC

Institutional Strength :

- Rich legacy of 126 years of parent trust in the field of women education, Due to which very good impression in society.
- Strong association of multinational Industry Cummins India Ltd and Cummins Inc. Cummins India — these associations support the college in many developmental initiatives.
- High retention ratio of the staff members. Long term association with college has developed sense of ownership and team spirit among staff members.
- Due to conducive academic environment and autonomous status meritorious students from Maharashtra strive to take admission in cummins College.
- Strong industry connect: College is associated with many industries for internships, lab development, projects, expert lectures and placements.

Institutional Weakness :

- Limited consultancy by faculty members
- Limited number of research grants
- Entrepreneurship and incubation facilities need to be enhanced.

Institutional Opportunity :

- Being autonomous college has opportunity to frame curriculum as per specific industry needs with more flexibility
- Has opportunity to implement exam reforms
- To start certificate/diploma programs in collaboration with the industries
- To develop problem solving ability among students through internships/projects with the help of associated Industries.

Institutional Challenge :

- Difficulty in involving alumnae in college work: being an all-women college, it is challenging to have substantial engagement of alumnae due to their other commitments and responsibilities.
- Providing hostel accommodation for all the students coming from cities other than Pune.
- Being primarily a teaching institute the development of ecosystem for research is a challenge.

Criteria wise Summary***Curricular Aspects :***

In its autonomous status, the college defined its own curricular structure for UG and PG level engineering programs by following AICTE and UGC guidelines. After completion of one cycle of autonomy revision in curriculum took place in 2020-21.

Objective of the curriculum is to provide quality education in engineering with extensive hands-on opportunities and industry exposure, so that students will be ready for their careers in engineering and technology. Keeping this objective in mind, the college has involved stakeholders, such as industry experts, employers, experts from academia and alumnae for designing the curriculum. These stakeholders are the members of the governing body, academic council, IQAC and various boards of studies of the college. Regular meetings of these committees are conducted to review and revise the curriculum.

College has an active feedback collection system to obtain the stakeholders' feedback, which is considered for the revision in the curriculum.

Most of the courses studied at the first year level are common to all the programmes. From the second year onwards programme-specific courses are delivered to the students.

Elective course system is implemented in all the programme curricula, from the third year onwards. It

allows the students to choose from several, program -specific elective courses. To ensure exposure to the multidisciplinary areas of engineering and technology, students of each programme are also provided with a variety of elective courses offered by the other programme departments. In the curricular structure of the college, such courses are termed as “open electives”. The students of the third and the fourth years can thus opt for the programme as well as open electives of their choice from the available options. In the curriculum structure credits are assigned for the NPTEL MOOCS courses as well.

The college also offers courses from the humanities and the social sciences, such as those on management, economics and finance, as well as on the universal human values. To further enrich their technical curricula, the college offers skill-development and value-added courses such as “Garnishing Talent”, “Employability Enhancement and Innovation Program” as well.

Every student has to complete Student project / Industry sponsor project at final year of B.Tech/ M.Tech.

Teaching-learning and Evaluation :

The students are admitted in the college through the Centralized Admission Process (CAP) conducted by the Directorate of Technical Education, Govt. of Maharashtra as per reservation policy.

The faculty-to-students ratio for the academic year 2021-22 was 1:17. Currently, more than one-third of the total faculty strength of the college is Ph.D. qualified. The average experience of faculty members of the college is about 13 years.

The college promotes the use of different ICT-enabled tools such as google classroom, Moodle, and Youtube channels and encourages best pedagogic practices in engineering education through its pedagogy cell. The faculty members adopt different techniques such as flipped classrooms, quizzes, and case study-based learning to make the teaching-learning experience effective.

The college regards “Student Mentoring” as an essential activity during every semester. About twenty students are assigned to one faculty member for mentoring. The mentor provides academic as well as personal mentoring. The college has a provision of honours and minor programs for advanced learners in the curriculum structure. For students who need an improvement in their communication skills, the institute has the “Garnishing talent program” in collaboration with the Confederation of Indian Industry (CII), EATON.

The college follows an outcome-based education system. The Programme Outcomes, Programme Specific Outcomes, and Course Outcomes are well-defined and displayed on the institute website, at key locations in the institute, and in the departments. The college also has an active academic system for analyzing and evaluating the course and the program outcome attainment levels.

For the evaluation process, the college has adopted “Ion EMS” (<http://www.ioncudos.com/>) as the examination Management System. Evaluation of the answer sheets of end semester examinations is carried out via a digital system (Ion DVS module). Results are made available to the students on the Ion student App. The overall graduation in the academic year 2021-22 is 98.85 %.

Research, Innovations and Extension :

The college has been taking focussed efforts on creating an ecosystem conducive for research activities.

For this, it has several laboratories that are equipped with high end hardware/software facilities such as ANSYS, LabView, Power Lab, MATLAB with all tool boxes, high end computing facilities, 3D printers etc. As per requirement budgetary provisions are made to upgrade research software computing facilities etc.

The college has a well defined research promotion policies are as follows:

- Incentives for SCI/SCOPUS Indexed Journal Publications
- Incentives for Funded research projects
- If the patent application is filed as per the IPR policy of the institute, all the charges of filing and maintaining IP are borne by the institute.
- Faculty members are also encouraged for higher education such as Ph.D. , for which the college offers full paid study leaves to the permanent faculty members for a maximum of 2 years.
- Institute encourages students to present papers in good quality conferences. Institute reimburses 50% of the registration charges for the conference papers of students.

Grants received from the government and non-governmental agencies for research projects, endowments, and the chairs' positions in the institution during the last five years is more than 1.5 Crore.

The college has 22 faculty members recognized as research guides. Over 20 faculty members registered for Ph.D. during the last 5 years. The research activities of the faculty members of the college during the last five years have resulted in the publication of over 200 journal articles and over 200 books and book chapters.

Over 50 workshops have been conducted by the college during the last five years focussing on research methodology, intellectual property rights, entrepreneurship, skill development.

The college promotes and supports a variety of extension activities every year, which are executed mainly by NSS and NCC units. Several faculty members have received awards for the various extension activities.

The college is having a good number of collaborations with various industries and institutes. Internships, Projects, Placements, Scholarships, Masters Fellowship Program are some of the activities carried out with the collaborative company/institute. More than two thousand such collaborative activities have been carried out in the last five years.

Infrastructure and Learning Resources :

The college has a well maintained, user friendly and resilient infrastructure conducive to teaching, learning and comprehensive development of students. It includes an adequate number of ICT enabled classrooms, tutorial rooms, state-of-the-art laboratories and common facilities such as library, workshop, computer centre, seminar halls. The library is equipped with around 60000 books and journals in hard copy form along with a digital facility to access e-books & e-journals.

The college is committed to creating a balanced atmosphere of academic, cultural and sports activities for the overall personality development of its students. The college has an open auditorium for rehearsals and conduction of cultural activities. The college is well equipped with various facilities for physical fitness, including indoor and outdoor sports facilities along with a dedicated gymnasium. Various sports activities are organized at the playground including Kabaddi, Kho-Kho and athletics. Specific area is assigned for the games such as basketball, volleyball, Throwball, 6 A side Football, Handball.

The hostel facility accommodating around 850 students is available.

The college prepares an annual budget for infrastructure development, maintenance of physical facilities, academic support facilities, salaries and other expenses. The Institution has an IT policy covering wi-fi, cyber security for updating its IT facilities. The IT policy addresses standards on IT Service Management, Information Security, Network Security, Risk Management and Software Asset Management. It outlines the responsible use of the Information Technology infrastructure at the college such as use of licensed software only, procurement of IP based licenses wherever possible, annual maintenance contract for application software, antivirus on every machine, restricted access through firewall, regular information backup, encouragement for usage of open source software.

Around 1500 computers are available on the campus. The internet facility with good network bandwidth of 1 GBPS is provided on all the computers in the campus.

There is a set policy for the maintenance and utilization of classrooms, laboratories, computers, library, sports complex. There is a team dedicated for maintenance of computers and networks in the college.

Student Support and Progression :

The college has a strong 'student support' system for financial support, health check-ups, co-curricular and extra-curricular activities as well as for mentoring and career guidance.

Every year college assigns a fixed amount of funds to provide financial assistance to needy students as well as assists students to apply for different government and non-government scholarships.

Students are provided with the guidance for improving their soft skills and communication skills by conducting value added courses in relevant areas and arranging additional sessions.

A health check up is organized every year for all the first year students. Also, the health check up camps are arranged, and various guest lectures are arranged related to health issues and hygiene. The curriculum involves an audit course on yoga.

Students are encouraged to participate in the various sports and cultural competitions at the state, national and international level and also provide support. The institute organizes sports and cultural events.

To introduce students to the latest technical topics, speakers with proven expertise in a topic are invited to deliver the lectures. Webinars and workshops on emerging technologies, industrial visits are arranged.

The institute has a special career guidance cell and Placement cell. Expert sessions are arranged to guide the students for competitive examinations, career guidance and higher studies. The Placement cell organizes the pre-placement activities for the students.

The college has an independent student council with 55 posts including technical secretary, placement representative, sports secretary, cultural secretary, treasurer, library representative.

The college has an active alumnae association officially registered in October 2019, having the objective of strengthening the alliance between the alumnae and the college.

The institution has a well structured and organized anti ragging committee and internal complaint committee as well as college also facilitates mechanisms for student's grievance redressal. The college

also provides an in-campus counselling facility for the students.

Governance, Leadership and Management :

The college has well defined vision and mission statements, with an aim of striving to become a globally renowned institute offering quality engineering education to women and with a focus on nurturing them to become academically and technically competent. The statements are well aligned with the vision and mission laid by the 126-year old parent institution.

The college has developed its perspective plan through rigorous discussions considering the strengths and weaknesses of the institution. It is based on three aspects of the overall development of the college: teaching-learning and evaluation, readiness for careers, and research and extensions. For each of these aspects there are well-defined goals, action points, metrics and targets.

The college has a well-defined organizational structure. It has been practicing decentralization and participative management through which its faculty members and non-teaching members are actively involved in the decision making for college development. To provide transparency and efficiency in the academic and administrative functions, e-governance has been implemented.

All the teaching and non-teaching members of the institution are provided with career development opportunities for professional growth. More than half of the college faculty have completed professional development programmes and have availed the financial support from college towards attending workshops, seminars and for professional body memberships. The college has its own resource mobilization policy and performs its financial audits regularly.

The college strongly believes in quality assurance strategies in academic and administrative activities. These are defined, benchmarked, audited and analyzed by the IQAC of the college periodically.

The activities include academic audit, question paper and laboratory assignments audit, motivating pedagogical teaching learning processes, research activities, collaborative initiatives, etc. Different feedback from the stakeholders are collected, analyzed, presented to the management and used for overall improvement of the college.

Institutional Values and Best Practices :

By following the pursuit set by the parent institute of Women Empowerment through Education, the college works relentlessly towards educating women and making them self-reliant.

As a part of the institutional values, the students and the employees are sensitized to the constitutional obligations through activities such as flag hoisting, election oath day, electoral literacy campaign, blood donation camps.

Commemorative days like Independence day, National voters day, Republic day, International Women's day, World environment day, Yoga day, Teacher's day and Engineer's day are celebrated every year.

Different cultural and regional programmes ensuring cultural are organized by the college.

The college ensures its environment friendliness through a variety of best practices and activities. For

instance, the energy conservation is ensured by installation of solar panels, Biogas plant, wheeling to the grid and its distribution and use of LED tubes/bulbs in all the corridors in the campus.

Solid waste is collected and utilized in the Biogas plant and generated Biogas is used for cooking in the hostels. Shredder machine is used to shred leaves, which is used for composting. Sanitary napkins are disposed off with an incinerator. Recycled water is used for gardening in the premises. There is no bio-medical, hazardous chemical and radioactive waste generated in college. A periodical write-off procedure is executed for the management of E-waste and computers.

Water conservation facilities like rain water harvesting, bore-wells and open wells are available in the Institute. The distribution of water to the campus is done through these water bodies. Waste water recycling is also implemented.

There is a restricted entry of automobiles in the Institute with pedestrian friendly pathways. A battery powered vehicle is used for transportation within the campus. Ban on use of plastic inside the campus and in the canteen is strictly followed. There are many trees and plants on the campus. Environment and energy audits are done for the campus.

The Institute has disabled-friendly facilities like ramps, lifts and disabled friendly washrooms.

For its faculty and students, best practices like “research promotional ecosystem” for faculty and “student clubs” for providing beyond curriculum learning opportunities are practiced in the college.

Profile

BASIC INFORMATION

Name and Address of the College	
Name	MAHARSHI KARVE STREE SHIKSHAN SANSTHA'S CUMMINS COLLEGE OF ENGINEERING FOR WOMEN
Address	MKSSSSs Cummins College of Engineering for Women Karvenagar, Pune
City	Pune
State	Maharashtra
Pin	411052
Website	www.cumminscollege.org

Contacts for Communication

Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	Madhuri Bhushan Khambete	020-25311100	9604339640	020-25311499	vikram.athalye@cumminscollege.in
IQAC / CIQA coordinator	Dipali Ramdasi	020-25311268	9890944707	020-25311499	dipali.ramdasi@cumminscollege.in

Status of the Institution

Institution Status	Self Financing
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Type of Institution

By Gender	For Women
By Shift	Regular

Recognized Minority institution

If it is a recognized minority institution	No
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Establishment Details

Date of Establishment, Prior to the Grant of 'Autonomy'	17-07-1991
Date of grant of 'Autonomy' to the College by UGC	10-09-2015

University to which the college is affiliated

State	University name	Document
Maharashtra	Savitribai Phule Pune University	View Document

Details of UGC recognition

Under Section	Date	View Document
2f of UGC	25-07-2014	View Document
12B of UGC	25-07-2014	View Document

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)

Statutory Regulatory Authority	Recognition/Approval details Institution/Department programme	Day,Month and year(dd-mm-yyyy)	Validity in months	Remarks
AICTE	View Document	03-07-2022	12	

Recognitions

Is the College recognized by UGC as a College with Potential for Excellence(CPE)?	No
Is the College recognized for its performance by any other governmental agency?	No

Location and Area of Campus

Campus Type	Address	Location *	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	MKSSSs Cummins College of Engineering for Women Karvenagar, Pune	Urban	4	3797

ACADEMIC INFORMATION

Details of Programs Offered by the College (Give Data for Current Academic year)						
Program Level	Name of Program/Course	Duration in Months	Entry Qualification	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BTech,Electronics Telecommunications Engineering	48	CET JEE Main	English	180	204
UG	BTech,Computer Engineering	48	CET JEE Main	English	180	220
UG	BTech,Instrumentation And	48	CET JEE	English	60	66

	Control Engineering		Main			
UG	BTech,Information Technology	48	CET JEE Main	English	60	70
UG	BTech,Mechanical Engineering	48	CET JEE Main	English	60	60
PG	Mtech,Electronics Telecommunications Engineering	24	UG GATE	English	18	2
PG	Mtech,Mechanical Engineering	24	UG GATE	English	30	2
Doctoral (Ph.D)	PhD or DPhil,Electronics Telecommunications Engineering	0	PG	English	0	0

Position Details of Faculty & Staff in the College

Teaching Faculty

	Professor				Associate Professor				Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	18				33				98			
Recruited	2	7	0	9	9	13	0	22	31	67	0	98
Yet to Recruit	9				11				0			
Sanctioned by the Management/Society or Other Authorized Bodies	0				0				25			
Recruited	0	0	0	0	0	0	0	0	5	20	0	25
Yet to Recruit	0				0				0			

Non-Teaching Staff

	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				86
Recruited	49	37	0	86
Yet to Recruit				0

Technical Staff

	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				50
Recruited	28	22	0	50
Yet to Recruit				0

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	2	7	0	9	13	0	7	15	0	53
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	20	36	0	56
UG	0	0	0	0	0	0	0	0	0	0

Temporary Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	3	0	0	3
M.Phil.	0	0	0	0	0	0	0	1	0	1
PG	0	0	0	0	0	0	5	34	0	39
UG	0	0	0	0	0	0	0	0	0	0

Part Time Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0
UG	0	0	0	0	0	0	0	0	0	0

Details of Visting/Guest Faculties				
Number of Visiting/Guest Faculty engaged with the college?	Male	Female	Others	Total
	4	5	0	9

Provide the Following Details of Students Enrolled in the College During the Current Academic Year						
Program		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	0	0	0	0	0
	Female	2580	96	0	6	2682
	Others	0	0	0	0	0
PG	Male	0	0	0	0	0
	Female	10	0	0	0	10
	Others	0	0	0	0	0
Doctoral (Ph.D)	Male	2	0	0	0	2
	Female	19	0	0	0	19
	Others	0	0	0	0	0

Provide the Following Details of Students admitted to the College During the last four Academic Years					
Category		Year 1	Year 2	Year 3	Year 4
SC	Male	0	0	0	0
	Female	39	38	46	47
	Others	0	0	0	0
ST	Male	0	0	0	0
	Female	14	11	7	5
	Others	0	0	0	0
OBC	Male	0	0	0	0
	Female	59	61	56	77
	Others	0	0	0	0
General	Male	0	0	0	0
	Female	348	384	356	369
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	138	141	168	81

	Others	0	0	0	0
Total		598	635	633	579

Provide the Following Details

Number of Programs	UG programs not covered under the Autonomous status of UGC	PG programs not covered under the Autonomous status of UGC	Professional Programs offered	Self-financed Programs offered	New Programs introduced during the last five years
	0	0	0	0	0

EVALUATIVE REPORT OF THE DEPARTMENTS

Department Name	Upload Report
Mechanical Engineering	View Document
Information Technology	View Document
Computer Engineering	View Document
Electronics Telecommunications Engineering	View Document
Instrumentation And Control Engineering	View Document

Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:	<p>The institute aims at the holistic development of students and has developed the program curriculum so as to satisfy the technical needs of our nation. The actions taken to comply with the NEP are as follows: 1. Implementation of Honor and Minor Graduate Degree Program. 2. Flexibility in the curriculum in the form of program and open electives. 3. Considerable number of program electives are available for the students that help blur the rigid boundaries of curricula and create possibilities for lifelong learning 4. A basket of open electives covering interdisciplinary and multidisciplinary courses along with core courses and program electives. 5. Inclusion of Soft Skills and Professional Ethics in the curriculum 6. A Pedagogy Cell that emphasizes on communication, discussion, debate, research, and opportunities for cross-</p>
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	<p>disciplinary and interdisciplinary thinking. 7. Inclusion of courses on Humanities and Performing arts. Universal Human Values courses</p> <p>8. Credit-based Projects with objective to cater service to the society</p>
2. Academic bank of credits (ABC):	<p>1. Institute's registration on National Academic Depository portal and registration of the students on ABC portal will be initiated soon. 2. Institute is exploring ways to collaborate with other academic institutes where our students can opt for academic credits. 3. Being an autonomous institute, the schedule of students aiming at academic credits from other institutes can be incorporated.</p>
3. Skill development:	<p>The institute imparts technical education to the students and laboratory sessions/ hands on sessions are an inherent part of the curriculum. These sessions contribute to the skill development of the students. Apart from these, various skill development workshops/ courses are conducted for the students to make them technically competent.</p>
4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):	<p>The curriculum covers Indian art and culture themes. The different forms of Indian Art like dance, music, drawing, Yoga covering aspects of the Indian culture are included in the curriculum as Audit Courses. Traditional and cultural values and morals are inculcated in the students through courses on Universal Human Values.</p>
5. Focus on Outcome based education (OBE):	<p>The institute follows Outcome based education (OBE) for all the UG and PG programs. Every Program has defined "Program Specific Outcomes" in consistency with the generic outcomes of any engineering program indicating the graduate attributes (with reference to the NBA framework). The theory and laboratory courses have well-defined Course Objectives and Outcomes. The attainment of Outcomes is analyzed and areas of improvement are identified on regular basis.</p>
6. Distance education/online education:	<p>Apart from classroom and laboratory teaching, faculty members contribute to online resources by uploading teaching material, lecture videos and demonstrations for students' reference. Learning Management Systems like Moodle, Google Classroom are extensively used by the faculty for the same. YouTube channels and equivalent methods are used for sharing the videos.</p>

Institutional Initiatives for Electoral Literacy	
1. Whether Electoral Literacy Club (ELC) has been set up in the College?	Yes, an 'Electoral Literacy Club' has been set up in the college.
2. Whether students' co-ordinator and co-ordinating faculty members are appointed by the College and whether the ELCs are functional? Whether the ELCs are representative in character?	Yes, one co-ordinating faculty member (Nodal Officer – Asst. Prof. Anjushree Augustine) has been appointed by the college and the Electoral Literacy Club is functional.
3. What innovative programmes and initiatives undertaken by the ELCs? These may include voluntary contribution by the students in electoral processes-participation in voter registration of students and communities where they come from, assisting district election administration in conduct of poll, voter awareness campaigns, promotion of ethical voting, enhancing participation of the under privileged sections of society especially transgender, commercial sex workers, disabled persons, senior citizens, etc.	Following innovative programmes and initiatives are taken by ELC in the college:- 1. Every year new voter's enrolment forms are filled and submitted to the election office. 2. National voter's day 25th January is celebrated by taking voters day pledge. The Pledge is taken by all the teachers and students of the college. 3. In view to voter awareness Campaign College had organised a marathon on 3rd March 2018. The marathon was jointly organised by collector office – Pune and District election office. 4. Also, the voters day posters are displayed in college campus, college facebook page, Instagram page to create awareness for those who have still not enrolled in the voters list. 5. College NSS students extend their voluntary contribution during electoral activities in terms of facilitating new voter registration process held in the college.
4. Any socially relevant projects/initiatives taken by College in electoral related issues especially research projects, surveys, awareness drives, creating content, publications highlighting their contribution to advancing democratic values and participation in electoral processes, etc.	No.
5. Extent of students above 18 years who are yet to be enrolled as voters in the electoral roll and efforts by ELCs as well as efforts by the College to institutionalize mechanisms to register eligible students as voters.	The college Electoral Literacy club takes initiative and makes provision of voting campaign for students above 18 years who are yet to be enrolled as voters in the electoral roll. New voters are given the provision to fill the hard copy of forms and later the forms are submitted in the Area Election Office. Also the new voters are given guidance to fill the forms online.

QIF

1. Curricular Aspects

1.1 Curriculum Design and Development

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

Answer:

Cummins College of Engineering for Women, first all women engineering college in india was established in 1991 by parent institution, Maharshi Karve Stree Shikshan Samstha (MKSSS). MKSSS was established in 1896 with the objective of empowering women through education. Given a relatively lesser percentage of women engineers and consequently a very few women leaders in the technology sector in India, Cummins college of engineering for women contributes towards enhancing the percentage of women engineers in local, national and global level.

Looking in to present need of technology at **global level and national level**, courses related to **electric vehicle, Industry 4.0, Artificial intelligence, Data science, Machine learning** are included in the curriculum. While designing the curriculum, guidelines provided by global professional bodies such as such as ACM, IEEE, American society of mechanical Engineers (ASME), International society of Automation are considered. Multinational companies such as Microsoft, CISCO, Boeing, Mercedes, Honeywell, Emerson, Avaya recruit our students. Feedback/views of technical experts from these companies are taken into consideration while designing the curriculum.

Considering AICTE and UGC guidelines, the college has defined the curriculum of the undergraduate and post graduate level engineering programs. For designing the curriculum, the college has involved stakeholders, such as industry experts, employers, experts from academia and alumnae. These stakeholders are members of the governing body, academic council, IQAC and various boards of studies(BOS) of the college. Regular meetings of these committees are conducted to review and revise the curriculum.

Pune is hub of Automobiles, Automation and IT sectors. Companies such as Cummins India, Citi Bank, Tata Technologies, Forbes marshal, Barclays, Mercedes Benz and other service provider companies are located in and around Pune. Considering local relevance, these companies are involved in designing the curriculum.

Through its curricular structure, the institute ensures development of competent human resources, as per the requirements of engineering sector at the regional and the national level. Various courses having social relevance from the areas such as biomedical engineering, renewable energy, business analytics, environmental studies and value education form an integral part of the curriculum

Periodic revision of syllabus and introduction of new courses enables the institute to remain sync with global and national trends and cover subjects of contemporaneous relevance.

Institute has strong focus on outcome based education (OBE) in all programmes and all courses are having well defined course outcomes and programme outcomes. All PO's are related with global attributes and all stakehohers are involved .Every programme even defines their programme specific outcome with discussion with academic council well supported by faculty concerned and department committees.

File Description	Document
Any additional information	View Document

Link for Additional Information	View Document
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1.1.2 Percentage of Programmes where syllabus revision was carried out during the last five years.

Answer: 62.5

1.1.2.1 Number of all Programmes offered by the institution during the last five years.

Answer: 8

1.1.2.2 How many Programmes were revised out of total number of Programmes offered during the last five years

Answer: 5

File Description	Document
Minutes of relevant Academic Council/BOS meeting	View Document
Details of program syllabus revision in last 5 years(Data Template)	View Document
Any additional information	View Document

1.1.3 Average percentage of courses having focus on employability/ entrepreneurship/ skill development offered by the institution during the last five years

Answer: 85.87

1.1.3.1 Number of courses having focus on employability/ entrepreneurship/ skill development year-wise during the last five years..

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
277	304	282	217	103

File Description	Document
Programme / Curriculum/ Syllabus of the courses	View Document
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	View Document
Average percentage of courses having focus on employability/ entrepreneurship(Data Template)	View Document

1.2 Academic Flexibility

1.2.1 Percentage of new courses introduced of the total number of courses across all programs offered during the last five years.

Answer: 22.2

1.2.1.1 How many new courses are introduced within the last five years

Answer: 97

1.2.1.2 **Number of courses offered by the institution across all programmes during the last five years.**

Answer: 437

File Description	Document
Minutes of relevant Academic Council/BOS meetings	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document

1.2.2 Percentage of Programmes in which Choice Based Credit System (CBCS) / elective course system has been implemented (Data for the latest completed academic year).

Answer: 100

1.2.2.1 **Number of Programmes in which CBCS / Elective course system implemented.**

Answer: 8

File Description	Document
Minutes of relevant Academic Council/BOS meetings	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document

1.3 Curriculum Enrichment

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

Answer:

In order to make students aware about cross-cutting issues such as professional ethics, gender, human values, environmental sustainability, relevant courses are included in the curriculum.

Through courses, Universal Human Values-I(UHV-I) and Universal Human Values-II (UHV-II) importance of human values is emphasized.

Audit courses on professional ethics and etiquettes, leadership and personality development and credit course Intellectual property rights discuss ethical practices and their importance in engineering profession. Curriculum relevant educational activities are carried out adhering to

professional ethics.

Cummins college is an all women engineering college. In order to appreciate gender diversity and equality, college provides bandwidth for the students to participate in

competitions. College has formed professional society chapters of society for women engineers and Association of Computing Machinery-W. These chapters provide opportunities of networking with women in engineering profession and conduct workshops, lectures relevant to state of the art technologies in the curriculum.

Environmental and Sustainability issues are very much relevant to the engineering curriculum. It is important for the students to know cross cutting issues and possible contribution areas as an engineer, courses on Environment, Sustainability, Green computing, Renewable energy are introduced in the curriculum.

Issues like Waste management, Pollution, Smart city, Green materials are covered in this course.

The college also promotes the various NSS activities related to sustainability such as plantation, water conservation, waste management.

File Description	Document
Upload the list and description of the courses which address the Gender, Environment and Sustainability, Human Values and Professional Ethics into the Curriculum	View Document

1.3.2 Number of value-added courses for imparting transferable and life skills offered during last five years.

Answer: 11

1.3.2.1 How many new value-added courses are added within the last five years

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
2	3	2	2	2

File Description	Document
List of value added courses (Data Template)	View Document
Brochure or any other document relating to value added courses	View Document

1.3.3 Average Percentage of students enrolled in the courses under 1.3.2 above.

Answer: 28.55

1.3.3.1 Number of students enrolled in subject related Certificate or Add-on programs year wise during last five years

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
791	782	634	787	768

File Description	Document
List of students enrolled	View Document
Any additional information	View Document

1.3.4 Percentage of students undertaking field projects/ internships / student projects (Data for the latest completed academic year)

Answer: 51.35

1.3.4.1 Number of students undertaking field projects / internships / student projects

Answer: 1369

File Description	Document
List of programs and number of students undertaking field projects / internships / student projects (Data Template)	View Document

1.4 Feedback System

1.4.1 Structured feedback for design and review of syllabus – semester-wise / year-wise is received from

- 1) Students, 2) Teachers, 3) Employers,
4) Alumni

Answer: A. All 4 of the above

File Description	Document
Any additional information	View Document
Action taken report of the Institution on feedback report as minuted by the Governing Council, Syndicate, Board of Management	View Document
URL for stakeholder feedback report	View Document

1.4.2 The feedback system of the Institution comprises of the following :

Answer: A. Feedback collected, analysed and action taken and report made available on website

File Description	Document
URL for stakeholder feedback report	View Document

2. Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Average Enrolment percentage (Average of last five years)

Answer: 98.94

2.1.1.1 Number of students admitted year-wise during last five years

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
585	635	631	579	568

2.1.1.2 Number of sanctioned seats year wise during last five years

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
606	606	606	606	606

File Description	Document
Institutional data in prescribed format (Data Template)	View Document
Any additional information	View Document

2.1.2 Average percentage of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy) during the last five years (exclusive of supernumerary seats)

Answer: 70.2

2.1.2.1 Number of actual students admitted from the reserved categories year wise during last five years

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
160	156	189	175	154

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

2.2 Catering to Student Diversity

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

Answer:

The institute motivates every student to explore and reach her potential and does not discriminate between slow and advanced learners on the basis of academic performance. There are multiple avenues made available to the students to explore their potential in academic, co-curricular, extra-curricular, and related activities.

Methodology to support slow learners:

- Slow learners are identified by faculty through interactions in class /labs and tutorial sessions.
- Individual guidance is given by the mentors and course instructors. Virtual meetings were conducted by mentors to address the student's academic and other related issues during Covid 19 pandemic.
- For extra practice, students can work in the labs besides the regular schedule.
- Online resources such as links to lecture recordings, process animations, video clips etc. were made available to the students. It helped students better understand the concepts.
- For the students having weak communication skills: Institute has a "Garnishing talent program" in collaboration with the Confederation of Indian Industry (CII), EATON.

Methodology to encourage advanced learners:

Advanced learners can learn beyond the curriculum through curricular and extracurricular activities. Their abilities are motivated and their learning is not restricted to curriculum structure. Following are some of the examples of processes that are followed.

- Class/Lab Interactions: Assignments with challenging problem statements are given to advanced learners.
- Technical Competitions: Students are motivated to participate in various technical competitions such as Robocon, SAE BAJA, SAE Aero Modeling etc. In light of the pandemic situation, SAE BAJA and SAE Aero modeling competitions were held virtually. Students participated in these competitions and performed exceedingly well.
- Students' achievements are published in the department newsletter and college magazine.
- Innovation Cell- Institute has formulated an innovation cell. Students with innovative ideas are encouraged to implement and assistance is given to file the patent.
- Students are encouraged to participate in national /international conferences to publish their research. The Institute supports them financially in terms of registration fees for conferences.
- Student Chapter of Professional Bodies: Students are encouraged to enroll in activities conducted by professional societies like IEEE, ISA, ASME, SAE, ACM-W, IET, and CSI. As an encouragement, the institute also pays half of the membership fee for student chapters of professional bodies.
- Project Competitions: Final-year students are encouraged to participate in various project competitions, hackathons
- Institute felicitates department topper(s), division topper(s), course topper(s), sports achievers, and best outgoing student of the department(s).
- M.S Program: The institute has had a tie-up with Purdue University since 2004. Under this, the students are fully sponsored for pursuing an M.S. program at Purdue which is one of the top Universities in the US. A total of 42 students secured since inception and nine students got admitted

to this program in 2017.

- Institute has a provision of Honors and Minor programs for advanced learners in the curriculum structure.

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

Answer: 17.2

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

Answer:

The faculty members of the institute adopt different techniques to make the teaching learning experience effective. With the changing times and technology at hands, all the faculty members contribute to enhance the learning experience for students by engaging innovative practices listed below.

1. Participative Learning:

- **Flipped Classroom** - Resource material is shared with the students prior to the classroom session. Consequently, students can actively participate in classroom discussions.
- **Quiz-** The students can self-assess what they know and what they need to know. It encourages and motivates students to study. Quizzes by using google forms/ moodle platforms are used effectively as evaluation tools during the pandemic period.
- **Case study-based learning** -Under this activity, students work in small groups. The cases under study are explored. Through this activity, the students are able to correlate the use of technology with the real-life applications.

2. Experiential learning-

- **Internships and Projects**
 - Internship facilitates students to explore the industry requirements, gain experience, and learn new skills which add value to them.
 - Project activity provides students with enormous opportunities to learn and develop many technical as well as non-technical skills.
 - As part of the project work, students are encouraged to use cutting-edge tools and technologies.
- **Laboratory experiments/sessions**
 - Laboratory sessions give opportunities to learn through experiments. In laboratory sessions, students explore and learn theoretical concepts.
 - To improve the self-learning ability among the students, open-ended assignments are defined by the faculties. In an open-ended lab assignment/practical aim is given but materials, methods, solutions not given
- **Workshops for Students:**
 - Institute organizes workshops for students to gain hands-on experience and learn the latest technologies.
- **Technical competitions participation:**
 - The students are encouraged to participate in various technical competitions. These competitions help students to explore and practice new techniques and technologies.

3. Problem-based learning

- **Mini-projects and Final Year Project:** Students identify real-life problem statements which can be solved by applying engineering knowledge.
- **Tutorials:** Students' learning is reinforced by tutorial sessions by solving conceptual problems.

File Description	Document
Link for Additional Information	View Document

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

Answer:

Teaching-learning evaluation is a prime component for all educational institutes. Institute promotes the use of different ICT tools. Faculty members explore the applicability of specific tools to respective theory and laboratory courses. To get advent of new technology in this pandemic situation made us work in a new normal condition as to use ICT tools not only for teaching learning but also for evaluation as well.

The following ICT-enabled tools/techniques are used for effective teaching, learning, and evaluation process

- a) Google Classroom: The institute availed G Suite Enterprise for Education edition, which allowed recordings of online sessions taken by faculty to all the students. Google classroom is also used by some faculty to share teaching materials.
- b) Moodle: Institute conducted training for the faculty on Learning Management Systems using Moodle. This training enhanced the e-teaching-learning experience of faculty and students during the period of a pandemic. This help to share teaching material as well as attempt Quiz, games, assignments, and mark attendance. Thereby making the learning process more interesting.
- c) Youtube channel: Faculty record their videos using screen-cast tools. The recorded videos are shared with students.
- d) Institute has a provision in the curriculum for students to enroll in MOOC courses conducted by NPTEL/ SWAYAM/ COURSERA. The students earn the credit through the completion of these courses. The 32 and 1559 students enrolled for NPTEL and COURSERA courses respectively. The enrolment by faculty for NPTEL and COURSERA courses is 25 and 109 respectively. The 212 and 2238 students enrolled for NPTEL and COURSERA courses respectively in the last 5 years. The enrolment by faculty for NPTEL and COURSERA courses is 219 and 115 respectively.

Academic years	No. of students enrolled for the NPTEL Course	No. of Faculty enrolled for NPTEL Course	No. of students enrolled for COURSERA Course	No. of Faculty enrolled for COURSERA Course
2017-18	37	33	-	-
2018-19	78	68	-	-
2019-20	69	89	-	-
2020-21	32	25	1559	109
2021-22	1	4	679	6

Total	212	219	2238	115
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e) Virtual Lab: Institute provides a facility for remote access to simulation-based Labs. It helps students in learning basic and advanced concepts through remote experimentation during the pandemic era.

f) Institute provides digital content to the students through the digital library. It is available through remote login of Web-OPAC. It contains access to electronic resources such as e-Journals, and e-books.

g) Use of Software tool for Concept Building: Institute has made the following software available to the students for a better understanding of concepts. The different software available and used in each program are mentioned below

- Electronic and Telecommunication Engineering: MATLAB, Xilinx, QuestaSim, WinSPICE, Microwind, UVision Keil, Flash Magic, ISP PGM, MPLAB, virtual box, Proteus8, Multisim 13.0, TNM 2.2, TURBO C++ 3.0, Qualnet 6.0
- Computer Engineering and Information Technology: NASM, Android, Java Eclipse, Python, Lex, YACC, Hadoop, Packet Tracer, Prolog, MySQL, MongoDB, Weka, OpenCV
- Instrumentation and Control Engineering: Delta-V, SCADA, PLC software
- Mechanical Engineering: AutoCAD, Solid works, Automation Studio, ANSYS, Feature Cam

h) Video clips and Animation: Some courses include complex concepts that are difficult to understand without visualization. Such visualization can be achieved by using multimedia tools like animation and video clips. During the theory class, video animation of channel flow measurement, coal feeder through bucket conveyor, and steam generation in the boiler are shown. This helps in the quick grasping of concepts.

File Description	Document
Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process	View Document
Link for Additional Information	View Document

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

Answer: 20.67

2.3.3.1 Number of mentors

मार्गदर्शकानां सङ्ख्या

Answer: 129

File Description	Document
Upload year wise, number of students enrolled and full	

time teachers on roll	View Document
Circulars pertaining to assigning mentors to mentees	View Document
Any additional information	View Document

2.3.4 Preparation and adherence of Academic Calendar and Teaching plans by the institution

Answer:

At the start of the academic year, the institute prepares the semester-wise academic calendar for all undergraduate and postgraduate programs. It is approved by the Principal and released by the dean of academics. The academic calendar is displayed on the notice board as well as on our college website before the commencement of classes.

The academic calendar majorly consists, of dates of start/end of the semester, in-semester and end semester examinations, summer term, holidays, etc. The academic calendar comprises of detailed schedule in terms of week slots for the conduction and result declaration of in-semester examinations and end-semester examinations. Also provides information about the availability of students' answer sheets for semester Examinations. Timelines for other activities like industrial visits, mentor meetings, completion of term work and assessment work, feedback, and curricular and co-curricular activities are taken into consideration at the department level. In line with the academic calendar of the institute, every program schedules its faculty development programs, student workshops, and co-curricular and extracurricular activities in the department's academic calendar.

Every faculty member follows the academic calendar and planned accordingly their Teaching and Learning schedule. The teaching plan is prepared by every faculty of this institute and it is declared/share with the student every semester. The teaching plan comprises the information about lecture plan, teaching-learning methods, and mode of conduction of in-semester examinations such as assignments, quizzes, presentations, etc.

File Description	Document
Upload Academic Calendar and Teaching plans for five years	View Document

2.4 Teacher Profile and Quality

2.4.1 Average percentage of full time teachers against sanctioned posts during the last five years

Answer: 96

File Description	Document
Year wise full time teachers and sanctioned posts for 5 years(Data Template)	View Document
List of the faculty members authenticated by the Head of HEI	View Document

2.4.2 Average percentage of full time teachers with Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. during the last five years (consider only highest degree for count)

Answer: 32.47

2.4.2.1 Number of full time teachers with *Ph.D./D.M/M.Ch./D.N.B Superspeciality/D.Sc./D’Lit.* year wise during the last five years

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
58	55	53	48	33

File Description	Document
Institutional data in prescribed format (Data Template)	View Document

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

Answer: 13.21

2.4.3.1 Total experience of full-time teachers

Answer: 2047.5

File Description	Document
Institutional data in prescribed format	View Document

2.5 Evaluation Process and Reforms

2.5.1 Average number of days from the date of last semester-end/ year- end examination till the declaration of results year-wise during the last five years

Answer: 27.4

2.5.1.1 Number of days from the date of last semester-end/ year- end examination till the declaration of results year wise during the last five years

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
22	35	39	29	12

File Description	Document
Institutional data in prescribed format (Data Template)	View Document
Any additional information	View Document

2.5.2 Average percentage of student complaints/grievances about evaluation against total number

appeared in the examinations during the last five years

Answer: 9.51

2.5.2.1 Number of complaints/grievances about evaluation year wise during the last five years

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
253	304	131	226	121

File Description	Document
Number of complaints and total number of students appeared year wise	View Document
Any additional information	View Document

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

Answer:

1. Examination Procedure:

The academic Performance of the students is assessed by **the In-semester Examination (ISE) of 50 marks and the End-semester Examination (ESE) of 50 marks**

- Principal appoints course chairman and paper setter for every course.
- In Semester examination consists of two components viz. T1 of 25 marks and T2 of 25 marks. The conduction mode for T1 is declared in advance.
- For question paper setting AICTE Exam Reform Policy is referred.
- All the assessments are mapped to the course outcomes and Bloom Taxonomy levels. The inclusion of higher cognitive levels is ensured by the course chairman.
- The course chairman has to submit multiple sets of ISE and ESE question papers to the examination cell.
- The faculty members evaluate the answer sheets of both ISE- T2 and ESE via a digital evaluation system (Ion Dvs module).
- The evaluated ISE answer sheets are discussed with the students to ensure transparency.
- The assessment of laboratory courses with continuous evaluation is in the form of practical assignments performed by students throughout the semester.
- For the laboratory courses with only ESE, the assessment is based on practical and oral examinations based on practicals performed by the student throughout the semester.
- To earn the course credits students should score a minimum 40% of marks for ESE and 40% of total marks.
- Results are made available to the students on the Ion student App
- Absolute grading is done and grades are awarded as per UGC guidelines.
- Process followed during a pandemic
 - online proctored examinations are conducted using the Ion Exam module. For every course, a question bank was submitted to the exam section, and question paper sets were auto-

generated and assigned randomly to students.

- A group of 20 students was assigned to an invigilator. Images of the students were captured every few seconds and flashed on the invigilator's screen. Students upload the scanned copy of the answer sheet in the prescribed format using the Ion student app.

2. Processes integrating IT:

- College has adopted the EMS module- Ion EMS (<http://www.ioncudos.com/>) examination Management System, Ion DVS for digital evaluation.
- Every student has been provided an account on the EMS module. The module can be accessed via the Ion app on mobile by the students.
- Evaluation of ESE answer sheets is carried out via a digital evaluation system (Ion Dvs module).
- Results are made available to the students on the Ion student App.
- Special IT integration features incorporated during a pandemic
 - Online proctored examinations were conducted using the Ion Exam module.
 - Question banks were submitted to the exam section, and question paper sets were auto-generated and assigned randomly to the students.

3. Continuous Internal Assessment System:

- In Semester examination consists of two components viz. T1 of 25 marks and T2 of 25 marks.
- T1 is conducted using various assessment modes such as assignments, viva-voce, puzzles, crosswords, seminars, model building, etc. T2 is conducted using paper pencil mode.
- The evaluated ISE answer sheets are discussed with the students to ensure transparency.
- The assessment of laboratory courses with In-Semester evaluation is in the form of practical assignments performed by students throughout the semester.

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.

Answer:

The institute has adopted Outcome Based Education and hence the curricula of all the programs are designed to attain Program Outcomes. The Program Outcomes are the qualities that must be imbibed in the graduates by the time of completion of their program. Each program also has Program Specific Outcomes, which cater to the program-specific competencies. PSOs are formulated by the faculty members' team and approved by the respective BoS.

Program Outcomes and Program Specific Outcomes are displayed on the institute website, at key locations in the institute, and in the departments.

Course outcomes are defined for each course in the curriculum by taking into account Program Outcomes and feedback from various stakeholders such as industry, alumni, and guidelines from professional bodies such as AICTE, IEEE, ASME, SAE, etc. Course Outcomes are formulated using appropriate action verbs defined by revised Bloom's taxonomy. They are discussed with the students in the lecture, tutorial, and laboratory sessions by course instructors and course chairmen. Course instructors and mentors create awareness about the course outcomes amongst the students. The importance of attaining course outcomes is emphasized during interactions with the students.

Course outcomes for all the courses for all the programs are displayed on the college website.

File Description	Document
Upload COs for all courses (exemplars from Glossary)	View Document

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

Answer:

CO Attainment:

A departmental committee consisting of HOD, senior faculty members, experts from academia and industry is constituted which reviews CO-PO and CO-PSO mapping.

Attainment	Tools Used	Weightage
Direct CO attainment	<ul style="list-style-type: none"> • Cumulative Internal Examination (CIE) • Semester End Examinations (SEE) • Continuous Assessment (CA) • Practical and Oral Examinations 	95%
Indirect CO attainment	End Course Survey- For every theory and laboratory course, an end course survey is conducted to check students' perception about their understanding of course outcomes on the scale of 1 to 3.	5%

Direct CO attainment:

Direct CO attainment for all courses is calculated for SEE and CIE using the 5 steps as shown in figure below.

Find	Find Co mapping of each question in each assessment tool
Group	Group the questions as per CO mapping
Apply	Apply the students performance threshold value
Compute	Compute percentage number of students above threshold for each CO
Compare	Compare the CO attainment with set attainment levels

Based on the percentage number of students scoring marks above benchmark, CO attainment levels are calculated for all the courses for SEE and CIE. using the levels defined in following Table

Direct CO attainment levels

Attainment Level	Criterion
1	< 40% students score marks above benchmark
2	40% - 60% students scoring marks above benchmark

3	More than or equal to 60% students scoring marks above benchmark
---	--

Marks distribution for CIE and SEE is as given in the table below.

Course	CIE	SEE
Theory	50%	50%
Practical/Oral	0%	100%
Term Work	100%	0%

Calculation PO and PSO attainment

Attainment	Tools	Weightage
Direct Attainment	CO attainment	80%
Indirect Attainment	Exit Survey	20%
	Employers' survey	
	Alumnae survey	
	Co-curricular activities	
	Extra- curricular activities	

Steps to compute direct attainment of POs and PSOs direct attainment:

- The COs of every course is mapped to the POs and PSOs to levels 1 or 2 or 3.
- After calculating the attainment levels for the course outcomes of a particular course, the direct attainment level of the POs and PSOs is calculated by using the following equations.
- Direct PO attainment value = Sum of [(CO-PO correlation level)/3 * (CO attainment)] for all courses / Number of CO-PO correlated courses
- Direct PSO attainment value = Sum of [(CO-PSO correlation level)/3 * (CO attainment)] for all courses / Number of CO-PSO correlated courses

File Description	Document
Any additional information	View Document

2.6.3 Pass Percentage of students(Data for the latest completed academic year)

Answer: 98.2

2.6.3.1 Total number of final year students who passed the examination conducted by Institution.

Answer: 653

2.6.3.2 Total number of final year students who appeared for the examination conducted by the Institution.

Answer: 665

File Description	Document
Upload List of Programmes and number of students passed and appeared in the final year examination(Data Template)	View Document
Link for the annual report	View Document

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Answer: 3.64

File Description	Document
Upload database of all currently enrolled students	View Document

3. Research, Innovations and Extension

3.1 Promotion of Research and Facilities

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

Answer:

Research Facilities:

College laboratories are equipped with high end hardware/software facilities such as ansys , LabView ,Power Lab , MATLAB with all tool boxes , high end computing facilities , 3D printers etc. As per requirement budgetary provisions are made to upgrade research software computing facilities etc.

Library subscribes most of the reputed journal access is provided to all students and faculties. Library has rich collection of domain specific reference books which is regularly updated . Internet access is provided to students and faculties to access online research articles.

Policy for Promotion of Research:

The Institute has well defined research promotion policies are as follows:

- **Incentives for SCI/SCOPUS Indexed Journal Publications**

Institute pays incentives for '**Journal paper publications**'. The incentives are based on the quality of the journal.

- If the paper is published in SCI / SCIE Indexed journal, faculty get Rs. 10,000 as incentive
- For SCOPUS / ESCI indexed journal publication, they get Rs. 5,000 incentives.

- **Incentives for Funded research projects**

After successfully completing research funding by govt / non-govt funding agencies.

1. In case of 'Major projects' (Amount > 3 Lakhs), the Principal Investigator (PI) and CO-PI get Rs. 25,000 as incentive.
2. In case of 'Minor project' (Amount <= 3 Lakhs), the Principal Investigator (PI) and CO-PI get 5% of fund amount as incentive.

- **Research Initiation Fund**

Under the 'Research Initiation Fund', a grant up to Rs. 2 Lakhs shall be awarded to applicant faculty which has to be utilized in 2-years. Based on the requirement and progress, an additional amount up to Rs. 1 Lakh may also be considered.

- **Reimbursement of Conference Registration Charges (for Faculty)**

1. The institute reimburses 100% registration charges for the 'SCOPUS indexed conference publication'. There is no restriction on how many times this facility can be availed by the faculty.
2. If the conference proceedings are not included in a standard database such as Scopus or Web of Science, then faculty will get 50% reimbursement of registration charges. Such reimbursement is **applicable for maximum 3-papers** of the faculty members.

In case of international conference (SCOPUS indexed), institute reimburses upto max Rs. 50,000 inclusive of registration and travel charges OR 50% of the total expenses, whichever is less.

- **Patent / Copyright Filing**

Institute encourages faculty and students for filing patents and other forms of IP.

If the patent application is filed as per the IPR policy of the institute, all the charges of filing and maintaining IP are borne by the institute.

- **Higher Education**

Faculty are also encouraged for higher education such as M.Tech or PhD. Institute offers full paid Study leave to permanent faculty for a maximum of 2-years.

- **Reimbursement policies for students**

Institute encourages students to present papers in good quality conferences. Institute reimburses 50% of the registration charges for the conference papers of students

File Description	Document
Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption	View Document
Any additional information	View Document
URL of Policy document on promotion of research uploaded on website	View Document

3.1.2 The institution provides seed money to its teachers for research (average per year, INR in Lakhs)

Answer: 0

3.1.2.1 The amount of seed money provided by institution to its faculty year-wise during the last five years (INR in lakhs).

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
0	0	0	0	0

File Description	Document
Minutes of the relevant bodies of the Institution	View Document
List of teachers receiving grant and details of grant received	View Document
Budget and expenditure statements signed by the Finance Officer indicating seed money provided and utilized	View Document
Any additional information	View Document

3.1.3 Percentage of teachers awarded national / international fellowship for advanced studies/research during the last five years

Answer: 0

3.1.3.1 The number of teachers awarded national / international fellowship for advanced studies / research year wise during last five years

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
0	0	0	0	0

File Description	Document
List of teachers and their international fellowship details	View Document
e-copies of the award letters of the teachers	View Document
Any additional information	View Document

3.2 Resource Mobilization for Research

3.2.1 Grants received from Government and non-governmental agencies for research projects, endowments, Chairs in the institution during the last five years (INR in Lakhs)

Answer: 157.77

3.2.1.1 Total Grants from Government and non-governmental agencies for research projects , endowments, Chairs in the institution during the last five years (INR in Lakhs)

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
33	42.23	29.72	36.7	16.12

File Description	Document
List of project and grant details	View Document
e-copies of the grant award letters for research projects sponsored by government and non-government	View Document
Any additional information	View Document

3.2.2 Percentage of teachers having research projects during the last five years

Answer: 3.41

3.2.2.1 Number of teachers having research projects during the last five years

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
3	3	10	5	5

File Description	Document
Names of teachers having research projects	View Document
Any additional information	View Document
Link for additional information	View Document

3.2.3 Percentage of teachers recognised as research guides

Answer: 14.19

3.2.3.1 Number of teachers recognized as research guides

Answer: 22

File Description	Document
Upload copies of the letter of the university recognizing faculty as research guides	View Document
Any additional information	View Document
Link for additional information	View Document

3.2.4 Average percentage of departments having Research projects funded by government and non-

government agencies during the last five years**Answer:** 60**3.2.4.1 Number of departments having Research projects funded by government and non-government agencies during the last five years**

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
4	2	4	2	3

3.2.4.2 Number of departments offering academic programmes

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
5	5	5	5	5

File Description	Document
Supporting document from Funding Agency	View Document
List of research projects and funding details	View Document
Any additional information	View Document
Paste link to funding agency website	View Document

3.3 Innovation Ecosystem

3.3.1 Institution has created an eco system for innovations, creation and transfer of knowledge supported by dedicated centers for research, entrepreneurship, community orientation, Incubation etc.

Answer:

Ecosystem for Innovations:

Various pedagogical innovative methods and innovative practices such as quizzes, games, flipped classroom, research paper discussion, video clips, animations etc. are implemented to improve the quality of teaching learning process. Faculty members give Innovative assignments to encourage innovation and creativity of students. As a part of the curriculum, students undergo through courses like intellectual Property Rights, Entrepreneurship Development etc ,

During their study, students work on challenging projects and provide innovative solutions. Every year College Conducts project competition for innovative project ideas. Shortlisted projects get 'Kedar Tumane innovative project award'. Students are encouraged to participate in hackathons, project competitions. Our students have won prizes in National level competitions such as Natarajan society innovative project competition, Smart India hackathon etc. Students are also encouraged to patent innovative ideas. In last five years 48 patents have filed by students and faculty.

Every year students appear for the National creativity aptitude examination. Students have received top ranks in this exam. The institute has formulated 'Startup & Innovation Cell' to promote start up and innovation activities. On the basis of various activities conducted college has been ranked in **PERFORMER** band for the year 2021 in Atal Ranking of Institutions on Innovation achievements (ARIIA).

Towards creation and transfer of knowledge institute takes various initiatives:

Faculty members create course material in the form videos, notes which are shared with the students. Professional society chapters of the college organize expert lectures, workshops for the students. Students clubs also arrange such activities. These activities play important role in knowledge transfer. Students and faculty work with industry/ organizations on research problems. The ideas/ solutions provided are shared with organizations.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

3.3.2 Number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR), entrepreneurship, skill development during the last five years.

Answer: 52

3.3.2.1 Total number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR), entrepreneurship, skill development year-wise during the last five years.

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
17	17	5	6	7

File Description	Document
Report of the event	View Document
List of workshops/seminars during last 5 years	View Document
Any additional information	View Document

3.4 Research Publications and Awards

3.4.1 The Institution ensures implementation of its stated Code of Ethics for research through the following:

- 1. Inclusion of research ethics in the research methodology course work**
- 2. Presence of Ethics committee**

3. Plagiarism check through software

4. Research Advisory Committee

Answer: A. All of the above

File Description	Document
Any additional information	View Document
Link for additional information	View Document

3.4.2 Number of Ph.D's registered per teacher (as per the data given w.r.t recognized Ph.D guides/ supervisors provided at 3.2.3 metric) during the last five years

Answer: 1.88

3.4.2.1 How many Ph.Ds are registered within last 5 years

Answer: 32

3.4.2.2 Number of teachers recognized as guides during the last five years

Answer: 17

File Description	Document
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc	View Document
URL to the research page on HEI web site	View Document

3.4.3 Number of research papers per teachers in the Journals notified on UGC website during the last five years

Answer: 1.44

3.4.3.1 Number of research papers in the Journals notified on UGC website during the last five years

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
46	66	37	32	39

File Description	Document
List of research papers by title, author, department, name and year of publication	View Document
Any additional information	View Document

3.4.4 Number of books and chapters in edited volumes / books published per teacher during the last five years

Answer: 1.37

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

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
50	54	29	37	39

File Description	Document
List books and chapters in edited volumes / books published	View Document
Any additional information	View Document

3.4.5 Bibliometrics of the publications during the last five years based on average citation index in Scopus/ Web of Science or PubMed

Answer: 3.04

File Description	Document
Bibliometrics of the publications during the last five years	View Document

3.4.6 Bibliometrics of the publications during the last five years based on Scopus/ Web of Science - h-index of the Institution

Answer: 13.5

File Description	Document
Bibliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	View Document

3.5 Consultancy

3.5.1 Revenue generated from consultancy and corporate training during the last five years (INR in Lakhs).

Answer: 1.94

3.5.1.1 Total amount generated from consultancy and corporate training year-wise during the last five years (INR in lakhs).

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
1.74292	0	0.2	0	0

File Description	Document
List of consultants and revenue generated by them	View Document
Audited statements of accounts indicating the revenue generated through consultancy and corporate training	View Document
Any additional information	View Document

3.5.2 Total amount spent on developing facilities, training teachers and staff for undertaking consultancy during the last five years (INR in Lakhs).

Answer: 0

3.5.2.1 Total amount spent on developing facilities, training teachers and staff for undertaking consultancy during the last five years (INR in Lakhs)

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
0	0	0	0	0

File Description	Document
List of training programmes, teachers and staff trained for undertaking consultancy	View Document
List of facilities and staff available for undertaking consultancy	View Document
Audited statements of accounts indicating the expenditure incurred on developing facilities and training teachers and staff for undertaking consultancy	View Document
Any additional information	View Document

3.6 Extension Activities

3.6.1 Extension activities are carried out in the neighbourhood community, sensitising students to social issues, for their holistic development, and impact thereof during the last five years

Answer:

Students are encouraged to take up extension activities for their holistic development.

Sensitizing Students to Social Issues

Curriculum- Courses are offered on Value Education and Universal Human Values. These courses sensitize students on their responsibility as a member of society. Students understand environmental issues through the course on Sustainable Engineering. Guest lectures are organized by inviting external experts to sensitize on social issues like traffic regulations, voters' responsibility etc.

Participation in Extension Activities

Students participate in the extension activities through NSS, NCC, professional society chapters and student Clubs. The institute has an active NSS wing which takes up activities like keeping campus green by conducting Tree Plantation Drive, doing Community Service by arranging/conducting Awareness Drives on Road Safety, River Cleaning, organizing various camps like Thyroid and Blood Glucose Check-up, Eye Check-up, Blood Donation and Haemoglobin Check-up etc. Every year students and the faculty members participate in various extension activities.

Seven Days Residential Special Camp is organised for the NSS students. Activities like Village Cleaning, Teaching School Students in the Village, conducting various Awareness Programs for the villagers are carried out during the seven days residential camp.

Oxygen Audit at the Covid Centres/Hospitals was carried out by the Gov. of Maharashtra during the Covid-19 Pandemic and 4 faculty members from the Institute were part of the Team of Auditors. This audit has helped big dedicated Covid-19 Hospitals save over 30 tonnes of Oxygen/day. NCC cadets from our institute were deployed at the COVID vaccination centre, faculty members from the institute served as a volunteer at the Covid centres during the pandemic.

College has students' branch/chapters of professional society IEEE & SWE. IEEE and SWE members of CCEW are actively participating in the various outreach programs. SWE branch of our institute has received 'Outstanding Outreach Event' award for carrying out high quality outreach event to inspire future engineers. IEEE student member has received 'Outstanding Student Volunteer' award for her new initiatives, contributions and commitment for development of engineers and students.

Debate club organises discussions on social issues and creates awareness about the same.

With all these activities, students feel a sense of social responsibility with a belief that they need to give back to the society to make the surrounding a better place to live in. This taught students various aspects of life other than the technical and academic achievements and helped in holistic development of the individual. The students studying in the institute come from varied economical background. It is observed that due the holistic development, awareness about the social responsibility has been enhanced in the students during the educational tenure.

File Description	Document
Upload Any additional information	View Document
Paste link for additional information	View Document

3.6.2 Number of awards and recognition received by the Institution, its teachers and students for extension activities from Government / Government recognised bodies during last five years

Answer: 9

3.6.2.1 Total number of awards and recognition received for extension activities from Government/ Government recognised bodies year-wise during the last five years.

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
2	6	1	0	0

File Description	Document
Number of awards for extension activities in last 5 year	View Document
e-copy of the award letters	View Document
Any additional information	View Document

3.6.3 Number of extension and outreach programs conducted by the institution through NSS/NCC, Government and Government recognised bodies during the last five years

Answer: 58

3.6.3.1 Number of extension and outreach programs conducted by the institution through NSS/NCC, Government and Government recognised bodies during the last five years

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
16	13	9	9	11

File Description	Document
Reports of the event organized	View Document
Number of extension and outreach Programmes conducted with industry, community etc for the last five years	View Document
Any additional information	View Document

3.6.4 Average percentage of students participating in extension activities listed at 3.6.3 above during the last five years

Answer: 27.2

3.6.4.1 Total number of students participating in extension activities listed at 3.6.3 above year-wise during the last five years.

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
845	542	699	560	932

File Description	Document
Reports of the event	View Document

Average percentage of students participating in extension activities with Govt or NGO etc	View Document
Any additional information	View Document

3.7 Collaboration

3.7.1 Number of Collaborative activities per year for research/ faculty exchange/ student exchange/ internship/ on –the-job training/ project work

Answer: 358.4

3.7.1.1 Total number of Collaborative activities per year for research/ faculty exchange/ student exchange/ internship/ on –the-job training/ project work

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
433	460	196	537	166

File Description	Document
Number of Collaborative activities for research, faculty etc	View Document
Copies of collaboration	View Document
Any additional information	View Document

3.7.2 Number of functional MoUs with institutions of national, international importance, other institutions, industries, corporate houses etc. during the last five years (only functional MoUs with ongoing activities to be considered)

Answer: 25

3.7.2.1 Number of functional MoUs with institutions of national, international importance, other Institutions, industries, corporate houses etc. year wise during last five years

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
5	3	3	7	7

File Description	Document
e-copies of the MoUs with institution/ industry/ corporate house	View Document
Details of functional MoUs with institutions of national, international importance, other Institutions etc during the last five years	View Document
Any additional information	View Document

4. 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.

Answer:

The college campus area is 4 Acres with built-up area 26845 sq. meter.

The institution has a well maintained, user friendly and resilient infrastructure conducive to teaching, learning and comprehensive development of students.

Classrooms: There are 31 classrooms. The classrooms are equipped with adequate furniture, blackboard, projectors, fans, lights and power backup. 28 classrooms are provided with LCD projectors, LAN connectivity.

Tutorial rooms : There are 7 tutorial rooms used to conduct tutorials and group interactions.

Laboratories: The institute has 54 labs. Each department has adequate no. of labs. Laboratories are equipped with equipments / softwares, prescribed in the curriculum. High-end equipments / softwares are also available for project and research work. The state of the art software like Ansys, Creo, MATLAB, LABVIEW, POWERLAB etc are available. Equipments like Emerson Deleta V system, Spectrum analyzer, 3D printer, SpectroPhoto meter are available in the labs. Maintenance of equipments and upgradation of softwares are done regularly. The laboratories are kept open beyond the working hours.

Workshop : In workshop facilities such as welding apparatus, convetional & CNC lathe machines, drilling machine are available. Students use these facilities for regular practical, projects and national competitions like Baja, robocon.

Library : The institute library has an extensive collection of books & journals for satisfying the academic and research needs. Every year, HEI subscribes E-resources like e-journals, e-books. Remote access to e-resources are made available. The library has a reading hall with a seating capacity of 180.

Seminar halls: College has 4 seminar halls with audio-visual facility.

Computing Equipment: The institution has 1561 computers. Every department has separate computer labs for conducting programming & simulation experiments to enhance the skills of the students. Computers with Internet access are provided to individual faculty members.

Power Supply: To ensure uninterrupted power supply, the college has an electrical power backup system.

Computer center : Two computer centers with 100 machines are available for various activities such as accessing online learning resources, conducting competitions like hackathons.

File Description	Document
Upload Any additional information	View Document

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

Answer:

The college is committed to creating a balanced atmosphere of academic, cultural and sports activities for the overall personality development of its students. The College is proactive in providing facilities for students to participate in cultural activities, sports and games in various ways.

- **Facilities for Cultural Activities**

Cultural activities play a significant role in strengthening the interpersonal skills of students. The students are encouraged to organize and participate in various cultural events. An annual gathering (Gandhar), Fresher's day, Farewell party for final year students, Women's day, Talent hunt, Dance competition, etc. are some of the examples of cultural activities carried out. Students are sent to other colleges for intercollegiate competitions like dances, skits (Like Purushottam, Firodia etc.), mimics etc.

- The college has an open auditorium / quadrangle (444.4 sq. meters), stage (70.342 sq. meter) for rehearsals and conduction of cultural activities.
- The stage is well equipped with a sound system, music system, light system and various allied equipment. This stage is used for the annual social gathering of the college and the practice of intercollegiate cultural events.
- There is a store room (67.98 sq. meter) specifically used to store the equipment and material related to cultural activities.
- The institute has four seminar halls equipped with audio visual systems. During the cultural events the seminar halls are utilized to organize group activities.

Temporary pandals are built in the open spaces during the cultural activities. The students use these pandals to carry out fun-fair, games etc.

1. **Facilities for Sports activities**

The college is well equipped with various facilities in sports and games for indoor and outdoor. Various sports facilities are provided to the students within the campus. Numbers of tournaments & competitions are arranged by the college.

- The college has facilities for sports including a playground of 2.5 acres.
- The playground has many outdoor sports facilities like basketball, Box Cricket, Football, Handball, Kabaddi, Kho-Kho, Netball, volleyball.
- Apart from outdoor games, the college has made provision for indoor games such as Carrom, Chess, and Table Tennis for practice purposes.

Outdoor Sports Facilities

Sr. No.	Sports name	Area
1.	6 A side Football	90 x 55 m
2.	Ball badminton	24 x 12 m
3.	Basketball	29 x 15 m
4.	Handball	40 x 20 m
5.	Kabaddi	13 x 10 m
6.	Kho-Kho	36 x 18 m
7.	Netball	30.5 x 15.25 m
8.	Throw Ball	18.3 x 12.2 m

9.	Volleyball	18 x 9 m
----	------------	----------

- Gymnasium

The college has a gymnasium of total Area – 3500 sq feet. The gymnasium has facilities such as machine exercises, free weight exercises, Aerobics, Zumba. These facilities are available for students and staff at a concessional rate. There is also a separate hall for yoga and meditation.

File Description	Document
Geotagged pictures	View Document

4.1.3 Percentage of classrooms and seminar halls with ICT- enabled facilities such as smart class, LMS, etc. (Data for the latest completed academic year)

Answer: 91.43

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Answer: 32

File Description	Document
Institutional data in prescribed format	View Document

4.1.4 Average percentage of expenditure for infrastructure augmentation excluding salary during the last five years (INR in Lakhs)

Answer: 11.48

4.1.4.1 Expenditure for infrastructure augmentation, excluding salary year-wise during last five years (INR in lakhs)

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
180.88	155.65	130.56	119.52	304.40

File Description	Document
Upload Details of Expenditure , excluding salary during the last five years	View Document
Upload audited utilization statements	View Document

4.2 Library as a Learning Resource

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

Answer:

The library is centralized. The library is fully automated with the help of Integrated Library Management software SLIM 21 (System for Library Information & Management-Version 3.8.0.20922) since 2009. It supports Acquisition, Cataloging, Circulation and Serial control. The barcode based issue return of books is practiced. Students and Faculty can search books through web OPAC and self-library account at the campus as well as outside the campus. Link to Digital Library is provided in the Library OPAC. Students are orientated in the First Year to the access OPAC of the Library. E-mail alerts to students to return books on time and E-mail alerts to faculty for recommended new book's arrival are sent regularly. Every year, ten most active students are selected from issue report and awarded with increased book borrowing limit for one year.

- Name of the ILMS software : SLIM 21
- Nature of automation (fully or partially) : FULLY
- Version : 3.8.0
- Year of automation : 2009

LMS Version

Sr. No.	Year	Version
1.	2021-22	3.8.0
2.	2020-21	3.7.0
3.	2019-20	3.7.0
4.	2018-19	3.6.0
5.	2017-18	3.5.0

File Description	Document
Upload any additional information	View Document

4.2.2 Institution has access to the following:

1. e-journals

2. e-ShodhSindhu

3. Shodhganga Membership

4. e-books

5. Databases

6. Remote access to e-resources

Answer: A. Any 4 or more of the above

File Description	Document
Upload any additional information	View Document
Institutional data in prescribed format	View Document
Details of subscriptions like e-journals, e-books , e-ShodhSindhu, Shodhganga Membership etc	View Document

4.2.3 Average annual expenditure for purchase of books/ e-books and subscription to journals/e-journals during the last five years (INR in Lakhs)

Answer: 33.15

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

Answer:

2021-22 2020-21 2019-20 2018-19 2017-18
28.309013 22.8714071 31.7004727 35.4554546 47.4150308

File Description	Document
Details of annual expenditure for purchase of and subscription to journals/e-journals during the last five years	View Document
Audited statements of accounts	View Document

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

Answer: 4.18

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

Answer: 118

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

4.3 IT Infrastructure

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

Answer:

The college has Sophos 330 ING firewall for bandwidth management, web site security purposes. The

bandwidth management helps to provide sufficient bandwidth to access the Internet. With the help of firewall we are able to block unnecessary sites , as well as filtering sites that are not useful for academics. Hence all the students and staff can access the Internet for education purposes only.

The college has licenses of eScan antivirus(14.0 version) for windows based machines. Using eScan antivirus, we are able to block the viruses, phishing sites, malware attacks, etc. This helps our windows machine be safe from different types of network attacks. This eScan server is managed centrally for new updates. Hence the less bandwidth will be consumed while downloading patches from the original web site.

The Institution has an IT policy covering wi-fi, cyber security for updating its IT facilities. The scanned copy of IT Policy is attached herewith.

File Description	Document
Upload any additional information	View Document

4.3.2 Student - Computer ratio (Data for the latest completed academic year)

Answer: 2.43

4.3.3 Bandwidth of internet connection in the Institution.

Answer: ≥50 MBPS

File Description	Document
Upload any additional information	View Document
Details of available bandwidth of internet connection in the Institution	View Document

4.3.4 Institution has the following Facilities for e-content development

1. Media centre
2. Audio visual centre
3. Lecture Capturing System(LCS)
4. Mixing equipments and softwares for editing

Answer: E. None of the above

File Description	Document
Institutional data in prescribed format	View Document

4.4 Maintenance of Campus Infrastructure

4.4.1 Average percentage expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component during the last five years

Answer: 49.7

4.4.1.1 Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component year wise during the last five years (INR in lakhs)

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
821.10	1004.13	661.23	657.27	720.57

File Description	Document
Details about assigned budget and expenditure on physical facilities and academic facilities	View Document
Audited statements of accounts	View Document

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.

Answer:

There is a set policy & system in-place for the maintenance & utilization of classrooms, laboratories, computers, library, sports complex.

- Maintenance and utilization of classrooms
 - The maintenance of classrooms is taken care by a team at institutional level.
 - Students' interactions and learning activity are mainly conducted during the classroom sessions. Further the classrooms are also utilized for examinations, inter-collegiate events, cultural events for group activities.
- Maintenance and utilization of laboratories
 - Every lab in the college has a lab in-charge. The in-charge looks after the maintenance of the equipment in the lab. The hardware equipments undergo routine & a periodic checkup at the start of the semester and before the examinations. This periodic checkup includes calibration of lab equipments like CRO, pressure gauges, etc. The maintenance also includes cleaning of equipments like manometer. Regularly greasing, oiling, engine oil change & filter change are carried out for the equipments in the petrol & diesel engine setups.
 - Maintenance of equipments is taken care the technical team.
 - The log book is maintained to register call.
 - The call is generally resolved on the same day by the technical team.
 - Students get hands on experience during the lab sessions.
 - The labs are made available for students beyond working hours for practice and extra assignments.
 - The student evaluation is also conducted in the laboratories to judge the skills developed.
- Maintenance and utilization of Library
 - Total area of the library 714 sq. mts. The library has a reading hall with a seating capacity of 180. Along with technical books, books for competitive exams such as UPSC, MPSC, GATE, GRE, TOEFL, IELTS are made available to students.
 - Books are purchased as per the recommendation of faculty members and students.
 - Book publishers submit the newly published books for necessary approvals.

- Faculty members review the books and recommend suitable books.
 - Faculty members can also review the contents of the book online
 - The write-off (weeding out) library material is carried out after the approval of respective head of departments.
 - The reading hall in the library is used by the students for study, reading books, etc. and it is open during the weekend as well.
 - The library is open on all working days from 07.30 am to 07.30 pm. Around the examination time the reading hall is open from 07.30 am to 9 pm.
 - There are 63067 print books with 5126 reference books. All prescribed text and reference books are made available to the students. First year students are allowed to borrow 03 technical books while second, third and final year students are allowed to borrow 04 technical books. In addition to technical books, students can borrow 01 non-technical book. Students can also borrow one book for a day in addition to the above standard quota in case of the need.
 - Part of the library stack room has desktops. These desktops are used to access e-resources from the library. On top of this, the students and faculty members can access the e-resources remotely.
- Maintenance and utilization of Computers
 - There is a centralized team for maintenance of computers and networks in the college. Each department has a faculty member as a coordinator and technical assistants to coordinate the activity to ensure all computers and printers are in proper working condition.
 - The technical team prepares a yearly budget for purchase of networking equipment, renewal of centrally managed software such as antivirus software, Microsoft volume licensing and website hosting software.
 - The college has IT policy addressing standards on IT Service Management, Information Security, Network Security, Risk Management and Software Asset Management. It outlines the responsible use of the Information Technology infrastructure at the college such as use of licensed software only, procurement of IP based licenses wherever possible, annual maintenance contract for application software, antivirus on every machine, restricted access through firewall, regular information backup, encouragement for usage of open source software.
 - The preventive and regular maintenance is carried out by the technical team includes maintenance of desktops, installation of operating systems, special softwares required for Lab courses, checking of LAN settings, cable connections and installation of printers.
 - The log book is maintained to trace the maintenance activities.
 - This logged issue is resolved generally within one working day.
 - Computers are utilized by the students to get hands on experience.
 - They develop software programs, mini-projects, projects, reports etc using the computing infrastructure available in the institute.
 - Maintenance and utilization of Sports complex
 - The Management has facilities for sports including a playground of 2.5 acres.
 - Regular maintenance of ground (grass removal, watering, rolling, etc.) is done by the maintenance team appointed by management.
 - Every year, college purchases consumable sports equipment for students. All the sports equipments are provided by the college to students and students issue the sports equipment from the sports office during competitions and for practice sessions.

- Various sports activities are organized at playground including Kabaddi, Kho-Kho and athletics. Specific area is assigned for the games such as basketball, volleyball, Throwball, 6 A side Football, Handball.
 - Inter campus sports competition “DAMINI” and intercollegiate competitions are conducted along with athletics events such as 100 meter sprint, Discuss throw, Shot put, Javelin throw and Long jump.
 - Regular physical fitness and coaching of college sports teams is performed at the playground.
 - Separate provision is made for indoor games such as Carrom, Chess, and Table Tennis for practice purposes.
- Maintenance and utilization of Physical infrastructure
 - The physical infrastructure of the college is divided into laboratories, classrooms, and circulation areas
 - The maintenance of the circulation area is outsourced to an external agency. The external agency looks after housekeeping of classrooms, Passages, Washrooms and Terraces.
 - Periodical maintenance of maintenance of lifts, electric power backup system and solar system, water tank cleaning, sewage chamber cleaning is carried out by an external agency.
 - The cleanliness of the laboratories is done by department peons.
 - The repair & maintenance work of electrical wiring, switches is done by in-house electricians.

5.Student Support and Progression

5.1 Student Support

5.1.1 Average percentage of students benefited by scholarships and freeships provided by the Government during last five years

Answer: 45.02

5.1.1.1 Number of students benefited by scholarships and free ships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years (other than students receiving scholarships under the government schemes for reserved categories)

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
1240	1238	1253	1168	1041

File Description	Document
upload self attested letter with the list of students sanctioned scholarships	View Document
Institutional data in prescribed format	View Document

Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years	View Document
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5.1.2 Average percentage of students benefited by scholarships, freeships, etc. provided by the institution and non-government agencies during the last five years

Answer: 8.19

5.1.2.1 Number of students benefited by scholarships and free ships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years (other than students receiving scholarships under the government schemes for reserved categories)

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
195	186	286	222	191

File Description	Document
Number of students benefited by scholarships and freeships besides government schemes in last 5 years	View Document
Institutional data in prescribed format	View Document

5.1.3 Following Capacity development and skills enhancement activities are organised for improving students capability

1. Soft skills
2. Language and communication skills
3. Life skills (Yoga, physical fitness, health and hygiene)
4. Awareness of trends in technology

Answer: A. All of the above

File Description	Document
Details of capability enhancement and development schemes	View Document
Link to Institutional website	View Document

5.1.4 Average percentage of students benefited by career counseling and guidance for competitive examinations as offered by the Institution during the last five years.

Answer: 23.1

5.1.4.1 Number of students benefitted by guidance for competitive examinations and career

counselling offered by the institution year wise during last five years

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
823	1016	212	601	403

File Description	Document
Number of students benefited by guidance for competitive examinations and career counselling during the last five years	View Document

5.1.5 The institution adopts the following for redressal of student grievances including sexual harassment and ragging cases

- 1. Implementation of guidelines of statutory/regulatory bodies**
- 2. Organisation wide awareness and undertakings on policies with zero tolerance**
- 3. Mechanisms for submission of online/offline students' grievances**
- 4. Timely redressal of the grievances through appropriate committees**

Answer: B. 3 of the above

File Description	Document
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	View Document
Details of student grievances including sexual harassment and ragging cases	View Document

5.2 Student Progression**5.2.1 Average percentage of placement of outgoing students during the last five years**

Answer: 75.11

5.2.1.1 Number of outgoing students placed year - wise during the last five years.

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
578	549	532	443	403

File Description	Document
Self attested list of students placed	View Document
Details of student placement during the last five years	View Document

5.2.2 Percentage of student progression to higher education (previous graduating batch).

Answer: 1.84

5.2.2.1 Number of outgoing student progressing to higher education.

Answer: 12

File Description	Document
Upload supporting data for student/alumni	View Document
Details of student progression to higher education	View Document

5.2.3 Average percentage of students qualifying in state/national/ international level examinations during the last five years (eg: IIT-JAM/CLAT/ NET/SLET/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations, etc.)

Answer: 99.13

5.2.3.1 Number of students qualifying in state/ national/ international level examinations (eg: IIT/JAM/ NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations, etc.)) year-wise during last five years

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
25	39	36	47	43

5.2.3.2 Number of students appearing in state/ national/ international level examinations (eg: IIT/JAM/ NET / SLET/ GATE/ GMAT/CAT,GRE/ TOEFL/ Civil Services/ State government examinations) year-wise during last five years

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
25	39	36	48	44

File Description	Document
Upload supporting data for student/alumni	View Document
Number of students qualifying in state/ national/ international level examinations during the last five years	View Document

5.3 Student Participation and Activities

5.3.1 Number of awards/medals won by students for outstanding performance in sports/cultural activities at inter-university/state/national / international level (award for a team event should be counted as one) during the last five years.

Answer: 45

5.3.1.1 Number of awards/medals won by students for outstanding performance in sports / cultural activities at inter-university / state / national / international events (award for a team event should be counted as one) year - wise during the last five years.

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
8	12	9	2	14

File Description	Document
Number of awards/medals for outstanding performance in sports/ cultural activities at inter-university / state / national / international level during the last five years	View Document
e-copies of award letters and certificates	View Document

5.3.2 Presence of an active Student Council & representation of students on academic & administrative bodies/committees of the institution

Answer:

Student council:The college has an independent student council. It has 55 posts such as technical secretary, placement representative, sports secretary,cultural secretary, treasurer, library representative. Students nominate themselves for these posts.

The technical secretary along with student volunteers organizes annual tech-fest ‘Innovation’, in which various workshops and seminars are organized.

The placement cell representatives help the Training and Placement Officer(TPO) in various placement activities. The issues or problems faced by students were taken care of by the TPO and student cell representatives.

The sports secretary organizes and conducts an intercollegiate sports tournament ,‘Pentacle’.

The cultural secretary plans and executes different cultural events such as ‘Gandhaar-Annual Cultural program’ and art exhibitions.

The treasurer along with the assistant treasurers take care of the budget planning and expenses required for all the events.

Every year, the magazine team under the leadership of the magazine secretary publishes the college magazine ‘Kshitij’. The processes like collecting the material, editing, designing and publishing are done by students. The magazine committee is also involved in various department newsletters.

The student council along with the faculty members conducts different events as per the academic calendar.

There are student representatives in the following committees also.

Internal Quality Assurance Cell (IQAC) : From the students’ council, the University Representative,

General Secretary and Cultural Secretary are the members of the Internal Quality Assurance Cell (IQAC) of the college.

By participating in the IQAC meetings, these representatives get an opportunity to provide inputs in a variety of student-related decision-making contexts, such as curricular, co-curricular and extra-curricular activities; technical and soft-skill development; student projects; internships; careers and placements. These representatives also participate in the analysis of the student satisfaction survey conducted by the college.

Anti Ragging Committee: Anti Ragging Committee at Cummins college is as per AICTE guideline .It ensures compliance with the provision of AICTE guidelines and is responsible for prevention of ragging in institutions.

Internal Complaint Committee (ICC): The Internal Complaint Committee of MKSSS's Cummins College of Engineering for Women is constituted in 2013 as per Gender Sensitization, Prevention and Prohibition of Sexual Harassment of Women Employees and Students and Redressal of Grievances in Technical Institutions (All India Council for Technical Education Regulations, 2016).

Department Advisory Board(DAB) : There are student representatives in the Department Advisory Board(DAB). In DAB, the discussion regarding department Vision and Mission ,PEO s and Syllabus formation is carried out. Department planning, monitoring of academic progress, discussion related to student activities are also done in DAB.The student representative in DAB, gives inputs regarding the academic calendar planning and students related activities.

Student Grievance Redressal committee-There is a student representative in the Student Grievance Redressal committee. The Student Grievance committee looks into the complaints lodged by any student, and redresses it as per requirement.

5.3.3 Average number of sports and cultural events / competitions organised by the institution per year

Answer: 1.8

5.3.3.1 Number of sports and cultural events / competitions organised by the institution year - wise during the last five years.

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
3	0	1	3	2

File Description	Document
Report of the event	View Document
Number of sports and cultural events / competitions organised per year	View Document

5.4 Alumni Engagement

5.4.1 The Alumni Association / Chapters (registered and functional) contributes significantly to the development of the institution through financial and other support services.

Answer:

The “Cummins College Alumni Association, Pune” is officially registered in October 2019. The objective is to strengthen the association between our alumni, the society and the college. The association develops a strong interaction between alumni and current students of the college.

The Alumni association aims to enhance the Institute – Industry – Alumni connect which caters to the requirements of students and the industry along with evolving the strong bond with alumni from various fields. This association serves as a platform for the general welfare of the ever growing Cummins College community and the society as a whole.

There are fifteen life members in the Managing Committee of the association. These members are supported by the alumni coordinators of the respective departments for the smooth and successful functioning of the association. The General Body meeting is scheduled twice annually.

Alumni Association has a dedicated website with link <https://alumni.cumminscollege.org/>. The Alumni portal is used extensively to post the achievements, information about notable alumni, events conducted, job opportunities in organizations of alumni, etc. As a part of celebration of Teachers day, Women's Day, etc. campaigns are launched through a portal where alumni express their feelings and experiences.

The alumni support the college in following ways:

1. Delivering the guest lectures and webinars for guiding the college students
2. Guiding in hands on Workshops on technical and nontechnical subjects
3. Evaluating the projects in competitions and technical events
4. Examining the students in end semester oral and practical exams
5. Helping the students to get internship and placements
6. Working as Board of Studies members
7. Contributing in syllabus designing
8. Mentoring the project groups
9. Supporting the needy students financially

5.4.2 Alumni financial contribution during the last five years (in INR).

Answer: C. 5 Lakhs - 10 Lakhs

File Description	Document
Link for additional information	View Document

6.Governance, Leadership and Management

6.1 Institutional Vision and Leadership

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

Answer:

The vision and the mission of the Cummins College of Engineering for Women are as follows:

- **Vision of Institute**

To be a globally renowned institute for imparting quality education and to develop women leaders in engineering and technology

- **Mission of Institute**

To develop women professionals who are academically and technically competent with strong professional ethics.

Perspective Plan:

The college has developed its perspective plan through a rigorous process of internal discussions. Senior faculty members, Heads of departments, deans are involved in drafting the perspective plan. Plan is reviewed by governing body members and external advisors from industry and academia. Considering the inputs of governing body members and advisors, the plan is modified. Following parameters are considered while finalizing the plan

1. Strengths and weaknesses of the institute
2. Recent transition of college from affiliated college to autonomous affiliated college
3. Students' inclinations and aspirations
4. Industry feedback
5. Achievable outcomes in five years

Plan is divided in three categories or contexts

1. Teaching-Learning & Evaluation
2. Readiness for Careers
3. Research and Extensions

Participation of faculty members in decision making:

The college supports decentralization and encourages participation of faculty members in decision making. Faculty members are members of various statutory bodies and administrative committees like the Governing body, Academic Council, College Development Committee, IQAC, Board of Studies, Industry Institute Partnership Cell (IIPC), Intellectual Property Cell (IPC), Purchase, etc.

File Description	Document
Link for additional information	View Document

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

Answer:

The college practices decentralization and encourages participative management by involving faculty members at various levels in organizational structure. Head of the departments, deans play vital roles in management and administration of the college.

Most of the faculty members are involved in academic, co-curricular and extra-curricular activities in the form of coordinators and incharges.

Annual Budget Preparation:

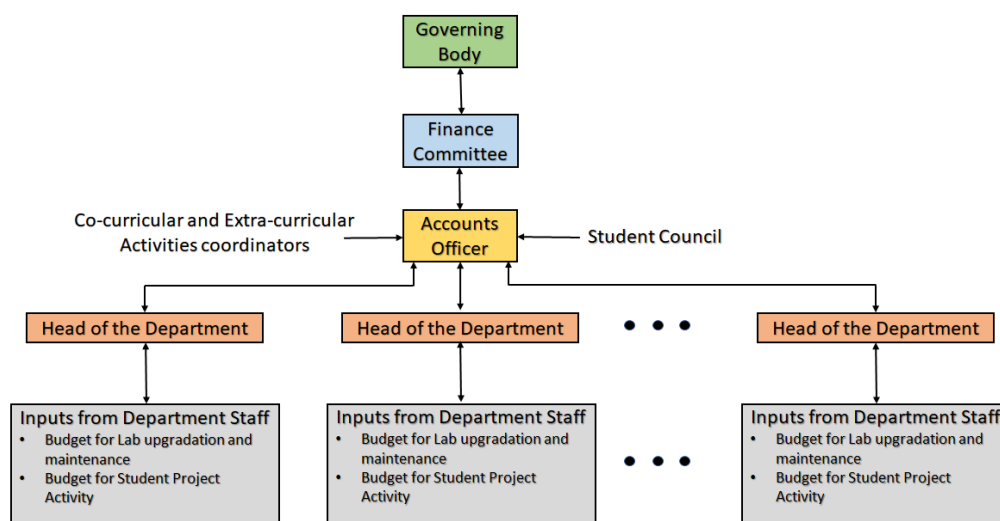


Fig.: Annual Budget Preparation of the College

The budget preparation for the next financial year is initiated in advance.

- Each department prepares a budget by gathering the requirements from the department staff. The department considers lab upgradation, software tools required, student project activities and other recurring expenses related to the department while preparing the budget.
- The students council and faculty coordinators propose the budget for co-curricular and extracurricular activities.
- For maintenance and upgradation of IT infrastructure, budgetary requirements are proposed by

system/network administrators.

- Budget is also proposed for library, sports, training and placement activities by the respective section heads.

By considering all the proposals and requirements together, the accounts officer prepares an annual budget. The budget is proposed, discussed and finalized in the finance committee meeting. The Governing Body approves the budget, and if required suggest the changes.

File Description	Document
Link for strategic plan and deployment documents on the website	View Document

6.2 Strategy Development and Deployment

6.2.1 The institutional Strategic / Perspective plan is effectively deployed

Answer:

The college has developed its perspective plan through a rigorous process of internal discussions. Deans, Heads of departments and Senior faculty members are involved in drafting the perspective plan. The plan is reviewed by governing body members and external advisors from industry and academia.

The plan is divided in three categories or contexts

1. Teaching-Learning & Evaluation
2. Readiness for Careers
3. Research and Extensions

Considering the aspirations of the stakeholders, the goals for every context are set. According to the goals, action points are defined. To evaluate execution of the plan, success metrics are also defined.

The teaching learning context of Perspective plan is aimed at implementing pedagogies to promote student centric learning processes.

Pedagogy Cell Activity:

The pedagogy cell consisting of faculty members from each department is formed to investigate and disseminate the modern trends in engineering education.

The members of the cell meet regularly to discuss different pedagogy practices adopted or practiced in various engineering institutes across India and abroad. Different activities conducted by the pedagogy cell increased awareness among the faculty members to enhance teaching learning processes. The activities include -

- Sessions for faculty to motivate, adopt and follow best pedagogic practices in engineering teaching and learning
- One week FDP on ‘Application of Moodle as LMS ’

- Online FDP on ‘Examination Reforms’
- Four week online FDP on ‘New Pedagogies’

As a result of this the faculty members explored and implemented a Learning Management System(LMS) as well as suitable pedagogy for their courses. They also collected feedback from students to improve the adopted practice. As the result of this -

- Cummins College Digest of Engineering Education(CCDEE) has been started from the year 2020. The digest is serving as a platform to display the methodology and outcomes of pedagogical practices experimented by faculty members. The articles published have motivated the faculty to follow innovative practices.
- The pedagogy cell organized the National Conference on Pedagogy in Higher Education (NCPHE-22) on 25 June 2022. The papers from different authors discussed different perspectives on pedagogy practices used in engineering education. Several papers presented in the conference are published in the Scopus indexed journal - Journal of Engineering Education Transformations.

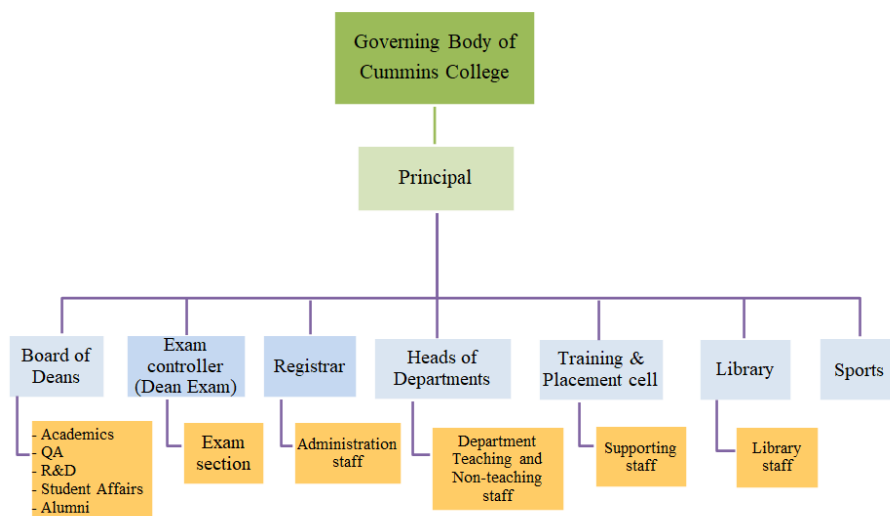
File Description	Document
Any additional information	View Document
Link for Strategic Plan and deployment documents on the website	View Document

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

Answer:

The Organization Chart of Cummins College of Engineering for Women is as shown below

Organization chart



- The Board of Deans are the heads of the development areas for Academics, Quality Assurance,

Research and Development (R&D), Student Affairs and Alumnae.

- Dean Academics coordinates in planning and execution of the curriculum activities.
 - Dean Quality Assurance coordinates to develop, disseminate and monitor the quality activities.
 - Dean R&D coordinates and supports the activities under research and development.
 - Dean Student Affairs handles different co-curricular and extra-curricular activities and issues related to students.
 - Dean Alumni handles the alumni association.
- The Dean examination controls the functioning of the examination section.
 - All Heads of the Departments monitor academic and administrative functions of the departments.
 - Registrar acts as a Head of administrative staff of the college.
 - The Training and Placement office provides opportunities and facilities for industry placements.
 - Library staff maintain the collection of books, periodicals, magazines and e-resources.
 - The Sports Director handles opportunities and facilities for indoor and outdoor games.

The college functioning is guided by different statutory committees like:

Governing Body: The college has constituted the Governing Body as per AICTE and UGC norms functions for approval of new programmes of study (degree/diploma), the annual budget and examination fees, certificate program fees.

College Development Committee: It consists of representatives from management, teaching and non-teaching staff, IQAC coordinator and the student council. The Principal is the member secretary. Its functions are to prepare an overall comprehensive development plan of the college, prepare an annual calendar, recommend new academic courses and the creation of additional teaching and administrative posts.

Internal Quality Assurance Cell: Senior faculty members, students, alumnae, industry experts and management representatives are the members of the committee. It defines development and application of quality benchmarks (SWOT), parameters for various academic and administrative activities of the institution; perspective plan. It performs different audits, collects and analyzes the feedback.

Human Resource Development Committee: Heads of the Departments, Management Committee representatives and Principal are the members of the HRD Committee. Decisions about appointments, leave sanction, career advancement are taken by the committee. This committee also acts as Grievance Committee for teaching as well as non-teaching staff members.

- The Service Rules, Code of Conduct, Ordinances, Procedure, Recruitment policies and promotional policies are as per University and AICTE regulations.

These rules are available as University Publications and college website.

File Description	Document
Link to Organogram of the Institution webpage	View Document

6.2.3 Implementation of e-governance in areas of operation

1. Administration
2. Finance and Accounts
3. Student Admission and Support
4. Examination

Answer: A. All of the above

File Description	Document
Screen shots of user interfaces	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Link for additional information	View Document

6.3 Faculty Empowerment Strategies

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

Answer:

The college provides welfare measures as follows.

- Gratuity as per the rules.
- Maternity and other medical leaves as per the rules.
- Group insurance
- Mediclaim policy
- Employees Provident Fund (EPF) scheme
- Registration fees to all the staff for attending workshops, seminars, etc.

For teaching faculty the college provides

- Career Advancement Scheme (CAS)
- Full paid Phd study leave scheme
- Incentives for publications in indexed journals and funded projects
- Registration fees for presenting research work in national and international conferences.

File Description	Document
Link for additional information	View Document

6.3.2 Average percentage of teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the last five years.

Answer: 57.18

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

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
34	38	197	78	83

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

6.3.3 Average number of professional development / administrative training Programmes organized by the institution for teaching and non-teaching staff during the last five years.

Answer: 3.8

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

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
4	2	5	6	2

File Description	Document
Institutional data in prescribed format	View Document
Link for additional information	View Document

6.3.4 Average percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the last five years (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course).

Answer: 59.36

6.3.4.1 Total number of teachers attending professional development Programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes year wise during last five years

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
81	109	114	75	72

File Description	Document
IQAC report summary	View Document
Institutional data in prescribed format	View Document
Link for additional information	View Document

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Answer:

The internal and statutory audits are conducted every year.

In the internal audit vouching, Receipts, ledger scrutiny, depreciation, grant utilization, fees reconciliation etc. are scrutinized.

In Statutory audit, external auditors check financial documents and files.

Auditors' reports are discussed in the finance committee as well as in management meetings. The objections and suggestions are reviewed in these meetings and accordingly actions are taken. No major objections have been raised by the auditors in the last few years.

File Description	Document
Link for additional information	View Document

6.4.2 Funds / Grants received from non-government bodies, individuals, philanthropists during the last five years (not covered in Criterion III and V) (INR in Lakhs)

Answer: 334.53

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

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
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72.09 78.95 63.24 63.24 57.01

File Description	Document
Institutional data in prescribed format	View Document
Annual statements of accounts	View Document

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

Answer:

The Cummins College is an unaided college and the primary income source for the college is fees collected from students. The government authorities approve the fees.

Based on the fees every year the budget is prepared considering operational expenses and development needs. The collected tuition fees are utilized to meet the operational expenses. However, if any shortage of funds, due to non-receipt of timely fees, parent trust supports the college to meet the expenses. Considering the requirements the institute requests for the support of the parent trust.

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 visible in terms of – Incremental improvements made for the preceding five years with regard to quality (in case of first cycle)

Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives (second and subsequent cycles)

Answer:

Internal Quality Assurance Cell (IQAC) sets and reviews overall quality benchmarks in academic and administrative activities of the college. IQAC initiated a variety of quality assurance strategies such as Question Paper Audit, Inclusion of Open-Ended Assignments in laboratory courses, Academic Audit, Feedback mechanism, etc.

Question Paper Audit:

IQAC conducts a question paper audit based on 10 criterion format covering the following points:

- The template, language and time allotted to the students
- The difficulty levels, syllabus coverage and mapping along with the marks distribution.
- Mapping of COs to the questions
- Overall coverage of all the COs during ISE and ESE
- Inclusion of higher cognitive levels (with reference to the Revised Bloom's taxonomy), for which program year wise benchmarks are set as follows : 10%, 20%, 30% and 30% for the First Year, Second Year, Third Year and Final Year B.Tech students respectively.

The auditors performing the question paper audit are the experts from the same program. Based on the

audit reports of the individual courses an analysis is presented and discussed in the IQAC meeting.

The observed extremities are discussed with the subject chair-persons by the Principal, Dean Quality Assurance and the auditors. The faculty members are given suggestions to improve the lapses for overall question paper framing.

Inclusion of Open Ended Assignments in lab courses:

To improve the self learning component of students, the IQAC insists on the inclusion of open ended assignments (OEA) in the laboratory courses. In OEAs, only the Aim is given whereas the materials, methods and answers are open. As the benchmark, it is decided that at least one open ended assignment should be included in the laboratory course.

The auditors check the blend of laboratory assignments as demonstration, exercise, structured and open ended assignments for each course. The audit is conducted for assignment autonomy levels.

A compiled and analytical report is prepared by Dean Quality Assurance and is discussed in the IQAC meetings.

File Description	Document
Any additional information	View Document

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

(For first cycle - Incremental improvements made for the preceding five years with regard to quality

For second and subsequent cycles - Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives)

Answer:

The Internal Quality Assurance Cell (IQAC) initiates, collects, analyzes, presents and reviews the feedback from stakeholders in IQAC meetings. The reviews are done on academic structure, research and innovation activities, Pedagogy cell activities, students and faculty achievements, students satisfaction survey and quality audits in the college.

Academic Audit:

The departmental Academic Audit is conducted annually by involving an internal auditor along with an external auditor. It is based on the following criteria -

- Quality of Teaching Learning Processes
 - Conduction and assessment of courses
 - Student feedback on teaching/learning process
 - Different pedagogies practiced by the faculty members for classes and laboratories

- Project work monitoring and evaluation
- Co-curricular and Extra-curricular activities
 - Conduction of Expert Lectures, Industry visits
 - Internships
 - Organization and support for participation in co curricular and extracurricular events
 - Student publications
 - Social activities
- Student Performance analysis based on
 - Result analysis
 - Placement
 - Higher Studies
 - Entrepreneurship
- Faculty Contributions
 - Research publications in conference and journals
 - Participation in FDP/Workshops/STTP
 - PhD guidance
 - Consultancy
 - Research proposals for funds/grants
- Additional facilities created for enhancing quality of teaching / learning
 - Laboratories
 - Department Library
 - E-resources

The academic audit report with suggestions of auditors is submitted to the IQAC.

Teaching Learning Evaluation Quality Reviews:

To improve the effectiveness and quality of teaching-learning-evaluation, different reviews are taken by IQAC.

Reviews on Result Analysis:

The students' performance in the examinations is discussed and reviewed regularly.

Review on Student Feedback on Teaching:

The feedback is obtained on teaching for every course with respect to following criteria :

- Course delivery, organization of topics, discussion of practical applications.
- The teaching speed and coverage of the syllabus.
- Availability outside the class
- Punctuality, attitude and behavior

The feedback is shared with faculty members. The Principal and the HoD give suggestions to the faculty member for improvements.

Student Satisfaction Survey:

The SSS is discussed and reviewed in IQAC meetings. Based on the analysis, action plans are decided for further improvements.

File Description	Document
Any additional information	View Document

6.5.3 Quality assurance initiatives of the institution include:

1. *Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analysed and used for improvements*
2. *Collaborative quality initiatives with other institution(s)*
3. *Participation in NIRF*
4. *Any other quality audit recognized by state, national or international agencies (ISO Certification)*

Answer: All of the above

File Description	Document
Upload e-copies of the accreditations and certifications	View Document
Institutional data in prescribed format	View Document
Paste web link of Annual reports of Institution	View Document

7. 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 last five years.**

Answer:

The 125-year-old parent body has been committed to “Empowerment of Women through Education”. The Samstha was established in 1896 by the great visionary and social worker Bharat Ratna Maharshi Dhondo Keshav Karve to provide shelter to destitute women. Our institute is an all-girls college and works relentlessly towards educating the women and thereby making them self-reliant. The institute imparts quality education to develop women leaders and professionals academically and technically competent with strong professional ethics.

- Across the world, the proportion of women engineers is very low. There are very few professional engineering colleges specifically for women. Our institute has various professional societies like IEEE, ISA, ASME, SAE, ACM-W, SWE, IET, and CSI. They organize different events and the Institute provides a platform for students to participate in the outside world. In order to empower women, students are encouraged to participate in co-ed forums such as National / International conferences to publish their project work, project competitions organized by Pathirakha Foundation, Smart India Hackathon, Nidhi Prayas, and competitions conducted by Persistent Systems Ltd, Forbes Marshall, etc. Students are also encouraged to file patents on their innovative project ideas. Our Institute has a separate “Entrepreneur Cell” to promote women entrepreneurs.
- A well-defined Mentor System exists in the Institute for constant counseling and guidance for the students. The mentor motivates the mentees to actively participate in various co-curricular and extracurricular activities and compete along with male students. Every year only girl's teams from our Institute participate and secure grand success in the competitions like Robocon, Mitsubishi, Smart India Hackathons, IBM hackathon, SAE BAJA, SAE Aero Modeling, etc.
- Courses are included in the syllabus which highlights gender issues. In the curriculum under the course “Organizational behavior”, a dedicated unit is included on “Diversity and Ethics”.
- Institute organizes seminars/workshops on topics like: “Womanizing at the workplace”, “Talk on Inclusion and Diversity”, “Self Defence”, etc.
- The Institute has a good proportion of women staff and they are occupying authoritative positions like Principal, Dean, and HoD. All the security guards on the campus are women.
- The institute has provided the following specific facilities:
 - a) For the security of stakeholders, security guards for 24 hours are present on all the entry and exit gates of the Institute and the hostels. No entry is allowed for outsiders and visitors only with permission are allowed to enter the campus. Even for the hostels, entry for outsiders is restricted. Multiple Security Cameras / CCTV systems are installed at different locations to monitor the activities. Safety measures like fire extinguishers are installed at various locations on the campus.
 - b) A qualified counselor is appointed for any help and counseling on the college premises.
 - c) Common room along with a recreation facility is available on the premises.
 - d) A daycare center facility is available on the premises for all the staff members working at our Institute.
 - e) Sanitary napkin vending machines are installed in the ladies' washrooms.

f) A resident doctor is available on the campus.

File Description	Document
Specific facilities provided for women in terms of: a.Safety and security b.Counselling c.Common Rooms d. Day care center for young children e. Any other relevant information	View Document
Annual gender sensitization action plan	View Document

7.1.2 The Institution has facilities for alternate sources of energy and energy conservation measures

1. Solar energy
2. Biogas plant
3. Wheeling to the Grid
4. Sensor-based energy conservation
5. Use of LED bulbs/ power efficient equipment

Answer: A. 4 or All of the above

File Description	Document
Geotagged Photographs	View Document
Any other relevant information	View Document

7.1.3 Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 500 words)

- Solid waste management
- Liquid waste management
- Biomedical waste management
- E-waste management
- Waste recycling system
- Hazardous chemicals and radioactive waste management

Answer:

The facilities provided by the Institution for the management of degradable and non-degradable waste are as follows:

- Solid waste management – Solid waste is collected separately in Wet and Dry dustbins in the campus. Biodegradable and non-biodegradable waste is segregated and biodegradable waste is used to prepare compost. A Biogas plant has been installed on campus. Food waste generated by the canteen and hostel mess in the college is utilized for production of Biogas and Compost. The generated Biogas is used for cooking in the hostels. Energy equivalent to 1 to 1.5 domestic LPG cylinders is generated per day.

The waste generated by leaves (approx. 300 trees in our premises), is shredded through a shredder machine and further used for composting.

For the disposal of sanitary napkins, an Incinerator has been installed in the campus.

- **Liquid waste management- Waste water / recycled water is used for gardening in the college premises.**
- **Biomedical waste management – There is no bio-medical waste generated in college.**
- **E-waste management – A periodical write-off procedure is executed for the management of E-waste and computers. They are given to the outside vendors for disposal.**
- **Waste recycling system –**
 1. **Wastewater is recycled and utilized for watering the garden and trees.**

2. **A Biogas plant has been installed in campus which utilizes food waste from the canteen and hostels. Biogas generated is used for cooking in the hostels.**

Hazardous chemicals and radioactive waste management- There is no hazardous chemical and radioactive waste generated in the Institute.

File Description	Document
Relevant documents like agreements/MoUs with Government and other approved agencies	View Document
Geotagged photographs of the facilities	View Document
Any other relevant information	View Document

7.1.4 Water conservation facilities available in the Institution:

1. *Rain water harvesting*
2. *Borewell /Open well recharge*
3. *Construction of tanks and bunds*
4. *Waste water recycling*
5. *Maintenance of water bodies and distribution system in the campus*

Answer: A. Any 4 or all of the above

File Description	Document
Geotagged photographs / videos of the facilities	View Document
Any other relevant information	View Document
Link for any additional information	View Document

7.1.5 Green campus initiatives include:

1. *Restricted entry of automobiles*
2. *Use of Bicycles/ Battery powered vehicles*
3. *Pedestrian Friendly pathways*
4. *Ban on use of Plastic*

5. landscaping with trees and plants

Answer: A. Any 4 or All of the above

File Description	Document
Various policy documents / decisions circulated for implementation	View Document
Geotagged photos / videos of the facilities	View Document
Any other relevant documents	View Document

7.1.6 Quality audits on environment and energy are regularly undertaken by the Institution and any awards received for such green campus initiatives:

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

Answer: A. Any 4 or all of the above

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

7.1.7 The Institution has disabled-friendly, barrier free environment

1. Built environment with ramps/lifts for easy access to classrooms.
2. Divyangjan friendly washrooms
3. Signage including tactile path, lights, display boards and signposts
4. Assistive technology and facilities for 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

Answer: C. 2 of the above

File Description	Document
Policy documents and information brochures on the support to be provided	View Document
Geotagged photographs / videos of the facilities	View Document
Details of the Software procured for providing the assistance	View Document

Any other relevant information	View Document
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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 500 words).

Answer:

- **The institution believes in the equality of all cultures and traditions. Students belonging to different castes, religions, regions, and socioeconomic backgrounds are studying in our college. Institute provides an inclusive environment for girls coming from all kinds of backgrounds.**
- **Students belonging to different castes, religions, and regions come and stay together in the hostel.**
- **Cultural: Cultural activities play a significant role in strengthening the interpersonal skills of students. The students are encouraged to organize and participate in various cultural events. Every year, students organize a cultural event ‘Gandhar’ which involves various intra-collegiate activities like Cultural dance performances, Traditional day celebrations, Painting, Sketching, Rangoli, Group dance, Faculty performance, Open mic, Classical events, Natak, Group singing, Poem recitation, Fandom quiz, etc which gives them a chance to spread awareness about Indian culture and heritage. This also creates an inclusive environment in the college.**
- **Regional: Admissions are totally based on merit and are centralized. Students from different regions of the country like North India, Northeast India, etc take admission to our Institute. J & K students get admitted under a special admission scheme. Regional diversity is presented through performances like Staff shows, Group dances, and Traditional day celebrations.**
- **Linguistic: Students participate and win prizes in the renowned Marathi drama competition ‘Purushottam Karandak’. To promote linguistic diversity, the Institute arranges various activities. The annual college magazine ‘Kshitij’ is published, in which the students write articles in Hindi, English, and Marathi. In the essay competitions arranged by the Institute, essays are accepted in Marathi, Hindi, and English languages. The Institute provides a platform to perform regional songs through College Band and Singing competitions. To encourage the faculty and students of the Institute under the scheme ‘Ek Bharat Shreshtha Bharat’, one sentence with its translation in 21 different languages is uploaded on the website as ‘Aaj ka Vakya’.**
- **Socioeconomic: Students from different economic backgrounds get admission to the institute on a merit basis. The institute provides financial assistance to students coming from weak financial backgrounds. Our Institute provided computers to needy students during the Covid pandemic to attend online classes. The institute provides equal opportunities to students from different social strata and categories. Rural students who come from vernacular backgrounds, improve their communication skills through the grooming sessions under the program ‘Garnishing Talent’.**
- **Other diversities - Student-centric innovative teaching-learning activities like flipped classrooms, open-ended assignments, and project-based learning are followed to make the students learn at their pace. To promote interest in the Art domain, various clubs and Audit**

courses are introduced. Similarly, our students also celebrate the different festivals with joy and enthusiasm which helps them to implant social and religious harmony.

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

7.1.9 Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens (within 500 words).

Answer:

The institution sensitizes the students and the employees to the constitutional obligations of values, rights, duties, and responsibilities of the citizens and constantly works to nurture them as better citizens of the country through various activities.

- The institution takes many initiatives like conducting awareness campaigns, organizing orientation programs, training programs, seminars, workshops, and guest lectures to sensitize human values and constitutional obligations.**
- The institute hoists the flag during national festivals and inspires students and staff by emphasizing the duties and responsibilities of citizens. The Institute invites guests who have contributed to nation-building.**
- Every year on 25th January election oath-taking program is organized for the college students and staff.**
- The electoral Literacy Club is established to conduct awareness campaign activities for new voters.**
- Institute takes efforts in raising awareness of the importance of blood donations. Students and faculty members of the institute are regular blood donors. Blood Donation Camp in association with Jankalyan RaktaPedhi is conducted regularly.**
- The college establishes policies that reflect core values. A Code of conduct is prepared for students and staff. Everyone obeys the code of conduct.**
- The institution encourages the participation of students in Sports and Games at the National level to strengthen nationwide bonds and relations.**
- The institution takes pride in raising successful leaders among the students by conducting the Student Council election every year. The elected representatives are given leadership training and delegate the responsibilities of organizing college programs with the support of other student volunteers.**
- NCC students and faculty members from the institute were deployed at the Covid Vaccination Center during the month of June/July 2021. The Oxygen Audit of the Covid**

Hospitals/Centers was conducted by the Government of Maharashtra. Five Faculty Members from Cummins College of Engineering for Women served as Auditors during the Oxygen Audit 2021 program. Faculty members have worked as volunteers in Covid Isolation centers.

- We have a very active NSS cell. Different activities like National Anthem to celebrate Azadi Ka Amrut Mahotsav, Sadbhavana Day Pledge, Constitution Day Celebration (read the preamble of the Indian constitution), Celebration of Youth Day, Voters Day Celebration, National Voter Awareness Contest, Swachhata Abhiyan Activity, River cleaning drive, etc. are conducted.
- Some of the student projects provide solutions to societal problems. These statements make students aware of their responsibility towards society.

File Description	Document
• Details of activities that inculcate values; necessary to render students in to responsible citizens	View Document
Any other relevant information	View Document

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.

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

Answer: C. 2 of the above

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

7.1.11 Institution celebrates / organizes national and international commemorative days, events and festivals (within 500 words).

Answer:

The institution organizes commemorative days, events, and festivals throughout the academic year. All these activities have become instrumental and help in building today's youth. Importance of national festivals and events preach to them and remind them about our country's cultural heritage and history.

1. Independence day (15th August), Republic day (26th January)- Every year the institute celebrates Independence Day and Republic Day by hoisting the national tricolor. Persons from defense backgrounds are invited as chief guests who inspire the students and faculty with an inspirational speech.
2. National voters day- On 25th January election oath-taking program is organized for the college students and staff. The Electoral Literacy Club was established to conduct awareness campaign activities for new voters.
3. International Women's day (8th March)- On the occasion of International women's day events like the Marathon for women, Yogasana for PCOD and Thyroid, Free basic Dental check-ups, Pathology tests, etc. are conducted.
5. World environment day (5th June)- Various events like tree plantation, campus cleaning drive, etc. are done by staff and students.
6. International Yoga day (21st June)- Every year the Institute organizes a 7-day yoga program for all the students, staff, and office employees.
7. Teacher's day (5th Sept) - We celebrate Dr. Radhakrishnan's birthday as Teacher's Day with great fervor. The students organize a program for the teachers.
8. Engineers day (15th Sept)- We celebrate this day as a tribute to Bharat Ratna Mokshagundam Visvesvaraya. Various activities like panel discussions, technical talks, and alumni discussions are organized on this day.

File Description	Document
Geotagged photographs of some of the events	View Document
Any other relevant information	View Document
Annual report of the celebrations and commemorative events for the last five years	View Document

7.2 Best Practices

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

Answer:

Best practice 1-

Title: Research Promotional ecosystem

Objective: The objective of the practice is to motivate the faculty members to pursue research, organize and attend conferences, workshops, seminars, and symposia to get to know emerging technology trends and to update their domain knowledge.

The Context: For effective teaching as well as research engagements, faculty members need to

be at the frontiers in their areas of specialization. To motivate, and facilitate faculty members to undertake research activities, an appropriate research ecosystem is necessary. To create a conducive environment for research, research promotional schemes are implemented.

The Practice: To encourage quality research work by faculty members, facilities/incentives are provided as given below:

1. Institute offers full paid study leave for a maximum period of 2 years.
2. If a paper is published in Scopus or SCI-indexed journals, faculty are rewarded with an amount of Rs.5,000 or Rs10,000 respectively.
3. Incentives are also offered to faculty members on the successful completion of funded research projects.
4. 'Research Initiation Fund' i.e, research grant up to Rs. 3 Lakhs is awarded to applicant faculty.
5. Institute reimburses 100% of registration fees for the 'SCOPUS indexed conference publication' and 50% for the Non-Scopus conference.
6. Institute encourages faculty and students for filing patents and other forms of IP. If the patent application id is filed as per the IPR policy of the institute all the charges of filing and maintaining IPs are borne by the institute.

Evidence of Success:

1. Increase in the number of faculty members registered and completed Ph.D. by availing Ph.D. leave.
2. Increase in the number of quality publications.
3. Increase in the number of patents.
4. Increase in the number of funded projects.

Problems encountered and resources required: Being a teaching-learning-centric institution, the available bandwidth (in terms of time) for the faculty members to pursue research is limited.

Best practice 2-

Title: Student Clubs

Objective: To provide “beyond curriculum” learning opportunities pertaining to soft skills, technical skills, and self-expression.

The Context: The engineering and technological world has become increasingly demanding and

competitive. To address the challenges, the curriculum has to be industry aligned. Along with domain knowledge and innovation, for the holistic development of the students, life skills such as communication skills, leadership skills, team building, and stress management must be inculcated.

The ecosystem is based on efforts of institutional initiatives as well as student involvement and participation. Student clubs are formed and managed by the students themselves. This develops a sense of belonging and responsibility along with technical and managerial skills. Student clubs at

The college-level promotes the shaping of skills of the students and provides them with opportunities that are beyond the curriculum.

The Practice: These student club activities play a crucial role in determining and channelizing the passion and interest of students, much beyond their academic pursuits. The extracurricular activities that are routinely organized by these clubs add up to shaping the personality of students. This culture thus opens up multiple avenues for the development of students, which also enhances their employability skills.

Following are the student clubs in the college:

1. Mozilla Campus Club

Mozilla Campus Club is a club dedicated to Open source development and community building. The club works to spread awareness on Open Source software. Mozilla Campus Club gives an opportunity to join the awesome world of open source where students have many opportunities to learn and grow in various fields, be it technical or non-technical.

2. Aasamant: The Astronomy Club

This club comprises like-minded enthusiasts in Astronomy who learn about space and astronomical phenomena, work together to organize different events, conduct sessions, create podcasts, visit Astronomy related sites like IUCAA and GMRT, organize stargazing programs, and many such activities. Curiosity and passion for astronomy bring the students together.

3. TEDxCCOEW

TED club organizes an annual event that brings together the leading thinkers and doers to share ideas that matter in any discipline like technology, entertainment, design, science, humanities, business, and development. In the spirit of “ideas worth spreading,” TED has created TEDx, a program of local, self-organized events that bring people together to share a TED-like experience. At a TEDx event, TED Talks videos and live speakers combine to spark deep discussion and connections. TED tackles humanity’s toughest questions, attempting to answer them with innovation, enterprise, and enduring optimism.

4. Artificial Intelligence and Computer Vision Society

This club aims to introduce the students to techniques of AI and Computer Vision. The club aims to equip them with a primary skill set in Deep Learning and the knowledge to implement various algorithms and gain a good understanding of what happens behind the scenes. The club aims to spread awareness about AI/ML and computer vision through workshops, seminars, guest lectures, and competitions.

5. Math Club

The Math Club is a student's club with an aim to empower students with mathematics and to help students explore and celebrate the world of mathematics by conducting various fun and engaging activities. It is a platform to provide opportunities for everyone to showcase, share and improve their mathematical skills.

6. Loop CCEW

Team Loop is a Coding Club with the primary motive of creating awareness about the various Data Structures and Algorithms. We conduct activities such as hosting Coding contests, volunteering sessions, and group discussions, for all years of our College. We also promote application-based learning of fundamental concepts by creating utility or game-based projects.

7. Google Developer Student Club

GDSC CCOEW is a university-based developers club, supported by Google. We at GDSC, organize and curate events spread across the entire academic calendar, foster a sense of creativity, and aim to inspire young developers with like minds to collaborate, help each other, and grow to their fullest potential. Prospering and sharing Knowledge and technology through peer-to-peer learning has endowed and encouraged many to become exceptional developers by pulling out the best in them. Our team welcomes you to join the ecosystem which propagates learning and teaching synergistically.

8. Finance and Economics Club

The Finance and Economics Club (FiSOC) provides a platform for ardent students to come together to learn the intriguing world of finance and economics through seminars/webinars with industry experts and organizing debates and discussions to explore career opportunities in the financial sector.

9. Code Club

Code Club is a club that helps in the preparation of opportunities like scholarships, hackathons, challenges, mentorship programs, etc. We provide a dynamic platform to learn, innovate and interact with seniors to learn from their experiences. It is a club open to students of all branches to improve their coding skills and enhance the culture of competitive coding.

10. The Debating Society (Debate Club)

This club tries to explore the hidden talent of students, help them to speak confidently to people, and improve their oratory skills. The club helps to boost students' investigations of community and social issues and creates educational opportunities for students on campus. It provides support for students interested in politics, social change, and community organization and discusses relevant ideas and topics so as to improve students' personal and professional attributes and skills.

Cultural Clubs at the Institute are:

1. Dance Club- Insia

Dance Club is formed for students interested in dancing where they can learn different dance forms and get a chance to participate in various events.

2. Music Club- Swarashree

The Music Club gives a platform for music lovers to showcase their talents. The club comprises a strong team of enthusiastic and passionate women, ranging from singers to instrumentalists, and coordinators. Through music mixing and video editing, instruments, and singing, the club helps students to fall in love with music. Performances are online and offline. Students participate in intra-college and inter-college competitions.

3. Cultural Club- Kalawant

Kalawant is the Cultural Club that has brought glory to the college, owing to its amazing legacy. A platform that encourages, educates, and guides enthusiasts to participate in vivid theatrical competitions, fine arts, performing arts, etc.

Evidence of Success:

1. Increase in the number of students getting placed.
2. Students getting job offers from varied sectors of the industry.
3. Alumni are successful entrepreneurs.
4. Students taking up responsible positions in their careers.
5. Winners in technical Competitions, Sports, and Cultural competitions.

Problems encountered and resources required: Along with academics, time to organize and schedule events and activities for students are less.

File Description	Document
Best practices in the Institutional web site	View Document
Any other relevant information	View Document

7.3 Institutional Distinctiveness

7.3.1 Portray the performance of the Institution in one area distinctive to its priority and thrust within 1000 words

Answer:

Considering the low percentage of women in the engineering profession, Cummins College was established in 1991 with the objective of providing opportunities for engineering education to girls. College gives thrust on imparting quality engineering education and make students ready for the

engineering profession.

As an autonomous institute, the college has framed the curriculum by involving stakeholders which is as per global trends in engineering. Through, innovative and student-centric teaching-learning processes, internships, and projects; the technical competencies of students are developed. Expert lectures, industrial visits, and workshops are arranged for the students to give them exposure to the latest technologies. The students are encouraged to present research papers, file patents, and participate in project competitions. For soft skill development value, additional programs are conducted.

Every year students are motivated and guided to participate in renowned National level competitions like SAE BAJA, Mitsubishi electric cup, ROBOCON Smart India Hackathons, IBM hackathon, etc. Students have won prizes in these competitions.

College strives for the overall development of the students. Students of our Institute actively participate and win medals in National and International level Sports competitions. Girls' teams have won a number of prizes in team events such as football, volleyball, cricket, throw ball, etc., and even individual level prizes in events like mallakhamb, badminton, swimming, athletics, etc.

Because of the thrust on imparting quality education, College has achieved good rankings in private as well government rankings and surveys. In the NIRF framework, in the years 2017 and 2018, the ranking of the Institute was in the band of 151-200. In 2019, the NIRF ranking was 188 and in 2020 it was 173. The Outlook magazine's All India ranking for our Institute is 37 in the private engineering college category in 2022. This year, India Today has appreciated our Institute and considered us amongst the TOP 3 Gainers (Private) colleges that made the biggest leap since last year.

In the last five years college provided the opportunity for engineering education to 2884 students. Due to appropriate academic inputs, 2505 students received job offers from reputed National and Multinational companies such as Microsoft, Goldman Sachs, Amazon, CISCO, Walmart, AVAYA, Boeing, Eaton, Cummins India Ltd., Tata motors, etc.

Our students due to their good performance, are able to pursue higher education in reputed institutes like IITs, BITS, Carnegie Mellon University, Massachusetts Institute of Technology, California Institute of Technology, etc. The institute has issued around 644 transcripts in the last 5 years.

The college has great pride in the alumnae working in the corporate sector, research domain, and defense services, and who have become successful entrepreneurs.

The Institute provides an opportunity for every student to contribute to make the society in which they live in, a better place and to grow as better individuals.

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

Extended Profile**Program***Number of programs offered year-wise for last five years***Answer:**

2021-22	2020-21	2019-20	2018-19	2017-18
8	8	8	8	8

File Description	Document
Institutional data in prescribed format	View Document

*Number of departments offering academic programmes***Answer: 5****Students***Number of students year-wise during last five years***Answer:**

2021-22	2020-21	2019-20	2018-19	2017-18
2666	2680	2663	2614	2560

File Description	Document
Institutional data in prescribed format	View Document

*Number of outgoing / final year students year-wise during last five years***Answer:**

2021-22	2020-21	2019-20	2018-19	2017-18
653	679	735	629	636

File Description	Document
Institutional data in prescribed format	View Document

*Number of students appeared in the examination conducted by the Institution, year-wise during the last five years***Answer:**

2021-22	2020-21	2019-20	2018-19	2017-18
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2636 2672 2644 1935 1217

File Description	Document
Institutional data in prescribed format	View Document

Number of revaluation applications year-wise during last five years

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
253	304	131	226	121

Teachers

Number of courses in all programs year-wise during last five years

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
292	316	319	244	169

File Description	Document
Institutional data in prescribed format	View Document

Number of full time teachers year-wise during the last five years

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
155	153	146	151	158

File Description	Document
Institutional data in prescribed format	View Document

Number of sanctioned posts year-wise during last five years

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
150	164	164	159	159

File Description	Document
Institutional data in prescribed format	View Document

Institution

Number of eligible applications received for admissions to all the programs year-wise during last five years

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
585	635	631	579	568

File Description	Document
Institutional data in prescribed format	View Document

Number of seats earmarked for reserved category as per GOI/State Govt rule year-wise during last five years

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
226	226	288	226	226

File Description	Document
Institutional data in prescribed format	View Document

Total number of classrooms and seminar halls

Answer: 35

Total number of computers in the campus for academic purpose

Answer: 1095

Total Expenditure excluding salary year-wise during last five years (INR in Lakhs)

Answer:

2021-22	2020-21	2019-20	2018-19	2017-18
1631.37	1827.33	1236.56	1480.96	1588.68

Conclusion

Additional Information :

- The college is the first NAAC accredited private college in the state of Maharashtra.
- In the surveys such as those conducted by the “Outlook” magazine and by “India Today” the college ranking has been among top hundred.
- The college is recognized in the band “PERFORMER” under the category college / institutes (private / self-financed) (technical) in Atal Ranking of Institutions on Innovation Achievements (ARIIA) in 2021.

- The college has won the prestigious “Best College Award” from the Savitribai Phule Pune University in February 2021.

Concluding Remarks:

CCEW is providing quality engineering education to the girl students for last 30 years. In its autonomous status since 2016, the college along with all its stakeholders, has engaged itself in defining and implementing its own curriculum and evaluation system.

The teaching-learning process focusses on nurturing creativity and analytical skills of the students, which not only makes the students employable but also inculcates the students’ potential entrepreneurship abilities.

The college has good industry connect and it strives to strengthen its industry linkages.

The college has a research ecosystem conducive for the research activities of the students and faculty. It aims to enhance the research activities further.

EXCLUDED METRICS

List of Excluded Metrics

3 Research, Innovations and Extension : Weightage (150)

3.2 Resource Mobilization for Research : Weightage (10)

Ref No	Details of Metric	weightage	Metric Performance
3.2.3	Percentage of teachers recognised as research guides (Metric Type : Derived , Question Type : QN , Evaluation : By DVV , Nature : Value)	3	14.19

3.4 Research Publications and Awards : Weightage (30)

Ref No	Details of Metric	weightage	Metric Performance
3.4.2	Number of Ph.D’s registered per teacher (as per the data given w.r.t recognized Ph.D guides/ supervisors provided at 3.2.3 metric) during the last five years (Metric Type : Derived , Question Type : QN , Evaluation :	5	1.88

By DVV , Nature :Value)		
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5 Student Support and Progression : Weightage (100)

5.2 Student Progression : Weightage (30)

Ref No	Details of Metric	weightage	Metric Performance
5.2.2	Percentage of student progression to higher education (previous graduating batch). (Metric Type : Derived , Question Type : QN , Evaluation : By DVV , Nature : Value)	10	1.84

6 Governance, Leadership and Management : Weightage (100)

6.3 Faculty Empowerment Strategies : Weightage (30)

Ref No	Details of Metric	weightage	Metric Performance
6.3.3	Average number of professional development / administrative training Programmes organized by the institution for teaching and non-teaching staff during the last five years. (Metric Type : Derived , Question Type : QN , Evaluation : By DVV , Nature : Value)	8	3.8

ANNEXURE