



YEARLY STATUS REPORT - 2021-2022

Part A	
Data of the Institution	
1.Name of the Institution	GOVERNMENT COLLEGE OF ENGINEERING, AMRAVATI
• Name of the Head of the institution	Prof. Dr. A.M. Mahalle
• Designation	Principal
• Does the institution function from its own campus?	Yes
• Phone No. of the Principal	07212531929
• Alternate phone No.	07212531930
• Mobile No. (Principal)	9960590210
• Registered e-mail ID (Principal)	principal@gcoea.ac.in
• Address	Government College of Engineering, Amravati, Kathora Naka, Amravati
• City/Town	Amravati
• State/UT	Maharashtra
• Pin Code	444604
2.Institutional status	
• Autonomous Status (Provide the date of conferment of Autonomy)	01/07/2006
• Type of Institution	Co-education
• Location	Urban

• Financial Status	UGC 2f and 12(B)				
• Name of the IQAC Co-ordinator/Director	Prof. Dr. S. D. Londhe				
• Phone No.	07212531929				
• Mobile No:	7030797299				
• IQAC e-mail ID	sdlondhe@gmail.com				
3.Website address (Web link of the AQAR (Previous Academic Year)	https://gcoea.ac.in/?page=Nzk=&name=NAAC				
4.Was the Academic Calendar prepared for that year?	Yes				
• if yes, whether it is uploaded in the Institutional website Web link:	https://www.gcoea.ac.in/?page=Mzk=&name=Academic%20Calender				
5.Accreditation Details					
Cycle	Grade	CGPA	Year of Accreditation	Validity from	Validity to
Cycle 1	B+	2.68	2021	07/09/2021	06/09/2026
6.Date of Establishment of IQAC			01/10/2019		
7.Provide the list of Special Status conferred by Central and/or State Government on the Institution/Department/Faculty/School (UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC, etc.)?					
Institution/ Department/Faculty/School	Scheme	Funding Agency	Year of Award with Duration	Amount	
Nil	Nil	Nil	Nil	Nil	
8.Provide details regarding the composition of the IQAC:					
• Upload the latest notification regarding the composition of the IQAC by the HEI	View File				
9.No. of IQAC meetings held during the year	1				

<ul style="list-style-type: none"> Were the minutes of IQAC meeting(s) and compliance to the decisions taken uploaded on the institutional website? 	Yes	
<ul style="list-style-type: none"> If No, please upload the minutes of the meeting(s) and Action Taken Report 	No File Uploaded	
10. Did IQAC receive funding from any funding agency to support its activities during the year?	No	
<ul style="list-style-type: none"> If yes, mention the amount 		
11. Significant contributions made by IQAC during the current year (maximum five bullets)		
<p>The external agency is appointed for conduction of online proctored examination where faculty act as an invigilator for a small group of students constantly monitoring their actions during the examination and also the inbuilt record of the student's activities through the camera and the supporting software. Systematic redressal of grievances with regard to online examinations and the problems faced by the students during examinations In spite of all odds posed by the pandemic, two faculty development programs were organized in the online mode The online platform named "WEBEX" is employed officially for conducting the online classes, meetings, and recording of the events. The faculty were made aware by training them to use the other available online platforms to carry out teaching, assignment submission, examination and assessment. The services of the outside experts and in-house faculty members were availed to address the training.</p>		
12. Plan of action chalked out by IQAC at the beginning of the academic year towards quality enhancement and the outcome achieved by the end of the academic year:		

Plan of Action	Achievements/Outcomes
1. Conducting online classes	1. Successfully conducted
2. Conducting online examination	2. Conducted with active proctoring
3. Full time internships for students	3. Implemented
4. Training faculty to use online platforms for teachinglearning process	4. Training faculty to use online platforms for teachinglearning process
13.Was the AQAR placed before the statutory body?	No
<ul style="list-style-type: none"> Name of the statutory body 	
Name of the statutory body	Date of meeting(s)
BOG Meeting Awaited	Nil
14.Was the institutional data submitted to AISHE ?	Yes
<ul style="list-style-type: none"> Year 	
Year	Date of Submission
2021-2022	06/01/2023
15.Multidisciplinary / interdisciplinary	
<p>While submitting this report in the month of April 2023, the institute is working on new curriculum based on National Education Policy. The multidisciplinary courses will certainly be introduced in the said curriculum.</p>	
16.Academic bank of credits (ABC):	
<p>While submitting this report in the month of April 2023, the institute is working on new curriculum based on National Education Policy. The Academic Bank of Credits (ABC) will certainly be introduced in the said curriculum.</p>	

17.Skill development:
While submitting this report in the month of April 2023, the institute is working on new curriculum based on National Education Policy. The skill development courses will certainly be introduced in the said curriculum.
18.Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course)
While submitting this report in the month of April 2023, the institute is working on new curriculum based on National Education Policy. The IKS courses will certainly be introduced in the said curriculum.
19.Focus on Outcome based education (OBE):Focus on Outcome based education (OBE):
The Institution is practicing Outcome Based Education based on the guidelines of National Board of Accreditation. The Institution and the Departments have elaborately prepared its vision and mission statements. Each programme defines its Programme Specific Outcomes along with the Programme Outcomes defined by NBA and each course in the curricula has its Course Objectives/Course Outcomes in alignment with the Institution Mission/Vision statements. Each department has Department Faculty Board and Board of Studies to ensure the attainment of defined outcomes and accordingly the revisions are carried out for curricular improvements in terms of course content, delivery methods and assessment methods. The inputs and feedbacks received from Experts from industry /Academia, Internal Faculty members, Employers, Students, Alumni and parents play a vital role in revision of vision / mission/programme outcomes/programme specific outcomes /regulations/curricula/ course content.
20.Distance education/online education:
Institute does not offer any distance education / Online education courses.

Extended Profile

1.Programme

1.1

15

Number of programmes offered during the year:

File Description	Documents
Institutional Data in Prescribed Format	View File

2.Student2.1 **2094**

Total number of students during the year:

File Description	Documents
Institutional data in Prescribed format	View File

2.2 **437**

Number of outgoing / final year students during the year:

File Description	Documents
Institutional Data in Prescribed Format	View File

2.3 **1858**

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

File Description	Documents
Institutional Data in Prescribed Format	View File

3.Academic3.1 **863**

Number of courses in all programmes during the year:

File Description	Documents
Institutional Data in Prescribed Format	View File

3.2 **87**

Number of full-time teachers during the year:

Extended Profile

1. Programme

1.1 15

Number of programmes offered during the year:

File Description	Documents
Institutional Data in Prescribed Format	View File

2. Student

2.1 2094

Total number of students during the year:

File Description	Documents
Institutional data in Prescribed format	View File

2.2 437

Number of outgoing / final year students during the year:

File Description	Documents
Institutional Data in Prescribed Format	View File

2.3 1858

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

File Description	Documents
Institutional Data in Prescribed Format	View File

3. Academic

3.1 863

Number of courses in all programmes during the year:

File Description	Documents
Institutional Data in Prescribed Format	View File

3.2	87
Number of full-time teachers during the year:	
File Description	Documents
Institutional Data in Prescribed Format	View File
3.3	139
Number of sanctioned posts for the year:	
4.Institution	
4.1	265
Number of seats earmarked for reserved categories as per GOI/State Government during the year:	
4.2	21
Total number of Classrooms and Seminar halls	
4.3	862
Total number of computers on campus for academic purposes	
4.4	701.59
Total expenditure, excluding salary, during the year (INR in Lakhs):	

Part B

CURRICULAR ASPECTS

1.1 - Curriculum Design and Development

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

The recent major revision was taken up in 2019, based on the model curricula suggested by the AICTE. In year 2021-22, the institute offered new curriculum for first three years of UG programs, while final year students were undergoing the old curriculum structure. The PG programmes were completely under new scheme.

The programmes include Foundation courses (basic science, engineering science, humanities and social science), Professional Core, Professional Electives including industry designed and offered electives, Open Electives, Employability Enhancement Courses, and self-study courses in the curricula to provide a strong theoretical foundation blended with practical engineering skills with an emphasis on Social/professional responsibility and Ethical/Environment and Sustainability related issues. Apart from this, the students are encouraged to undergo Industrial Training/Internship. The departments also arrange Industrial Visits for each class of students at least once in every year.

The Institution is practicing Outcome Based Education as per the guidelines of NBA. Each department ensure the attainment of defined outcomes and accordingly review of curricula, delivery methods and assessment methods is done. The inputs and feedbacks received from Experts from Industry/Academia, Internal Faculty members, Employers, Students, Alumni and parents play a vital role in revision of outcomes.

Link of curriculum:<https://gcoea.ac.in/?page=Nw==&name=Curriculum>

File Description	Documents
Upload additional information, if any	No File Uploaded
Link for additional information	Nil

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

7

File Description	Documents
Minutes of relevant Academic Council/BOS meeting	No File Uploaded
Details of syllabus revision during the year	View File
Any additional information	No File Uploaded

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

123	
File Description	Documents
Curriculum / Syllabus of such courses	View File
Minutes of the Boards of Studies/ Academic Council meetings with approval for these courses	No File Uploaded
MoUs with relevant organizations for these courses, if any	No File Uploaded
Any additional information	No File Uploaded

1.2 - Academic Flexibility

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

123	
File Description	Documents
Minutes of relevant Academic Council/BoS meetings	No File Uploaded
Any additional information	No File Uploaded
Institutional data in prescribed format (Data Template)	View File

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

7	
File Description	Documents
Minutes of relevant Academic Council/BoS meetings	No File Uploaded
Any additional information	No File Uploaded
List of Add on /Certificate programs (Data Template)	View File

1.3 - Curriculum Enrichment

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

Students, irrespective of their genders, participate in various co-curricular activities such as workshops, project competitions, organization of paper contests, group discussions, technical quiz programs and various cultural activities. Institute organizes various programs inhouse. Also, they are encouraged for participating in such events outside the campus at University and national level. Further, the different auspicious days are celebrated which include Yoga, Sadbhavana, Sanvidhan, Ekata, etc. along with programs on the occasion of birth anniversaries of great personalities.

The girls and boys together work in project batches participate in the project competitions and national level contests like BAJA and TIFAN, to name a few. Quite often, the project work undertaken addresses the social, industrial and appropriate technology problems related to environment and sustainability.

The courses that particularly address the issues outlined in title include Human values and Ethics, Introduction to Constitution of India, Environmental Studies, Effective Technical Communication, Minor Project, Project Phase I and II, Seminar, Environmental Pollution Control, Industrial Training and Visit, Human Resource and Economics, Industrial Organization and Management, Project Management, Operation Research, etc. that form the part of the curricula of UG program. The Institute offers separate PG program in Environmental Engineering.

Link of curriculum:

1. <https://gcoea.ac.in/?page=Nw==&name=Curriculum>
2. <https://gcoea.ac.in/downloads/Draft-Curriculum-Second-Year-Civil-20-211.pdf>
3. https://gcoea.ac.in/downloads/B_Tech_Second_Year_Electrical_Engineering_2020-21-2.pdf
4. https://gcoea.ac.in/downloads/B_Tech_Second_Year_Computer_Science_and_Engineering_2020-21.pdf
5. <https://gcoea.ac.in/downloads/BTech-Final-Year-Instrumentation-Engg-2022-231.pdf>

File Description	Documents
Upload the list and description of the courses which address issues related to Gender, Environment and Sustainability, Human Values and Professional Ethics in the curriculum	No File Uploaded
Any additional information	No File Uploaded

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

13

File Description	Documents
List of value-added courses	View File
Brochure or any other document relating to value-added courses	No File Uploaded
Any additional information	No File Uploaded

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

1687

File Description	Documents
List of students enrolled	View File
Any additional information	No File Uploaded

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

365

File Description	Documents
List of programmes and number of students undertaking field projects / internships / student projects	View File
Any additional information	No File Uploaded

1.4 - Feedback System

1.4.1 - Structured feedback and review of the syllabus (semester-wise / year-wise) is

B. Any 3 of the above

obtained from 1) Students 2) Teachers 3) Employers and 4) Alumni	
File Description	Documents
Provide the URL for stakeholders' feedback report	Nil
Upload the Action Taken Report of the feedback as recorded by the Governing Council / Syndicate / Board of Management	No File Uploaded
Any additional information	No File Uploaded
1.4.2 - The feedback system of the Institution comprises the following	C. Feedback collected and analysed
File Description	Documents
Provide URL for stakeholders' feedback report	Nil
Any additional information	No File Uploaded
TEACHING-LEARNING AND EVALUATION	
2.1 - Student Enrollment and Profile	
2.1.1 - Enrolment of Students	
2.1.1.1 - Number of students admitted (year-wise) during the year	
421	
File Description	Documents
Any additional information	No File Uploaded
Institutional data in prescribed format	View File
2.1.2 - Number of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc.) as per the reservation policy during the year (exclusive of supernumerary seats)	
250	

File Description	Documents
Any additional information	No File Uploaded
Number of seats filled against seats reserved (Data Template)	View File

2.2 - Catering to Student Diversity

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

The institute organizes the orientation programme for newly admitted students. During the year 2021-22, the programs were organized in offline mode. Apart from remedial classes for poor performing students, the special audit courses are offered for students admitted directly to second year. The institution follows a well-designed academic plan to implement desired learning objectives, assess the students and guide them to improve their academic performance.

During first half of the year 2021-22 (i.e. odd semester), the teaching-learning and assessment were carried out in the online mode, whereas during the second half (even semesters) the teaching-learning and assessment were carried out in the regular (offline) mode. The Institute adapted itself to the changed scenario and taken the relevant decisions pertaining to academics from time to time to cater the needs of the students.

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

2.2.2 - Student – Teacher (full-time) ratio

Year	Number of Students	Number of Teachers
01/07/2021	2094	87

File Description	Documents
Upload any additional information	No File Uploaded

2.3 - Teaching- Learning Process

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

The curriculum has theory, laboratories, workshops, seminars & project work to attain the relevant program outcomes outlined by National Board of Accreditation. During the first half of the year 2021-22, the faculty and students have to face unprecedented situation. The new ways and means were to be discussed, deliberated and followed to carry out the academics. The Institute took up the well-organized steps and measures to face the challenges posed by the pandemic. The laboratory courses were conducted in the virtual mode during the odd semester of the year 2021-22.

The examples of student centric methods like experiential learning, problem solving methodologies etc. being used by the institute is as given below.

- Minor and Major project
- Case studies
- Student internship programs
- Skill development programs
- Expert Talks
- Self Study

Link of curriculum:<https://gcoea.ac.in/?page=Nw==&name=Curriculum>

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

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

In the first half (odd semesters) of the year 2021-22, every faculty have continued with the new avenues of the entire teaching learning process. The students were facilitated by sharing learning material in the form of power point presentations and soft copies of the notes prepared by the faculty. The awareness is created for the NPTEL, MOOCS and SWAYAM courses available for

enhancing the knowledge in common as well as specialized areas. The laboratory courses were conducted in the virtual mode. The soft skills trainings were arranged in the online mode. Also, students were encouraged to take up the AICTE offered industrial and other skill based trainings made available at national level. The library resources in the form of e-books and journals were made available to the students by the Institute. Conduction of examinations, assessment of laboratory and theory courses, and assignments submission is also carried out online by the teachers and controller of examination.

In the second half (even semesters) of the year 2021-22, teaching-learning process was resumed in conventional mode (offline mode). However, the students were still encouraged to use NPTEL, MOOCS and SWAYAM courses available for enhancing the knowledge in common as well as specialized areas.

File Description	Documents
Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process	Nil
Upload any additional information	No File Uploaded

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

2.3.3.1 - Number of mentors

90

File Description	Documents
Upload year-wise number of students enrolled and full-time teachers on roll	No File Uploaded
Circulars with regard to assigning mentors to mentees	No File Uploaded

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

Detailed academic calendar indicating dates for all scheduled activities such as commencement of classes for each semester, online registration for semester, all class tests/ midterm exams, end of the term, end semester exams (theory and practical), list of holidays and vacations is being prepared well in advance and

then is discussed, modified (if required) and then approved in academic program evaluation committee and finally in the academic council. The approved academic calendar is uploaded on institute's website and displayed on the notice board of all departments to enable all students to aware of all academic activities before/at the time of commencement of academic year.

In year 2021-22, the rescheduling of the activities was carried out from time to time as per the need and it was communicated to the students by displaying on the website, informing in the class-wise Whatsapp groups, and through respective teachers handling the courses.

Every faculty has liberty to prepare and implement their own teaching plan and methodology for their subjects. The thinking behind this is to have more flexible and student centric teaching learning process.

Link of the calendar for
2021-22 <https://gcoa.ac.in/?page=Mzk=&name=Academic%20Calender>

File Description	Documents
Upload the Academic Calendar and Teaching Plans during the year	No File Uploaded

2.4 - Teacher Profile and Quality

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

90

File Description	Documents
Year-wise full-time teachers and sanctioned posts for the year	View File
List of the faculty members authenticated by the Head of HEI	No File Uploaded
Any additional information	No File Uploaded

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

39

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

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

1567

File Description	Documents
List of teachers including their PAN, designation, Department and details of their experience	View File
Any additional information	No File Uploaded

2.5 - Evaluation Process and Reforms

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

43

File Description	Documents
List of Programmes and the date of last semester-end / year-end examinations and the date of declaration of result	View File
Any additional information	No File Uploaded

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

0

File Description	Documents
Upload the number of complaints and total number of students who appeared for exams during the year	No File Uploaded
Upload any additional information	No File Uploaded

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

For evaluation of student's academic performance, old scheme comprised Teacher's Assessment - 10 marks, Class Test I and II - 15 marks each, and the End-Semester Examination (ESE) - 60 marks. In the new scheme (since 2019-20), Class Test I and II are replaced with single Mid Semester Examination (MSE) - 30 marks. In both the schemes, laboratory courses are evaluated continuously throughout the semester based on the parameters including Technical competence, Innovation, Participation in team, Integrity and Responsibility.

During academic year 2021-22, all above activities for 5th and 7th semester were performed online. Also MSE for 1st and 3rd semester was conducted online. The ESE in online mode was carried out in the form multiple choice questions through the centralized and auto proctored examination. The external agency was appointed to carry out proctored examination by appointing faculty members as proctors. The assessment of examinee was communicated to the respective faculty through the Dean (Academic). For 2nd, 4th, 6th and 8th semester, all activities were conducted offline as per usual format.

The institute utilizes cloud based MIS software for registration of the students and result processing. The students have direct access to the MIS through their login ID to check their marks and grades.

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

2.6 - Student Performance and Learning Outcomes

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

POs for each of the engineering UG program are specified by National Board of Accreditation (NBA). PSOs are the specific program wise outcomes that have been separately formulated for the programs offered by all the Departments of the Institute. COs are the measurable parameters which evaluate students' performance for each course that is undertaken in every semester. COs are written for each of the course of all the programs offered presently. The POs, PSOs and COs are displayed on the website prominently. The separate meetings were conducted with peer groups, faculty and supporting staff to make them aware of outcomes. The teachers themselves were involved in preparing vision, mission, PEOs, PSOs and COs. The students are informed about the course outcomes by the respective teachers. The POs and PSOs are also exhibited as posters in the respective Departments. The POs, PSOs and COs are elaborated in the syllabi of all the programs.

Link of curriculum:<https://gcoa.ac.in/?page=Nw==&name=Curriculum>

File Description	Documents
Upload COs for all courses (exemplars from the Glossary)	No File Uploaded
Upload any additional information	No File Uploaded
Link for additional Information	Nil

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

The CO attainment level is measured using the result of the internal assessment and End Semester Examination/external examination as a Direct Assessment and course feedback by students and expert feedback by peer experts as an indirect assessment. Direct assessment is taken as 70% and indirect assessment is taken as 30%.

Later, PO and PSO attainment is calculated using Course-PO and PSO articulation matrix.

The complete procedure of calculation of CO and PO attainment is elaborated in the additional information uploaded herewith.

The data used for calculation of CO-PO attainment includes:

Marks obtained in the examination

Lab work actual performance and internal continuous evaluation and external examination

Teacher's assessment

Mini project: include design, problem identification, problem formulation fabrication, site visits, market survey, model and prototype based work, report writing

Project: includes design, problem identification, problem formulation fabrication, experimental, data analysis

Feedback of faculty members regarding student's performance and degree of achievement of POs

Feedback from students about faculty with regard to teaching skills/methodology, coverage of syllabus and related topics covered

Feedback from alumni regarding achievement of COs

Students Placement Record

Feedback from employer regarding performances of students in different sectors.

Student's Exit feedback from passing graduates.

Upload previously uploaded file for this metric

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

2.6.3 - Pass Percentage of students

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

Institution	
388	
File Description	Documents
Upload list of Programmes and number of students appear for and passed in the final year examinations	View File
Upload any additional information	No File Uploaded
Paste link for the annual report	Nil
2.7 - Student Satisfaction Survey	
2.7.1 - Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design its own questionnaire). Results and details need to be provided as a weblink	
https://gcoea.ac.in/downloads/2_7_1_Students_Satisfaction_Survey1.pdf	
RESEARCH, INNOVATIONS AND EXTENSION	
3.1 - Promotion of Research and Facilities	
3.1.1 - The institution's research facilities are frequently updated and there is a well-defined policy for promotion of research which is uploaded on the institutional website and implemented	
<p>The institute has laboratories of six departments which are recognized as research centre by SantGadge Baba Amravati University, Amravati. These laboratories are well equipped and updated every year by procuring up-to-date equipment.</p> <p>The institute has two Centres of Excellence (CoE) to provide the latest research facilities to the faculty members as well as students in the areas of Industrial Internet of Things, and Instrumentation Control and Automation.</p> <p>To improve technical competency of faculty members and to enhance the research work in the institute, the Institute has adopted the policy to provide financial assistance to the faculty for attending conferences and to publish the research papers in reputed journals. Financial assistance is provided to attend a National/ International conference to present a paper, chair a</p>	

session or deliver an expert talk. The R&D policy for faculty is available at the institute, which covers all aspects of faculty development and is available on the institute's website.

Financial assistance is also provided to attend a training organised by institute of repute, for content updating.

Faculty members are motivated to complete their PG/ Ph. D under Quality Improvement Programme by deputing them full time to NITs and IITs.

File Description	Documents
Upload the Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption	No File Uploaded
Provide URL of policy document on promotion of research uploaded on the website	https://www.gcoea.ac.in/?page=NzM=&name=R%20&%20D
Any additional information	No File Uploaded

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

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

00

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

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

00

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

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

8.1

File Description	Documents
e-copies of the grant award letters for research projects sponsored by non-governmental agencies/organizations	View File
List of projects and grant details	No File Uploaded
Any additional information	No File Uploaded

3.2.2 - Number of teachers having research projects during the year

2

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	Nil
List of research projects during the year	View File

3.2.3 - Number of teachers recognised as research guides

39

File Description	Documents
Upload copies of the letter of the university recognizing teachers as research guides	View File
Institutional data in Prescribed format	View File

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

2

File Description	Documents
Supporting document from Funding Agencies	View File
Paste link to funding agencies' website	Nil
Any additional information	No File Uploaded

3.3 - Innovation Ecosystem

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

The Institute has adopted the R& D policy to reimburse the expenses to the students for participating in regional and national level technical competitions, paper presentation contests, project competitions, etc. The policy is available on website.

Apart from the above competitions, the faculty and students are involved in filing patents with regard to their innovative work. For the filing of patents, copyrights, and industrial designs, a memorandum of understanding has been signed with Patent Consultant M/S BLI Consultancy Pvt Ltd.

The institute has also framed the Institute Start-up Policy in line with the National Innovation and start-up policies to meet the needs of faculty and students who want to convert their innovation ideas into start-ups.

The institute is planning to develop an Incubation centre to facilitate research and Innovation culture within its campus. Necessary technical guidance, professional expertise and funding will be offered to the innovators. It is also proposed to establish infrastructural facility of around 1000 Sq.M. built up area.

The institute has two Centres of Excellence (CoE) to provide the latest research facilities to the faculty members as well as students in the areas of Industrial Internet of Things, and Instrumentation Control and Automation.

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

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

00

File Description	Documents
Report of the events	No File Uploaded
List of workshops/seminars conducted during the year	View File
Any additional information	No File Uploaded

3.4 - Research Publications and Awards

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

B. Any 3 of the above

File Description	Documents
Code of Ethics for Research, Research Advisory Committee and Ethics Committee constitution and list of members of these committees, software used for plagiarism check	No File Uploaded
Any additional information	No File Uploaded

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

3.4.2.1 - Number of PhD students registered during the year

32

File Description	Documents
URL to the research page on HEI website	Nil
List of PhD scholars and details like name of the guide, title of thesis, and year of registration	View File
Any additional information	No File Uploaded

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

68

File Description	Documents
List of research papers by title, author, department, and year of publication	View File
Any additional information	No File Uploaded

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

10

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://www.taylorfrancis.com/chapters/edit/10.1201/9781003146711-6/amalgamation-blockchain-technology-cloud-computing-secure-adaptable-cloud-himanshu-taiwade-premchand-ambhore?context=ubx&refId=17c73797-a90c-410f-835a-e0ebd8bf53df

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

3.4.5.1 - Total number of Citations in Scopus during the year

322

File Description	Documents
Any additional information	No File Uploaded
Bibliometrics of the publications during the year	No File Uploaded

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

3.4.6.1 - h-index of Scopus during the year

13.83

File Description	Documents
Bibliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	No File Uploaded
Any additional information	No File Uploaded

3.5 - Consultancy

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

165.09

File Description	Documents
Audited statements of accounts indicating the revenue generated through consultancy and corporate training	View File
List of consultants and revenue generated by them	View File
Any additional information	No File Uploaded

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

00

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

3.6 - Extension Activities

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

The institute, in normal circumstances, conduct number of activities to sensitize the students about social issues. Following programs were conducted.

1. Webinar on Eye Donation and Organ Donation (13th June,2021)

1. The chief guest of the program was Mr.Swapnil Arun Gawande, the managing trustee and secretary of Deesha Group and Deesha Education Foundation.
2. As an impact of this session, many students enrolled them

selves as volunteers of the DEESHA group to spread messages and also filled out forms as an eye donor. Every year, in the first-year induction program, this session is repeated to create a longer impact.

2. Yoga Day Program (20th June , 2021)

This year, as every year, International Yoga Day was celebrated at Government College of Engineering Amravati. The keynote speaker and guide of this program was Hon. Dr. Mukul Guru along with his entire yoga team attended the event. He initially highlighted the importance of yoga in our lives. He then demonstrated some of the yoga asanas to the audience and also explained the benefits of those yogasanas to all. The yogasanas he demonstrated consisted mainly of Ardha Chakrasana, Sadrasasana, Sampurna Naukasana. He also mentioned 5 virtues namely diet, vihar, conduct, thought, and treatment.

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

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

00

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

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

19

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

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

1559

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

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

10

File Description	Documents
Copies of documents highlighting collaboration	View File
Any additional information	No File Uploaded

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

9

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

INFRASTRUCTURE AND LEARNING RESOURCES

4.1 - Physical Facilities

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

Every department is provided with built up space as per the requirements of AICTE in the form of class rooms, laboratories and seminar halls, staff rooms and departmental library. In

addition to this there are central facilities in the form of library, computing facility and student recreational facilities. Allied areas in the form of hostels, and mess cater the need of students. The campus also provides appropriate parking facility for cycles, two wheeler and four wheeler vehicles.

Every department has dedicated laboratories and classrooms. Each laboratory is equipped with sufficient number of required experimental setups. Computers in the campus are connected to internet. Central library is having a large collection of textbooks, journals (hard

copy and soft copy) and magazines. There is E-class room in the central library with a seating capacity of 30, where digital library facility is available to the students and faculty. Also e-journals and online books/learning material can be accessed.

The library provided the remote access to the students and the faculty of the Institute in the times of online education in the year 2021-22 as well. This initiative helped the students in carrying out their studies and fulfil their minor and major project and seminar requirements.

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

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

There are adequate facilities available on campus for various activities. Grounds spread over around 8 acres of land are available for the outdoor and indoor games that include Cricket, Foot-Ball, Basket Ball, Volleyball, Handball, Indoor Games: Badminton, Table Tennis, Carom / Chess, Body Gym.

The students themselves manage different clubs like Robotics Club, Fine art Club

Photography Club, Music and Dramatics Club, etc. Also, there are students association e.g. CESA, Civil Engineering Students association (similarly MESA, EESA etc. for other disciplines) for conduct of co-curricular activities. There are different student chapters of professional societies e.g. ISTE, IE(I), IEEE etc.in the departments. Students get proper exposure through extracurricular and co-curricular activities conducted through the above clubs, associations and chapters.

In the Year 2021-22, under Kalpana Chawla trophy, interdepartmental sports competition was organized that Badminton, Cricket, Volley Ball, Footbal, Chess, etc. The department with maximum number of wins, viz., Civil Engineering bagged the trophy.

The College Annual Day Function, Zenith 2022 was celebrated with various cultural activities that include Drama, Sugam Sangeet, Variety Entertainment, Art-Craft-Value Education, Dance, Fishponds, etc.

College Magazine, which includes the articles written by students, activities conducted by various departments etc., was also published in 2021- 22.

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

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

21

File Description	Documents
Upload any additional information	View File
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	View File

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

613.78

File Description	Documents
Upload audited utilization statements	No File Uploaded
Details of Expenditure, excluding salary, during the years	View File
Any additional information	No File Uploaded

4.2 - Library as a Learning Resource

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

Data Requirement: Provide a description of the library with

- Name of the ILMS software - SLIM21 (System for Library Information Management)
- Nature of automation (full or partial) - Fully
- Version - upgrade 3.8.0
- Year of automation - 2003

Present a write-up within a maximum of 200 words.

File Description:

- Upload any additional information

Paste link for additional information

Following information provides the insight into the library resources and facilities at a glance along with relevant software for automation.

Books

82684 (General Section- 46072, Book Bank Section-36612)

E-Journals (National & International)

904 (ASME-33, ASCE-35, IEEE-190, Science Direct-296, Taylor & Feancis-350)

News Papers

12 (Marathi- 06, Hindi- 01, English- 05)

Magazines General

24 (English- 19, Marathi- 05)

E-Books

481 (McGraw Hill-130, Vidya e-books-34, Pearson-317)

Electronic Database Videos, VCDs & DVDs

3998

NPTEL Video Course

90

OPAC (Online Public Access Catalog) Service

Also available on institute intranet.

Library Automation with SLIM

Automates nearly every library task.

NDLI Club (National Digital Library of India Club)

Registration number is INMHNCXJPA67X5L. Institute Users are registered with NDLI Club , which is an initiative of MHRD to

develop a framework of virtual repository of learning resources.

E -Library

A separate E-Room with 20 multimedia PC with uploaded DVDs /VCDs/NPTEL videos & with the Internet facility.

Webinar & MOOC, Educational channel facility

Seminar room with capacity of 30 along with LCD projector facility is available for Webinar purpose along with TV facility.

Plagiarism Software:Typeset

Helpful in publishing research papers.

Multimedia PC

39

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	https://ieeexplore.ieee.org/Xplore/home.jsp

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

A. Any 4 or more of the above

File Description	Documents
Details of subscriptions like e-journals, e-books, e-ShodhSindhu, Shodhganga membership	View File
Upload any additional information	No File Uploaded

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

60.17

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

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

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

42

File Description	Documents
Upload details of library usage by teachers and students	No File Uploaded
Any additional information	No File Uploaded

4.3 - IT Infrastructure

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

The Institute has upgraded the current internet bandwidth from 100Mbps to 1 Gbps, under National Knowledge Network (NKN), a Central Government scheme. Further, the BSNL leased line capacity is increased from 75 Mbps to 140 mbps. The important additional procurement includes the Cisco Firewall for providing network security, number of advanced Wi-Fi devices and switches, etc. The wireless access points and switches were added to provide better wireless internet service to the users. Simultaneously, the networking of various departments is strengthened to cater to 1000 physical nodes and more than 1000 wireless internet users.

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://www.gcoea.ac.in/?page=NzI=&name=Data%20Center

4.3.2 - Student - Computer ratio	
Number of Students	Number of Computers
2094	760
File Description	Documents
Upload any additional information	No File Uploaded
4.3.3 - Bandwidth of internet connection in the Institution and the number of students on campus	A. 50 Mbps
File Description	Documents
Details of bandwidth available in the Institution	View File
Upload any additional information	No File Uploaded
4.3.4 - Institution has facilities for e-content development: Facilities available for e-content development Media Centre Audio-Visual Centre Lecture Capturing System (LCS) Mixing equipments and software for editing	D. Any one of the above
File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil
List of facilities for e-content development (Data Template)	View File
4.4 - Maintenance of Campus Infrastructure	
4.4.1 - Expenditure incurred on maintenance of physical and academic support facilities, excluding salary component, during the year (INR in lakhs)	
627.12	

File Description	Documents
Audited statements of accounts	View File
Upload any additional information	No File Uploaded

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

The construction of new buildings and major maintenance are carried out by Public Works Department of Government of Maharashtra. In addition to this, the Institute has its own Building and Works Committee that comprises Principal (Chairman), one BoG member, one Architect, PWD representative, AMC representative, Dean (Construction) and Head (Civil) as a member secretary. This committee takes decisions on infrastructure developments, electrical installations and budgetary provisions thereof. Minor civil works are executed and monitored by the committee.

Institute has few regular employees to look after the cleanliness. Apart from that, the housekeeping work and gardening is carried out by hired agencies. Major electrical installation and maintenance work is looked after by electrical division of PWD. There is a set system for addressing the minor electrical problems which is supervised by the Electrical Engineering Department.

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

STUDENT SUPPORT AND PROGRESSION

5.1 - Student Support

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

1561

File Description	Documents
Upload self-attested letters with the list of students receiving scholarships	View File
Upload any additional information	No File Uploaded

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

00

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

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

A. All of the above

File Description	Documents
Link to Institutional website	Nil
Details of capability development and schemes	View File
Any additional information	View File

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

776

File Description	Documents
Any additional information	No File Uploaded
Number of students benefited by guidance for competitive examinations and career counseling during the year (Data Template)	View File

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

A. All of the above

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

5.2 - Student Progression

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

264

File Description	Documents
Self-attested list of students placed	View File
Upload any additional information	No File Uploaded

5.2.2 - Number of outgoing students progressing to higher education

6

File Description	Documents
Upload supporting data for students/alumni	No File Uploaded
Details of students who went for higher education	View File
Any additional information	No File Uploaded

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

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

18

File Description	Documents
Upload supporting data for students/alumni	View File
Any additional information	No File Uploaded

5.3 - Student Participation and Activities

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

5

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

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

STUDENTS COUNCIL:

It comprises all the class representatives (three from each class) of all the programs, the University representative, ladies representative, gymkhana. The council conducts various programs

and workshops for the betterment of the students. The CRs meetings are held regularly to get the feedback regarding academics and the other problems.

GYMKHANA COUNCIL:

It is a students' body that include the secretaries of various sports and co-curricular activities. It is headed by the General Secretary, Gymkhana and supported by the Joint General Secretary and Ladies Representative. It consists of a total of 22 secretaries that are selected through an interview process. These secretaries are responsible for organising their respective activity and guide the student participants in the University level competitions. The major events organized are Annual Gathering, 'Zenith', Kalpana Chawla Sports Trophy and the technical competition 'Prajwalan'.

ANTI-RAGGING COMMITTEE: As per norms of AICTE, comprises one student representing each hostel (3 boy's and 2 girl's hostels) in the campus.

WOMEN'S GRIEVANCE COMMITTEE: As per the guide lines from SGB Amravati university, the committee comprises one UG students and one PG student.

ACADEMIC BOARD: Two student representatives in the board, one each from UG and the PG.

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

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

00

File Description	Documents
Report of the event	No File Uploaded
List of sports and cultural events / competitions organised per year	View File
Upload any additional information	No File Uploaded

5.4 - Alumni Engagement

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

The activities of association include:

1. Alumni Meet

An Alumni Meet is organised every year by the alumni association. The batch completing 25 years organises the function along with get together.

2. Alumni Support

The association supports many activities every year that includes fresher's welcome program and activities during the annual gathering, sports trophy and technical competition.

3. Expert talk by the Alumni- Miss. Sagarika Karanje

Miss. Sagarika Karanje, Senior Business Consultant at Syncordis Consulting, London, UK, graduated in Electrical Engineering in 2015 students with detailed discussion on the ample of opportunities and career options. She has also emphasised on the increase the networks with the help of Linked-In and try to have a good communication with people who are excellent in their respective domains and had given the career guidance.

4. Expert Lecture by Alumni - Mr. Prashant Gawande

Mr. Prashant Gawande, Executive Engineer, MAHAGENCO delivered lecture on the key-technical aspects of "Functioning of Thermal Power Plant" on 17th September 2021. The talk emphasized the practical scenarios and methods to improve the thermal efficiency of the power plant.

5. Scholarship

Alumni Association, every year, provides scholarship to the economically weak students based on their merit.

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

5.4.2 - Alumni's financial contribution during the year

E. <2 Lakhs

File Description	Documents
Upload any additional information	No File Uploaded

GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 - Institutional Vision and Leadership

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

The Board of Governors (BoG) is vested with powers to frame the policies for overall development, administration, finance and academics. The BoG is supported with other statutory bodies as defined by UGC for autonomous institutes. These bodies include Academic Council (Senate), Finance Committee (FC), Building Works Committee (BWC), Academic Program Evaluation Committee (APEC), Subject Boards (BoS) and Department Faculty Board (DFB). In each of the above committees, the faculty members are nominated and are involved in decision making. BoG is very keen to see that the various programs have been designed and implemented in consultation with all the stake holders and so also with the expert guidance of faculty from IIT, NIT and industrial experts.

The management and administration are supportive to the staff and students in order to achieve their goals. The institute has well documented financial procedure and rules. Sufficient funds are available in the form of its own deposits, State Govt. grant (salary) and funding agencies. The institute has developed

various policies in order to align institutional progress with vision and mission.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	https://www.gcoea.ac.in/?page=NDU=&name=Board%20of%20Governor

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

The Board of Governors takes the policy decisions. All the statutory and non-statutory committees are constituted as per the UGC guidelines for autonomy. The meetings are conducted regularly and the minutes are well recorded. All these committees derive inputs from stake holders, viz., internal faculty, staff, students, University, Directorate, alumni, faculty experts from outside, Industries, Research Organizations etc. Academic activities are also audited by internal and external committees. Periodic feedbacks are obtained from students, parents, alumni, employers etc for enabling overall improvement of the college. The college has also framed academic rules under Autonomy.

This college practices participative management at various levels. Various positions, namely, Dean (Planning and Administration), Dean (Academics), Dean (R&D) Dean (QA), Dean (IIIC and TPO), Dean (Students welfare), Dean (Corporate relations), Planning and evaluation committee, Gymkhana Managing Committee, Library Committee, Faculty Advisors for student activities, Coordinators, Purchase Committee, Electrical Maintenance In-charge, Water Maintenance In-charge, Hostel wardens, Rector, Security In-charge, Canteen In-charge, Heads of Departments, Grievances Committees for students, supporting staff, faculty, Women's Grievance Cell, Anti Ragging Committee, Garden Committee, Training and Placement Committee, Campus Cleaning Committee, etc. are available and working is very smooth.

File Description	Documents
Upload strategic plan and deployment documents on the website	No File Uploaded
Upload any additional information	View File
Paste link for additional Information	https://www.gcoea.ac.in/?page=NDQ=&name=Organization%20Structure

6.2 - Strategy Development and Deployment

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

The Institute has decided the strategic goals in accordance with the Vision, Mission, quality policy and core values. The following are the broader areas of activities.

- Industry Institute Interaction
- Placement, Internship and Career Guidance
- Financial Planning and Good Governance
- Physical Infrastructure
- Faculty and Staff Trainings
- Teaching Learning and Evaluation Process
- Entrepreneurship
- Financial Management
- Research Development and Innovation
- Quality Assurance
- Testing and Consultancy

File Description	Documents
Strategic Plan and deployment documents on the website	No File Uploaded
Paste link for additional information	Nil
Upload any additional information	No File Uploaded

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

Service rules, procedures, recruitment and promotional policies are governed by Maharashtra Civil Services Rules and government norms revised from time to time. Facility of upward movement to

the higher post under time scale is available for faculty as well as technical and non-technical supporting staff. Grievance redressal committees for faculty, supporting staff, women, students and SC/ST faculty and staff are nominated and working in the institute. These committees are responsible for timely clearing of relevant cases. The link to documentary evidences of the different committees is provided herewith.

All the statutory and non-statutory bodies that are required as per the UGC guidelines with regard to autonomy are in place. The meetings of these bodies are carried out as per the norms and procedures and minutes are displayed on the website.

The appointment of teachers are processed by public service commission through its official process and all service conditions and rules are governed by code of conduct prescribed in Maharashtra Civil Service Rules(MCSR), which are modified time to time.

File Description	Documents
Paste link to Organogram on the institution webpage	Nil
Upload any additional information	No File Uploaded
Paste link for additional Information	Nil

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

A. All of the above

File Description	Documents
ERP (Enterprise Resource Planning) Documen	No File Uploaded
Screen shots of user interfaces	View File
Details of implementation of e-governance in areas of operation	View File
Any additional information	No File Uploaded

6.3 - Faculty Empowerment Strategies

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

Being a Government institute, the support for upliftment of the faculty and staff alongwith social & family security is provided as given below.

- Pension scheme as per rules
- Group Insurance Scheme
- Accidental Insurance
- Medical claim facility for employees and their dependents
- Loan for house, car, motorcycle, computer
- Festival advance of Rs. 10000 during the Diwali festival for Class III and Class IV employees .
- Leave Travel concession once in four year in State
- Home town travel allowance once every two year
- General Provident Fund and Advance/Loan availability
- For faculty, Career Advancement Scheme
- For supporting staff, time scale promotion
- Deputation for upgradation of qualifications, M.Tech. and Ph.D., for faculty under

Quality Improvement Program

- Study leave for two years for other employees
- Assurance of service to the dependents of the deceased employee on compassionate grounds
- Cooperative society with contribution from the employees themselves, under which, emergency loan is available

Institute initiatives

- Grant for Patent.

- Grant for attending conference/ seminars, publishing research paper, etc.
- Sports and cultural program for faculty and staff once in a year at R.O. level.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	https://www.gcoea.ac.in/?page=NzM=&name=R%20&%20D

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

3

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

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

2

File Description	Documents
Reports of the Human Resource Development Centres (UGC HRDC/ASC or other relevant centres)	View File
Upload any additional information	No File Uploaded

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

35

File Description	Documents
Summary of the IQAC report	No File Uploaded
Reports of the Human Resource Development Centres (UGC ASC or other relevant centers)	View File
Upload any additional information	View File

6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly

Audit (External)

The financial audit of the Institute is carried out by Accountant General (Maharashtra-2) once in two or three years. All the grants received from State Government, other agencies like AICTE, DST, fees collected and internal revenue generated are scrupulously audited. The audit committee submits its report along with the relevant findings and objections, if any to the Institute and the Director, Technical Education. The compliance of the objections raised by the auditors is given by the Institute within the framework of rules and regulations.

Audit (Internal)

After grant of autonomous status in 2006, the Institute is retaining student's tuition fee. The same is utilized for recurring and non-recurring expenditure of the Institute. The rules and regulations set by the State Government are followed by the Institute. As per the directives of Board of Governance (BoG), the internal audit is conducted at hands of renowned chartered accountant (CA), every year. The report is submitted by auditors to the Institute along with findings and objections, if any. The office then takes efforts to regularise the objections by taking necessary corrective measures and compliance. The audit report and its compliance is tabled in the Finance Committee meeting and the BoG meeting.

- Link to the audit report 2020-21

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

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

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

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

The institute became autonomous in 2006. In order to move towards self-sufficiency, the State Govt. Of Maharashtra allowed to retain the fee of the students admitted in the institute. Further, the institute receives Salary Grant and separate grants for construction of new facilities from the State Government. The institute has established four funds as per the directives, namely, corpus fund, staff development fund, depreciation fund and maintenance fund.

The institute receives Research and Lab development Grants from agencies like AICTE, DST, etc. Also, grants are obtained for Faculty Development Programs.

The institute also generates its internal revenue by offering testing, consultancy and continuing education program.

The preparation and approval of budget of the institute is a systematic process. The departments, deans and various offices submit requisition of funds for the ensuing financial year. The draft budget is prepared based on requisition by member secretary, finance committee and Dean (Finance). The finance committee discuss the budget in detail and recommend it with necessary revision to the Board of Governance (BoG) for approval. The budget

finally approved by BoG, is followed for respective Financial Year. In case of emergent supplementary demands, similar procedure is adopted.

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

6.5 - Internal Quality Assurance System

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

IQAC cell has been in place to cater the needs outlined as per the guidelines of NAAC.

The specific initiatives undertaken during the year include the following

- The external agency is appointed for conduction of online proctored examination where faculty act as an invigilator for a small group of students constantly monitoring their actions during the examination and also the inbuilt record of the students activities through camera and the supporting software.
- Systematic redressal of grievances with regard to online examinations and the problems faced by the students during examinations
- In year 2021-22, two faculty development programs were organized in the online mode: (1) Introduction to Machine Learning in Research, and (2) Developing Internet of Things(IoT) Solutions and Azure.
- The online platform named "WEBEX" is employed officially for conducting the online classes, meetings, and recording of the events.
- The faculty were made aware by training them to use the other available online platforms to carry out teaching, assignment submission, examination and assessment. The services of the outside experts and inhouse faculty members

were availed to address the trainings.

File Description	Documents
Upload any additional information	View File
Paste link for additional information	Nil

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

Two examples of facilitation by IQAC are noted below:

- The external agency is appointed for conduction of online proctored examination where faculty act as an invigilator for a small group of students consatntly monitorng their actions during the examination and also the inbuilt record of the students activities throgh camera and the supporting software.
- The faculty were made aware by training them to use the available online platforms to carry out teaching, assignment submission, examination and assessment. The services of the outside experts and inhouse faculty members were availed to address the tranings.
- Two centers of excellence were established in the Institute. Initiative was taken up in 2019-20, however, it could be materialized in 2021-22.
- The progress of teaching throughout the semester is monitored by conducting two meetings of Class Representatives for review and feedback.
- Curriculum is updated rcently recently beginning from from first year in 2019-20. Learning outcomes are clearly stated for each of the courses. For undergraduate programs, in the year 2021-22, third year batch faced the new curriculum.

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

6.5.3 - Quality assurance initiatives of the institution include Regular meeting of the IQAC Feedback collected, analysed and used for improvement of the institution Collaborative quality initiatives with other institution(s) Participation in NIRF Any other quality audit recognized by state, national or international agencies (such as ISO Certification)	A. Any 4 or all of the above
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File Description	Documents
Paste the web link of annual reports of the Institution	Nil
Upload e-copies of accreditations and certification	No File Uploaded
Upload details of quality assurance initiatives of the institution	View File
Upload any additional information	No File Uploaded

INSTITUTIONAL VALUES AND BEST PRACTICES

7.1 - Institutional Values and Social Responsibilities

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

The Women's Grievance Committee is formed as per the guidelines and instructions received from SGB Amravati University. The purpose of this committee is to avoid the incidence of sexual harassment. The members of the Women's Grievance Committee are a senior lady faculty as chairman, BoG representative, a lady advocate, a social activist, two senior staff members and student representatives. Under this cell various programs like counseling sessions, workshops, career guidance programs, mental health awareness programs, guest lectures, etc. are regularly held in the institute. The main motto behind this is to bring about gender sensitivity. An overwhelming response is always observed from the students throughout the academic year.

The programs conducted in 2021-22 include:

An event on the occasion of International Women's Day, 8th March, was inaugurated by Tree Plantation Program. Chief guest Prof. Vanita Raut addressed the audience to enhance the quality of their

life by giving own self a priority and considering mental health an important aspect for attaining peace on the walks of performing every role as a woman. She interacted with students and faculties. She inspired all the women to be the driver of their entity and make the best out of it.

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

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

D. Any 1of the above

File Description	Documents
Geotagged Photographs	No File Uploaded
Any other relevant information	No File Uploaded

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

Solid waste management: - The Institute has four boys hostel and two girls hostel and residential quarters for wardens along with Principal's residence. The solid waste generated from this area is collected by sweepers. The garbage other than the solid waste are also collected by housekeeping personnel and handed over to municipal corporation personnel. The dry leaves and plant cuttings are collected at the identified location and shredded using machine. Then it is loaded into green bin composting unit. The composted manure is utilised in the gardens.

Liquid waste management: - Proper sewerage system is provided in the campus. Sewage from residential area is collected in one septic tank and overflow from the same is drain off with the help of sewer. The wastewater is disposed off into municipal sewer line.

E-waste management: - Electronic goods are put to optimum use. The irreparable electronic goods and damaged computers are written off and then sold to scrap vendor. The e-waste generated within the department buildings is collected at one location in the building and handed over to eligible contractor for the further processing.

Hazardous chemicals and radioactive waste management: - The unused UPS Batteries are exchanged with the licensed suppliers.

File Description	Documents
Relevant documents like agreements/MoUs with Government and other approved agencies	No File Uploaded
Geotagged photographs of the facilities	No File Uploaded
Any other relevant information	No File Uploaded

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

B. Any 3 of the above

File Description	Documents
Geotagged photographs / videos of the facilities	No File Uploaded
Any other relevant information	No File Uploaded

7.1.5 - Green campus initiatives include

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

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

A. Any 4 or All of the above

File Description	Documents
Geotagged photos / videos of the facilities	No File Uploaded
Various policy documents / decisions circulated for implementation	No File Uploaded
Any other relevant documents	No File Uploaded

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

<p>7.1.6.1 - The institution's initiatives to preserve and improve the environment and harness energy are confirmed through the following:</p> <ol style="list-style-type: none"> 1. Green audit 2. Energy audit 3.Environment audit 4.Clean and green campus recognitions/awards 5.Beyond the campus environmental promotional activities 	E. None of the above
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File Description	Documents
Reports on environment and energy audits submitted by the auditing agency	No File Uploaded
Certification by the auditing agency	No File Uploaded
Certificates of the awards received	No File Uploaded
Any other relevant information	No File Uploaded

<p>7.1.7 - The Institution has a disabled-friendly and barrier-free environment: Ramps/lifts for easy access to classrooms and centres Disabled-friendly washrooms Signage including tactile path lights, display boards and signposts Assistive technology and facilities for persons with disabilities: accessible website, screen-reading software, mechanized equipment, etc. Provision for enquiry and information: Human assistance,</p>	B. Any 3 of the above
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reader, scribe, soft copies of reading materials, screen reading, etc.

File Description	Documents
Geotagged photographs / videos of facilities	No File Uploaded
Policy documents and brochures on the support to be provided	No File Uploaded
Details of the software procured for providing assistance	No File Uploaded
Any other relevant information	No File Uploaded

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

The students from all types of backgrounds and hailing from the differed strata of the society seek admission in the Institute. There are students from all the backward classes and also from the economically weaker section. The Institute encourages and practices impartial outlook towards not only the students but also the faculty and supporting staff with cultural, regional, linguistic, communal, socio-economic and other diversities. All the policies are framed in the interest of the students, faculty and staff that are aimed equally at the welfare and well being of all.

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

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

On 26th November and on 26th January every year, the public reading of the preamble of the constitution is made as per the directives of the Government. The different programs and events organized for a week at the time of birth anniversary of Dr. B.R. Ambedkar every year to infuse the awareness of constitutional obligation, values, rights, duties and responsibilities of the citizens outlined in the constitution. On the occasion of Anti Terrorist Day (21st May), Sadbhavana Divas (20th August), National Unity Day (31st October

and 19th November), the oath of respective day is taken by students, faculty and staff.

File Description	Documents
Details of activities that inculcate values necessary to transform students into responsible citizens	No File Uploaded
Any other relevant information	No File Uploaded

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

C. Any 2 of the above

File Description	Documents
Code of Ethics - policy document	No File Uploaded
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programmes, etc. in support of the claims	No File Uploaded
Any other relevant information	No File Uploaded

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

The institute celebrates birth anniversaries of great Indian personalities. The government of Maharashtra issues a resolution every year mentioning the names of personalities whose birth anniversaries are to be celebrated. Accordingly, the students and faculty, and staff meet in the Gymkhana hall for the function. On the occasion of Anti-Terrorist Day (21st May), Sadbhavana Divas (20th August), and National Unity Day (31st October and 19th November), the oath of the respective day is taken by students,

faculty, and staff. On 26th November, the preamble to the Constitution of India is read and the oath is taken to follow the constitution of India and work for unity. On the occasion of the birth anniversary of Dr. B.R. Ambedkar, one week is celebrated by organizing various activities/events that include whole day reading, debate competition, essay competition, inviting the expert to deliver the lecture on Ambedkar's thoughts etc. All these activities are conducted and monitored by Gymkhana.

File Description	Documents
Annual report of the celebrations and commemorative events for during the year	No File Uploaded
Geotagged photographs of some of the events	View File
Any other relevant information	No File Uploaded

7.2 - Best Practices

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

1. Utilization of Resources under Center of Excellence

The center of excellence in "Internet of Things" is in place at the cost of Rs. 1 Crore. These facilities are available for taking up projects at UG and PG level, and hands on training for students and faculty in the related field. The training conducted are found to be beneficial to students and faculty.

1. Academic Audit

Academic audit of the institute is conducted every year usually in the first quarter. Academic audit for the year 2019-20 and 2020-21 was carried out on 12th April 2022. The audit for the year 2021-22 will be scheduled shortly.

1. Utilization of Resources under Centre of Excellence

i. Objectives

- To utilize resources available in the Institute under Centre

of Excellence

- To impart training to the students and faculty on recent developments in 'Internet of Things'
 - To inspire students to initiate start-up. Total revenue generated was Rs.55,000/-

2. ACADEMIC AUDIT**Objectives**

- To assess the quality of the teaching-learning process, and performance of faculty and quantify the improvements
- To monitor the attainment of course and program outcomes
- To evaluate the quality of question papers and the assessment process

To provide a critical analysis of the academic and lab facilities

File Description	Documents
Best practices in the Institutional website	Nil
Any other relevant information	Nil

7.3 - Institutional Distinctiveness

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

The institute has chosen to present the performance in industry-institute interaction which is distinctive to its vision, priority, and thrust. Industry-Institute Interaction is a collaborative effort with industries and is designed to share technology advancements, train the students and faculty in the latest technologies and industry work culture and transform the graduates into professionals.

The basic philosophy for promoting industry-institute interaction is the realization that students need to acquire skills from industry experts in addition to the knowledge gained by them at the institute so as to facilitate their transformation into a professional with critical thinking, analyzing and problem-solving capabilities.

The institute has successfully implemented:

- preparing industry-ready graduates and possessing high level of employability
- bringing industry and institute at one platform
- reforming the curriculum as per industry needs
- exposing the students to the latest technological trends
- allowing the students to learn practical skills in the industry environment

These objectives achieved:

- MoU with industries for enhancement of industry-institute interaction. During the year 2021-22, more than 05 MoUs with leading corporates were active.
- Around 170 students completed the 1- 2 Months internships with mentoring and supervision by industry experts
- Fourteen students were selected through Cognizant digital nurture 2.0 initiative :

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

7.3.2 - Plan of action for the next academic year

- Expansion of Centre of Excellence in emerging areas
- To establish Centralized Testing and Instrumentation Facility
- To provide facility of Incubation Centre and encourage students for Start ups
- To implement NEP to the best possible way