



YEARLY STATUS REPORT - 2020-2021

| Part A | |
|--|---|
| Data of the Institution | |
| 1.Name of the Institution | GOVT. COLLEGE of ENGINEERING & CERAMIC TECHNOLOGY |
| • Name of the Head of the institution | PROF. DR. KRISHNENDU CHAKRABARTY |
| • Designation | PRINCIPAL |
| • Does the institution function from its own campus? | Yes |
| • Phone No. of the Principal | 03323701264 |
| • Alternate phone No. | |
| • Mobile No. (Principal) | 9339207179 |
| • Registered e-mail ID (Principal) | gcectwb@gmail.com |
| • Address | 73, Abinash Chandra Banerjee Lane, Kolkata - 700010 |
| • City/Town | Kolkata |
| • State/UT | West Bengal |
| • Pin Code | 700010 |
| 2.Institutional status | |
| • Autonomous Status (Provide the date of conferment of Autonomy) | 04/10/2012 |
| • Type of Institution | Co-education |
| • Location | Urban |

| <ul style="list-style-type: none"> Financial Status | <p>UGC 2f and 12(B)</p> | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|----------------|----------------------------------|---------------|-------------|--|--------|----------------|-----------------------------|---------------|-------------|----------|-----|------------|---------|------------|------------|------|------------|----------|-------|---------|------------|------------|----------|
| <ul style="list-style-type: none"> Name of the IQAC Co-ordinator/Director | <p>Prof. Dr. Rituparno Sen</p> | | | | | | | | | | | | | | | | | | | | | | | | |
| <ul style="list-style-type: none"> Phone No. | <p>03323632072</p> | | | | | | | | | | | | | | | | | | | | | | | | |
| <ul style="list-style-type: none"> Mobile No: | <p>9831509654</p> | | | | | | | | | | | | | | | | | | | | | | | | |
| <ul style="list-style-type: none"> IQAC e-mail ID | <p>rsen63@gmail.com</p> | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>3. Website address (Web link of the AQAR (Previous Academic Year))</p> | <p>http://gcect.ac.in/iqac/</p> | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>4. Was the Academic Calendar prepared for that year?</p> | <p>Yes</p> | | | | | | | | | | | | | | | | | | | | | | | | |
| <ul style="list-style-type: none"> if yes, whether it is uploaded in the Institutional website Web link: | <p>http://gcect.ac.in/download/Miscellaneous/Academic-Calendar-2021.pdf</p> | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>5. Accreditation Details</p> | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Cycle</th> <th style="width: 15%;">Grade</th> <th style="width: 15%;">CGPA</th> <th style="width: 15%;">Year of Accreditation</th> <th style="width: 15%;">Validity from</th> <th style="width: 15%;">Validity to</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Cycle 1</td> <td style="text-align: center;">A</td> <td style="text-align: center;">3.13</td> <td style="text-align: center;">2015</td> <td style="text-align: center;">11/05/2015</td> <td style="text-align: center;">10/05/2020</td> </tr> </tbody> </table> | | | | | | Cycle | Grade | CGPA | Year of Accreditation | Validity from | Validity to | Cycle 1 | A | 3.13 | 2015 | 11/05/2015 | 10/05/2020 | | | | | | | | |
| Cycle | Grade | CGPA | Year of Accreditation | Validity from | Validity to | | | | | | | | | | | | | | | | | | | | |
| Cycle 1 | A | 3.13 | 2015 | 11/05/2015 | 10/05/2020 | | | | | | | | | | | | | | | | | | | | |
| <p>6. Date of Establishment of IQAC</p> | | | <p>06/05/2019</p> | | | | | | | | | | | | | | | | | | | | | | |
| <p>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.)?</p> | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">Institution/ Department/Faculty/School</th> <th style="width: 20%;">Scheme</th> <th style="width: 20%;">Funding Agency</th> <th style="width: 20%;">Year of Award with Duration</th> <th style="width: 20%;">Amount</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">GCECT</td> <td style="text-align: center;">AUTONOMY</td> <td style="text-align: center;">UGC</td> <td style="text-align: center;">01/04/2012</td> <td style="text-align: center;">9000000</td> </tr> <tr> <td style="text-align: center;">GCECT</td> <td style="text-align: center;">RUSA 2.0</td> <td style="text-align: center;">RUSA</td> <td style="text-align: center;">01/04/2015</td> <td style="text-align: center;">20000000</td> </tr> <tr> <td style="text-align: center;">GCECT</td> <td style="text-align: center;">TEQIP 1</td> <td style="text-align: center;">WORLD BANK</td> <td style="text-align: center;">01/01/2004</td> <td style="text-align: center;">73600000</td> </tr> </tbody> </table> | | | | | | Institution/ Department/Faculty/School | Scheme | Funding Agency | Year of Award with Duration | Amount | GCECT | AUTONOMY | UGC | 01/04/2012 | 9000000 | GCECT | RUSA 2.0 | RUSA | 01/04/2015 | 20000000 | GCECT | TEQIP 1 | WORLD BANK | 01/01/2004 | 73600000 |
| Institution/ Department/Faculty/School | Scheme | Funding Agency | Year of Award with Duration | Amount | | | | | | | | | | | | | | | | | | | | | |
| GCECT | AUTONOMY | UGC | 01/04/2012 | 9000000 | | | | | | | | | | | | | | | | | | | | | |
| GCECT | RUSA 2.0 | RUSA | 01/04/2015 | 20000000 | | | | | | | | | | | | | | | | | | | | | |
| GCECT | TEQIP 1 | WORLD BANK | 01/01/2004 | 73600000 | | | | | | | | | | | | | | | | | | | | | |
| <p>8. Provide details regarding the composition of the IQAC:</p> | | | | | | | | | | | | | | | | | | | | | | | | | |
| <ul style="list-style-type: none"> Upload the latest notification regarding the composition of the IQAC by the HEI | | | <p>View File</p> | | | | | | | | | | | | | | | | | | | | | | |

| | | |
|--|---|--|
| 9.No. of IQAC meetings held during the year | 4 | |
| <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>** Online mode of interviews were conducted by various companies that resulted into considerably good placements</p> | | |
| <p>** Several webinars were conducted during the academic year 2020-21</p> | | |
| <p>** Old best practices adopted by the institute were reviewed and new ones were identified and adopted.</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 | |
| <p>To fix the plan for the prospective conduction of seminars and workshops for the academic year 2020-21</p> | <p>During the pandemic of COVID19, virtual seminars (webinars) would be viable options. The departments were advised to organize such webinars of interest to students and faculty inviting experts from different institutes/industries.</p> | |
| <p>To adopt strategies for Final Semester End Examinations of 2020 passing out batch</p> | <p>It was decided to hold the Semester End examination comprising of two components viz online examination of 50 marks of MCQ type prepared in Google Form and viva voce of 25 marks in each theory paper conducted</p> | |

| | |
|---|--|
| | <p>in online mode (Google Meet). All practical examinations were decided to be held in online mode (Google Meet platform)</p> |
| <p>To report the status of academic activities in respect of online classes in G-Suite platform and planning for Semester End examinations for intermediate semesters</p> | <p>i) Online classes continued as per time table prepared. Google Classrooms were created for each and every paper. Official GSuite IDs were issued to every teacher and student for conduction of academic activities in the classrooms. The whole gamut of activities under the GSuite platform were managed by system administrator including the Principal. Periodical review regarding classes held including attendance of students were conducted by the Principal. ii) It was decided to hold the Semester End examination for the intermediate semesters in the similar manner as that of the final semester students of 2020 batch, comprising of two components viz online examination of 50 marks of MCQ type prepared in Google Form and viva voce of 25 marks in each theory paper conducted in online mode (Google Meet). All practical examinations were decided to be held in online mode (Google Meet platform).</p> |
| <p>To review the report of the Academic Audit for the academic year 2019-20</p> | <p>The report of Academic Audit Committee was reviewed critically and it was advised to implement the recommendations made in the Audit Report at the earliest.</p> |
| <p>To review the best practices followed by the institute</p> | <p>The committee reviewed the best practices followed by the institute and found that it had been implemented in letter and</p> |

spirit. The best practices adopted in the preceding year i.e., 2019-20 had been implemented as follows: i) Establishing maximum transparency in evaluation of answer scripts: - Post publication answer scripts review/scrutiny can be simplified with more transparency. This has resulted in no application for review of the answer scripts by the students, which implies that a transparent evaluation system is in practice in the institute. ii) Encouragement for best performance in the examination by making provision of best graduate award: - Presently, the institute is celebrating Graduate Day, which is equivalent to convocation of a university, in which the Vice Chancellor of the affiliating university, in presence of the Principal, confers the degree certificates to the eligible candidates from the institute. The Graduate Day celebration is held with due pomp and grandeur.

13. Was the AQAR placed before the statutory body?

Yes

- Name of the statutory body

| Name of the statutory body | Date of meeting(s) |
|----------------------------|--------------------|
| Governing Body | 26/03/2022 |

14. Was the institutional data submitted to AISHE ?

Yes

- Year

| | |
|------------|--------------------|
| Year | Date of Submission |
| 01/07/2020 | 21/03/2022 |

Extended Profile

1.Programme

| | |
|---|---|
| 1.1 | 5 |
| Number of programmes offered during the year: | |

| File Description | Documents |
|---|---------------------------|
| Institutional Data in Prescribed Format | View File |

2.Student

| | |
|---|-----|
| 2.1 | 462 |
| Total number of students during the year: | |

| File Description | Documents |
|---|---------------------------|
| Institutional data in Prescribed format | View File |

| | |
|---|-----|
| 2.2 | 117 |
| Number of outgoing / final year students during the year: | |

| File Description | Documents |
|---|---------------------------|
| Institutional Data in Prescribed Format | View File |

| | |
|--|-----|
| 2.3 | 462 |
| 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 | 5 |
| Number of courses in all programmes during the year: | |

| File Description | Documents |
|---|---------------------------|
| Institutional Data in Prescribed Format | View File |
| 3.2 Number of full-time teachers during the year: | 32 |
| File Description | Documents |
| Institutional Data in Prescribed Format | View File |
| 3.3 Number of sanctioned posts for the year: | 56 |
| 4.Institution | |
| 4.1 Number of seats earmarked for reserved categories as per GOI/State Government during the year: | 43 |
| 4.2 Total number of Classrooms and Seminar halls | 19 |
| 4.3 Total number of computers on campus for academic purposes | 270 |
| 4.4 Total expenditure, excluding salary, during the year (INR in Lakhs): | RS. 80,15,131 |

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 curriculum of the institute is designed addressing the recent technologies and the opportunities existing in regional and global level with all necessary fundamentals. The Institute has the three layer structures for development, revision and implementation of

curriculum of all the departments. The prime objective of the institute is to create excellence in technical field, fulfilling both academia and industrial requirement.

Methodologies for Curriculum Design:

The Curriculum is designed to ensure that the students have the required domain knowledge, skills and application aptitude.

For references in framing of syllabus, the institute uses

1. Model curriculum prescribed by AICTE
2. Syllabus of various Indian and International institutes of repute
3. The Program Specific Outcomes of professional bodies
4. Suggestions and feedback by industry experts
5. Suggestions by industry alumni
6. Syllabi of various competitive exams like GATE, subject GRE
7. Current research and industrial trend

The curriculum is designed through three layers of hierarchy of the institute. At first, it passes through departmental meeting. Then it is discussed and ratified through Board of studies (BOS). Experts of different reputed organizations (Generally three from academia and one from industry) act as the external members of BOS. After that the syllabus is ratified by the highest academic body of the institute, i.e. Academic Council (AC), composed of internal and external experts.

The students may acquire minimum additional 20 credits by undertaking MOOCs through NPTEL to attain B. Tech. degree with honours. Further, the summer training / internship is made compulsory for all students to make them acquainted with the industrial practices and ethics and learn to perform in a practical environment. It is also mandatory for all students to carry out a project, complying with the PO, PSO and CO of the respective departments.

In addition to the curriculum, students' skills are upgraded by arranging various value added courses conducted by Wipro and TCS, and help them become industry ready. Institute has a provision where students can have industry internship in their final year, in which they provide assistance to the industry against a stipend in completing a project.

Implementation of Outcome Based Education (OBE) in the Curriculum:

- The initial step for ensuring academic quality is the design of the curriculum, in particular, the types of courses, the number of electives with complete details of the course title and course contents as per the regulations.
- In the next step, Course Outcomes (COs) for every course is mapped with the Program Outcomes (POs) and the Program Specific Outcomes (PSOs) of the program in line with the vision and mission of the organization.
- An effective implementation of this Outcome Based Education (OBE) ensures that our graduating engineers have attained skills with global attributes as per the POs as defined by National Board of Accreditation to compete in global platform. Specific to every program, the Institute has Program Educational Objectives (PEOs) that are measured through the performance of the outgoing batches of graduate students. The Institute monitors the attainments of PEO, PO and PSO on a regular basis for the respective programs.

| 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

3

| File Description | Documents |
|--|---------------------------|
| Minutes of relevant Academic Council/BOS meeting | View File |
| 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

5

| File Description | Documents |
|---|---------------------------|
| Curriculum / Syllabus of such courses | View File |
| Minutes of the Boards of Studies/ Academic Council meetings with approval for these courses | View File |
| 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

6

| 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

5

| File Description | Documents |
|--|---------------------------|
| Minutes of relevant Academic Council/BoS meetings | View File |
| Any additional information | View File |
| 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

Technological revolution and industrial progress (both manufacturing and service) with consequent economic growth are the core agenda of

Government of India. In addition, eradication of poverty, unemployment and corruption; health-care and sanitation; clean environment and development of basic infrastructure are other needs of the country. Another very important responsibility of any educational institution is to inculcate human values in the students so that they finally become responsible citizens of the country. All these aspects have been taken care of in designing the various curricula of the College.

Syllabi of the institute is designed focusing on the following issues:

1. All the courses are aimed at the overall development of the students as competent professionals with human values.
2. There is a mandatory course on ethics and human rights to inculcate human values among the students for becoming responsible citizens.
3. The curriculum includes courses on environmental studies to create awareness among students about burning issues like global warming, pollution, conservation of natural resources etc.
4. To adopt fast changing global technology, several emergent core engineering topics are included in the course curriculum.
5. A state-of-the-art language laboratory has been set up to improve soft skills of the students to meet the national / international requirements.
6. To make the students aware of their rights and duties, a course on Indian constitution has been introduced in the curriculum. Gender Equality is taught in this course as well.
7. Cyber law and related ethics are introduced as a course in the curriculum of Information Technology and Computer science. As cyber applications are very common nowadays and different cyber-crimes take place, it is essential to know cyber ethics and protection against cybercrime.
8. Green computing, which reduces the consumption of power and saves the natural environment, are introduced into different courses like mobile computing, cloud computing and sensor network.
9. In course on ceramic raw material, different eco-friendly methodologies are introduced. In the glass science course, the students are taught how to convert waste into wealth. In the course on Cement, Concrete & Monolithic Refractories, methods of Waste material utilization are taught.
10. Topic of Green energy resources are taught.

All the courses offered in both UG and PG levels are aimed at

grooming a student with technological skill to address the need of the society and are relevant to the development of the nation as a whole. Along with professional courses, topics on ethics, moral and human values are taken care of in the time of preparation of courses. Choice based credit systems are introduced into the curriculum using MOOC. Course Baskets are designed in such a manner so that not only professional courses are offered, but courses based on human value, professional ethics, environment sustainability are included.

Other than syllabus designing, different extra-curricular activities are conducted at the institute.

1. **Gender:** Major gender issues are focused and addressed through the activities like Save girl child campaign, Essay and poster exhibitions, wall paper presentations, etc. NSS unit of the institution regularly organizes programmes on gender equity.
2. **Environment and Sustainability:** N.S.S. promotes environmental protection through tree plantation and other sustainable development programs. Every year, N.S.S. unit undertakes a host of activities in the college campus and organizes various environment related programs including tree plantation, locality cleanliness, cleaning of gutters, digging of soak pits, plastic free campaign, Poster Competition, Debate Competition, etc. Various activities like quiz and poster competitions, invited talks are organized to create awareness about nature, biodiversity, environment and sustainability. Celebration of various days like World Environment Day, N.S.S. Day, Swachh Bharat Abhiyan are conducted at college campus.
3. **Human Values and Professional Ethics:** National festivals like Independence Day and Republic Day serve as a platform to enliven patriotic and moral values. Different social activities like Health and Hygiene awareness programs, Medical check-up camps, Road safety Campaign, Blood donation camps, etc. have been initiated by the college .

| 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 | View File |
| Any additional information | No File Uploaded |

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

3

| 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

296

| 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

117

| File Description | Documents |
|---|---------------------------|
| List of programmes and number of students undertaking field projects / internships / student projects | View File |
| Any additional information | View File |

1.4 - Feedback System

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

| File Description | Documents |
|---|---|
| Provide the URL for stakeholders' feedback report | http://gcect.ac.in/igac |
| Upload the Action Taken Report of the feedback as recorded by the Governing Council / Syndicate / Board of Management | View File |
| Any additional information | No File Uploaded |

1.4.2 - The feedback system of the Institution comprises the following

A. Feedback collected, analysed and action taken made available on the website

| File Description | Documents |
|---|---|
| Provide URL for stakeholders' feedback report | http://gcect.ac.in/igac |
| 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

140

| 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)

29

| 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 proficiency of students is diverse not just in terms of regional and linguistic aspects but also their level and pace of comprehensibility. Students' level of comprehension, classroom observation, interaction, continuous and periodic assessment are used as measuring tools to assess the learning levels of the students.
- Institute has drawn up the schedule for organising remedial classes for slow learners. Teachers are able to give one to one attention in remedial classes and focus on individual problems in a better manner. The departments use monitoring and mentoring to keep track of slow learners' progress. Tutoring by peers and senior students are encouraged. Corrected assignments and answer scripts are shared with each student and discussed to enable students to recognize their problem areas and improve. Faculty makes it a point to be patient and accessible to students personally, over the phone, mail, and social apps. Training and Placement Cell conducts grooming sessions and mock interviews for all students with special emphasis for slow learners to enhance their employability.
- Advanced learners are encouraged to study additional reference books on the subject of study. Gold Medals are awarded to the toppers in the Graduate Day celebration. Students are encouraged to participate in seminars, conferences and workshops to gain knowledge. The faculty facilitates students to publish their articles in renowned peer-reviewed journals.

| 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 | 462 | 54 |

| 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:

GCECT adopts student-centric teaching-learning methodologies for enhancing the learning experiences of students. The details of experiential learning, participative learning and problem-solving methodologies adopted by the institute are given below.

1. Experiential learning:

1.1. Project method:

Students have to undertake project work as per the requirement of the curriculum. The project work stimulates students' interest in the subject and provides the student with an opportunity for freedom of thoughts and the free exchange of different views.

1.2. Participation in competition at various levels

For real-life exposure, students are encouraged to participate in competitions of National and International Level.

1.3. Industrial Visits

Departments Plan and Organise industrial visits for students to provide exposure to industrial practices.

1.4. Invited Lecture:

Invited lectures by eminent experts from industry and academia of repute are organised to supplement the teaching process and provide experiential learning.

2. Participative learning:

2.1. Teamwork

The students get involved in group activities while attending laboratory classes, projects, seminars, group discussions etc. under the guidance of teachers.

Institute organizes different activities to promote the spirit of Teamwork through NSS. The activities are tree plantation, health awareness camp, campaigning for road safety, water conservation, SwachBharatetc. NSS also organises self-defence programs like karate training. Student welfare association also organises different programs like TechFest, CulturalFest, Hackathons etc to promote team spirit.

3. Problem-solving methodologies:

3.1. Case studies

Students are provided with some real-life problems to solve with their logical thinking and practical knowledge. For example, a group of students have developed the result management software of the institute.

3.2. Research Activities

Research activities are conducted in each Department under the guidance of faculty where the students get knowledge about the emerging areas which help them to inculcate the research acumen.

| 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

College uses Information and Communication Technology (ICT) in education to support, enhance, and optimize the delivery of education. The following tools are used by the Institute

ICT Tools:

1. Overhead LCD Projectors- Overhead LCD projectors are available in all classrooms and few laboratories
2. Desktop and Laptops- Computational facilities are available in all laboratories of Computer Science and Engineering and Information Technology Departments. Few Laptops are available for the use of faculties in addition to desktop computers.

3. Printers- Printers are available in all computational laboratories. Printing facilities are also available in different laboratories of the Ceramic Technology department. Faculties are provided with printers.
4. Photocopier machines - Multifunctional photocopier machines are available in all academic and administrative departments.
5. Scanners- Scanners are available in all academic and administrative departments.
6. Conference Rooms- Three conference rooms are equipped with audio-visual facilities.
7. Smart Board- Five smart boards are installed in the smart classrooms of the campus.
8. Auditorium- It is equipped with state of the art audio-visual facilities.
9. Online Classes are conducted through the licensed version of Google Suite.
10. Students have access to the facility of classes of MOOC, NPTEL, Coursera etc.
11. The library has subscribed to the resources of digital library(UGC INFLIBNET N LIST)
12. Language Lab: One state of the art language lab is present in the campus with ISILS software (Interactive Software Integrated Learning System) CACM, (CACM, STEP IIT Kharagpur)
13. Library has a good repository of recorded lectures of NPTEL procured from IIT Kharagpur.

Moreover, teachers use the following e-resources like MHRD-Virtual Lab, SWAYAM, NPTEL, Youtube videos, e-pathsala, UGC INFLIBNET N LIST etc.

| File Description | Documents |
|--|---|
| Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process | http://gcct.ac.in/igac/ |
| 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

54

| File Description | Documents |
|---|---------------------------|
| Upload year-wise number of students enrolled and full-time teachers on roll | View File |
| Circulars with regard to assigning mentors to mentees | View File |

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

Preparation and Adherence of Academic Calendar: The institution prepares the academic calendar in the meeting of the examination committee at the beginning of each academic year. The academic calendar has schedule of commencement of classes, dates of Mid Term Examinations, filling of the examination form, End semester examinations and publication of examination results. The academic calendar is displayed on the website of the institute. Thereafter, the timetable is prepared by the departments as per the academic calendar. Utmost care is taken to adhere to the academic calendar of the institute.

Preparation and Adherence of Teaching Plan: The concerned faculties prepare teaching plans for their respective subjects they teach. These plans are made at the beginning of the class and serve as a guideline for outcome-based teaching in the class. The Principal and HODs assess the progress of each subject to ensure timely and effective completion of course as per academic calendar.

| File Description | Documents |
|---|---------------------------|
| Upload the Academic Calendar and Teaching Plans during the year | View File |

2.4 - Teacher Profile and Quality

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

32

| 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 | View File |
| 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

19

| 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)

423

| 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

| 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 | View File |
| 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

The following reforms have been implemented in the examination system: (a) continuous assessment (b) 50% weight in continuous evaluation and 50% weightage in end semester examination and (c) viewing of answer script before the publication of result.

The classes were held in online mode due to COVID-19 pandemic situation using G-Suite platform for education in the academic year 2020-21. Class notes and recorded lectures were shared amongst the students. Assignments were uploaded by the teacher in the Google classroom and the same had been submitted by the students online. Teachers evaluated the assignments and given appropriate feedback to the students for further improvement digitally. Mid-term examinations as well as the semester-end examinations were conducted in digital mode. In this specific academic year, the semester-end examination of 75 marks was divided into two evaluation methods comprising of MCQ for 50 marks and Viva Voce of 25 marks for each subject. The students were allowed to view their answer scripts in the presence of the evaluator of the answer script after evaluation before

finalising the marks awarded to them. This has brought proper evaluation of the answer script and transparency in the examination process.

Institute has developed an in-house examination management system in which different activities such as filling of forms, admit card generation, uploading of marks, result preparation are done in a very efficient manner.

| 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

Programme Outcomes of each program are displayed in prominent locations in the departments of the institute. The Course Outcomes of each subject has been inserted in the course content of each subject of the syllabi. Detailed curriculum of each program has been made available on the college website. This enables the teachers and students of the institute to get easy access to the document.

The following mechanism is followed by the institution to frame the Course outcomes:

- The departmental committee frames the initial draft of the syllabus of different courses along with course outcomes in line with program outcomes.
- The Board of studies of each department approves the syllabus after thorough scrutiny.
- Thereafter, the syllabus is placed before the Academic Council for its approval.

| File Description | Documents |
|--|---------------------------|
| Upload COs for all courses (exemplars from the Glossary) | View File |
| 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

CO attainment:

COs' attainment could be found out by direct methods like Classroom Quizzes, Mid Term Tests, Assignments, Semester end examinations and by indirect methods like Course End Survey. Course End survey is conducted at the end of the course by the faculty concerned to evaluate course outcome attainment contributing to programme outcome. In indirect method of CO attainment, questionnaires are formed to assess in qualitative terms e.g., Excellent, Very Good or Strongly agree, Agree etc. The qualitative terms so defined have been given a weight to convert into quantitative terms e.g., Excellent=5, Very Good=4 etc.

80% weightage is given to Direct assessment and 20% weightage is given to Indirect assessment.

Step 1:

The detailed syllabus is available in the college website. All stakeholders have access to the content, evaluation scheme and Course Outcome of each course.

Step 2:

Teachers are required to set questions in the examinations (Mid Term exam and Semester End examinations) keeping in mind the COs of the particular subject and thereafter a report is generated to visualize the CO wise marks distribution.

Step 3:

After the examination is complete, the CO attainment level is measured using the following formula:

CO attainment for ith CO= (SUM OF MARKS ATTAINED/SUM OF ALL MARKS ALLOTTED TO ith CO)X100%

PO attainment:

Each programme outcome is assessed using data collected from direct and indirect methods as described below:

Direct method of assessment for programme outcome consists of mapping Course Outcomes with Programme Outcomes and Programme Specific Outcomes.

Indirect method of assessment for programme outcomes consists of:

1. Alumni survey
2. Employer survey
3. Course end survey
4. Graduate survey
5. Student Satisfaction Survey

| 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

117

| 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

<http://gcect.ac.in/igac/>

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

RESEARCH POLICY OF GCECT, KOLKATA (AUTONOMOUS)

Objectives of Research

Our research policy is intended to provide a multidisciplinary platform to initiate scholarly research with the following objectives:

To create and promote a culture of research among the faculty and scholars of GCECT.

To identify research areas and research topics of academic, applicable and socially relevant significance.

To organize seminars/conferences/workshops on research topics and training programmes in research methodology.

To ensure quality, integrity and ethics in research.

To publish research material in appropriate media and to make available such published information to the end users.

To facilitate the publication of reports submitted by the research scholars.

To bring about an annual/periodic compendium (A quarterly journal ``Scientific Voyage'' has been published since February 2015) of abstracts/papers presented by the faculties and scholars in various seminars / conferences / workshops.

To serve as a facilitator providing professional guidance, technical support and recommendation for financial assistance.

The Management of GCECT (Autonomous) hereby affirms the following principles concerning research:

Individual research scholars should be free to select the subject matter of their research, to seek support from any legal financial source for their work, and to arrive at their own findings and conclusions. These findings and conclusions should be available for scrutiny and criticism of peers.

Research techniques should not violate established professional ethics pertaining to the health, safety, privacy, and other personal rights of human beings or to the infliction of injury or pain on animals.

The Management should create an environment conducive to research by providing suitable infrastructural facilities such as space, library, lab facilities, and funding if available, based on the educational merit of the proposed research.

The Principal will initiate, promote and monitor the research activities in the institution by constituting an Office of the Dean of Research - consisting of the Heads of the different Departments and two members of the faculty designated by the Management (already a committee has been function in the name of ``Research Committee'' in connection to Projects based on UGC Norms). The Principal shall appoint the Dean from among this team.

| File Description | Documents |
|--|---------------------------|
| Upload the Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption | View File |
| Provide URL of policy document on promotion of research uploaded on the website | Nil |
| 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)

0

| File Description | Documents |
|---|---------------------------|
| Minutes of the relevant bodies of the institution regarding seed money | View File |
| 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

1

| File Description | Documents |
|---|---------------------------|
| e-copies of the award letters of the teachers | View File |
| 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)

3360600

| 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

4

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

3.2.3 - Number of teachers recognised as research guides

5

| 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.

Dr. B. K. Sanfui, Asst. Professor of Ceramic Technology has concentrated upon development of new engineering materials like ceramic membrane for separation of CO₂ from flue gas, value added products prepared from agricultural waste and coal ash like light weight building block and abrasion resistant ceramic respectively, low energy consuming refractory etc.

His laboratory developed product coal ash-based abrasion resistant ceramics got wide publicity in DD News (<https://ddnews.gov.in/national/industrially-important-ceramic-products-bottom-ash-thermal-plants-may-reduce-waste-worries>). It was also highlighted in the leading newspaper "The Hindu-Business line" (<https://www.thehindubusinessline.com/specials/ceramics-from-ash/article33372248.ece>). Dr.Sanfui also filed application for granting one patent for his newly developed product.

| File Description | Documents |
|---------------------------------------|---|
| Upload any additional information | No File Uploaded |
| Paste link for additional information | https://www.thehindubusinessline.com/specials/ceramics-from-ash/article33372248.ece |

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

| File Description | Documents |
|--|---------------------------|
| Report of the events | View File |
| 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 | View File |
| Any additional information | View File |

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

7

| 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

1.44

| 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

0.91

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

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

3.4.5.1 - Total number of Citations in Scopus during the year

39

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

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

82

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

0

| 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 | No File Uploaded |
| Any additional information | No File Uploaded |

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

0

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

3.6 - Extension Activities

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

Tree Plantation in the GCECT campus, Health checkup camp organized in the GCECT campus Celebration of International Women's Day Quiz on HIV and AIDS Celebration of International Yoga Day

| File Description | Documents |
|---------------------------------------|---------------------------|
| Upload any additional information | View File |
| 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

2

| File Description | Documents |
|--|---------------------------|
| Number of awards for extension activities in during the year | View File |
| e-copy of the award letters | View File |
| 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)

4

| 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

136

| 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

97

| 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)

1

| File Description | Documents |
|---|---------------------------|
| e-copies of the MoUs with institution/ industry/ corporate house | View File |
| 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.

The institute runs both UG & PG courses in engineering and for this purpose suitable number of classrooms are available with adequate seating arrangement and ventilation. Importantly, quite a few of these classrooms are having ICT facilities (total 11 numbers) while some of the classrooms are purely dedicated as smart classrooms (total 5 numbers). Moreover, 18 numbers of LCD projectors are also available for classrooms and laboratories while most of these classrooms are having Wi-Fi facility with 100 mbps internet connection (provided by NKN) bandwidth. Apart from these, the institute also provides sufficient well-equipped furnished laboratories for the students to carry out their experimental works. In this context, some department specific important laboratories are mentioned below-

Ceramic Technology Laboratories

CSE & IT Laboratories

Basic Science & Engineering Laboratories

Refractory Lab

Cement & Concrete Lab

Unit Operation Lab

White ware Lab

Glass Lab

Coating Lab

Instrumental Analysis Lab

Nano Materials and Sol-gel Lab

Energy Engineering Lab

Thin Film Lab

Project Lab

Physical Testing Lab

Basic Computing Lab

System Administration Lab

Object Technology Lab

Digital Electronics Lab

Microprocessor Lab

Communication Engineering Lab

Distributed Computing Lab

Physics Lab

Chemistry Lab

Engineering Drawing Lab

Modern English Language Lab

Central Computing Lab

Basic Electronics Lab

Mechanical Workshop

Electrical Engineering Lab

In addition, some specialized advanced labs are also set up by utilizing the grants received from the National Funding Agencies. Among these labs VLSI Lab, Image Processing & GIS Lab, Image Processing & Computer Vision Lab are the most important pioneer labs in recent times. Also, these basic and advanced labs are providing enough state-of-the-art computing facilities (including machineries/hardware/software) to groom the students for the global market. In this aspect, more than 200 desktop computers are available for the laboratories with internet connections while all such computers are providing good computing facilities. Additionally, the institute also hosts some specialized instruments/equipment for advanced study/research and these are mentioned below-

Specialized equipment of Ceramic Technology

Specialized equipment / software of CSE & IT

Nano Particle Size Analyser

Sedigraph

Fully automatic Micro-hardness tester

Horizontal Dilatometer

High Temperature Viscometer

Lanmuir-Blodget Thin film Apparatus

Spin and Dip Coater

Furnace(Spectro Photometer & pc control)

Fully Computer Controlled high precision compressive strength testing machines

Non destructive elastic property analyzer

ERDAS Imagine Professional

ENVI

IGIS

IDL

Virtual GIS

Multisim

VSLI Design Toolset

P sim Software

Amplifier

ISILS Software for Language Lab

Operating System Winpro

| 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.)

The institute always encourages their stakeholders in various extra-curricular activities for improving their physical and mental health. Hence, several infrastructures are built and maintained regularly to promote such extracurricular activities for both students and staff. Among these facilities, air-conditioned indoor auditorium with 250 seating capacity is used for organising the different cultural events, seminars and get togethers while one

seminar hall (seating capacity around 50) is also available for hosting the technical seminars, workshops and conferences etc. Importantly, both these halls are having in-built sound system facility and electrical systems. Apart from these, the institute also has one dedicated yoga/karate room for hosting the different yoga/karate training/events on a regular basis. Additionally, the institute also encourages indoor games like chess, table tennis, carrom etc. with competitions being organized in periodic intervals. Further, the institute has also set up a gymnasium with cycling, treadmill and weight lifting facilities. Finally, provisions for outdoor games are also available with two playgrounds adjacent to the main building which are frequently used for hosting the different sports events from time to time.

| File Description | Documents |
|---------------------------------------|---------------------------|
| Geotagged pictures | View File |
| 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

18

| File Description | Documents |
|---|---------------------------|
| Upload any additional information | No File Uploaded |
| 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)

12.06

| File Description | Documents |
|--|---------------------------|
| Upload audited utilization statements | View File |
| 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)

Library is fully automated using integrated library management software LIBSYS which is a fully proprietary product of LIBSYS Corporation. It has been functioning since 2005. But the Library Committee considering the advantage of using open source library management software decided to switchover from LIBSYS to KOHA and accordingly KOHA was installed. KOHA is fully featured, award winning open source integrated library management system. It is being used worldwide in libraries of all sizes. Its development is driven by a growing community of users collaborating to achieve their technology goals. KOHA's features continue to evolve and expand to meet the needs of its user base.

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

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

| File Description | Documents |
|---|---------------------------|
| Details of subscriptions like e-journals, e-books, e-ShodhSindhu, Shodhganga membership | 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)

11.171

| File Description | Documents |
|--|---------------------------|
| Audited statements of accounts | View File |
| 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

5.08

| File Description | Documents |
|--|---------------------------|
| Upload details of library usage by teachers and students | View File |
| 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 the facility of both wired and Wi-Fi internet connections with 100 mbps bandwidth (provided by NKN). In this context, it is to be noted that, there is no such distribution of bandwidths between wired and wireless networks and the whole bandwidth is available for both of them. The cyber security issues of the institute mainly based on a proxy server and an application-level firewall. Moreover, the institute takes proper initiatives for updating and maintaining these IT infrastructures. Importantly, this maintenance process is need based, where the institute places the requisition to the Higher Education Department, Govt of West Bengal and after proper approval, the work is executed as per the West Bengal Govt. financial rules by utilizing the state govt. allotted budget.

The IT policies adopted in the institute for procurement, maintenance and augmentation of computational and network facilities including Wi-Fi and cyber security aspects are as follows:

- 1) Each student is to be provided with a PC in the laboratory to carry out his experimental and project related work.
- 2) Few PCs with printing and scanning facility are to be allocated for administrative staff of the institute.
- 3) Every faculty are to be allotted a PC with printing and scanning facility.
- 4) All PCs are to be connected to network having internet facilities.
- 5) All PCs of the institute are to be connected to online/stand-alone UPS.
- 6) All PCs and accessories should be under Annual Maintenance Contract.
- 7) Internet connectivity should be made available to all the VLANs with a provision of 1gbps and above speed.
- 8) Campus wide Wi-Fi connectivity should be made available to all users.
- 9) Access to the network should be proxy based and password protected.
- 10) The internal networks are to be protected by means of application level firewall and a proxy server.
- 11) All laboratories are to be equipped with fire fighting equipment.
- 12) IT infrastructure and its functioning are to be monitored by a committee.

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

4.3.2 - Student - Computer ratio

| Number of Students | Number of Computers |
|--------------------|---------------------|
| 462 | 324 |

| 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. 750 Mbps**

| File Description | Documents |
|---|---------------------------|
| Details of bandwidth available in the Institution | View File |
| Upload any additional information | View File |

4.3.4 - Institution has facilities for e-content development: **B. Any three of the above**
Facilities available for e-content development
Media Centre
Audio-Visual Centre
Lecture Capturing System (LCS)
Mixing equipments and software for editing

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

4.4 - Maintenance of Campus Infrastructure

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

34.59

| File Description | Documents |
|-----------------------------------|---------------------------|
| Audited statements of accounts | View File |
| Upload any additional information | View File |

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 College being a government institute, Public Works Department (Civil and Electrical division), Govt. of West Bengal looks after the maintenance work of all the physical infrastructures as and when required. In this aspect, PWD carries out detailed inspection as per requisition of the institute and submits the estimated budget for the proposed work. This budget is then placed to the Higher Education Department for their approval and the work is subsequently executed. For urgent plumbing and sanitary maintenance work, the College authority can execute it and submit the bill to the Kolkata Pay A/Cs office for payment. The PWD electrical division has set up an office within the college campus for day-to-day maintenance activities of all the electrical appliances and installations. In addition to these, there are certain procedures adopted for maintenance and purchase of academic as well as other support facilities. The concerned faculty puts forward requisition through the HODs to the Principal to decide on purchase and maintenance of laboratory equipment under the State budget. All purchases and maintenance are decided by the Purchase committee, with the Registrar of the College as the convener. Any purchase costing over Rs. 10,000/- is done following West Bengal Financial Rules. Occasionally, few equipment which are not covered under annual maintenance contract are looked after by faculty and support staff. In addition

to this, a network maintenance committee is also constituted with faculties and technical assistant to look after the smooth functioning of the internet connection facilities within the college campus. Finally, the college authority ensures regular cleaning and sanitization of the whole campus including gym and play-ground area of the institute. Security and house keeping services are outsourced by following the Govt. rules. To meet the information need of the teachers, students and research scholars, the concerned HODs, in consultation with the teachers, selects the books and e-contents for collection. Students' demands are noted down in the book requisition register maintained in the library. Collected materials are processed either by the librarian or through outsourcing depending upon the volume of collection. Day to day house keeping operation viz. accessioning, shelving, retrieval, issue, return, restoration, shelf rectification, cataloguing, data entry are done by the librarian. Dusting and cleaning, pest controlling and binding of damaged books are done through outsourcing. Collection of books are examined periodically for the purpose of repair, replacement or removal. Maintenance of computer and photocopier machines are done through AMC. The library committee members are regularly framing various policies and procedures for the development as well as

betterment of the library.

| 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

66

| File Description | Documents |
|---|---------------------------|
| Upload self-attested letters with the list of students receiving scholarships | View File |
| Upload any additional information | View File |

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

61

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

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

C. Any 2 of the above

| File Description | Documents |
|---|---|
| Link to Institutional website | http://gcect.ac.in/ |
| Details of capability development and schemes | View File |
| Any additional information | No File Uploaded |

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

102

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

61

| 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

10

| 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

09

| 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

Nil

| 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

Student Welfare Association and its representatives are responsible for organizing various co-curricular activities for 400 plus students in the campus and assessing the requirements of the students for putting them before the Principal of the college for necessary action. Also, they look after the welfare of the students as a whole and put forward grievances of the student community, if there be any, before the authority. The students' representatives work as facilitators for the functions of training and placement cell of the college. The students' welfare Association are also responsible for assisting, motivating, counselling and organizing various events during Jagriti, their cultural annual fest and Karmatec, an inter college technical fest held at the campus respectively. General Secretary of the Welfare Association is a member of the Governing Body of the college. A few student representatives are also actively involved in assisting the HODs and training placement cell for organizing industrial training, industry visits and both on and off campus placement drives.

| File Description | Documents |
|---------------------------------------|---|
| Upload any additional information | View File |
| Paste link for additional information | http://gcect.ac.in/students-welfare-associations |

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

9

| 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 college has a registered Alumni association. The Alumni Association of Govt. College of Engineering and Ceramic Technology is very active and functional. The alumni association is working continuously to organize special lectures, different technical seminars, academic convention, workshops and yearly event like National symposium cum Alumni meet at the college campus to strengthen the bonding between the former students and current students and faculties of the institution. Alumni Association also funds different programmes jointly organized with the institution for the benefit of students and faculty. Some alumni members are members of BOS of Ceramic Technology as well as Academic Council of the institution. Many alumni make scope for the internship to the present students. Few alumni are senior VPs/Managing Directors of reputed industries, few are heading production, international marketing, project divisions etc. For this session the Alumni Association has organized a virtual program on "Reconnecting, Restoring and Revigorating the GCECTian spirits" on 30th January, 2021. It maintains a secured website: <https://www.gcectalumnus.org> for communicating purpose, the association uses an email id: gcectalumnus@gmail.com. The College collects feedback from the alumnasand suggestions from that end are being well considered for developing the curricula and other developmental activities of the College.

| File Description | Documents |
|---------------------------------------|---|
| Upload any additional information | View File |
| Paste link for additional Information | https://www.gcectalumnus.org/ |

5.4.2 - Alumni's financial contribution during the year E. <2 Lakhs

| File Description | Documents |
|-----------------------------------|---------------------------|
| Upload any additional information | View File |

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

Vision of the Institute:

To be a centre of excellence in various fields of engineering and technology by imparting core knowledge to the students

Mission of the Institute:

M1: To impart high quality technical education with ethical values that will produce globally competitive engineers & technologists.

M2: To inculcate entrepreneurial skill and leadership quality amongst potential students.

M3: To motivate students for acquiring and eventually generating advanced knowledge.

M4: To create compassionate, responsible and innovative global citizens.

M5: To strengthen Institute-Industry interaction to make the students aware of real problems in the Industries and solutions thereof.

The institution follows a participatory mode of governance and management with all stakeholders. The Governing Body of the institution delegates authority to the Principal. Principal, with due consultation with different subsequent levels of functionaries, such as, the Heads of Departments, Academic council, Board of studies, various committees, faculties and staff representatives of the institution and other decision-making bodies takes decision in determining and implementing different institutional policies.

The institution has different perspective/strategic plans for systematic running of the institute. Grants are received from government sources viz. UGC, AICTE etc. and non-government sources such as Alumni Association for administrative and academic utilization. Administrative purposes include infrastructural expansion for accommodating more classrooms, laboratories, auditoria, staffrooms, hostels etc., as well as, renovation of ageing infrastructures, washrooms etc. Academic upgradation includes emphasizing ICT enabled teaching-learning, upgradation of subjects and curriculum with an eye towards the modern industrial requirements. Emphasis is also paid on research. Faculties are encouraged to apply for grants in the state, national and

international level; as well as, encouraged for collaborative research with other institutes.

Faculties are also instrumental in implementing the vision and mission of the institution and play a leading role in various decision-making processes, in consultation with the Principal. Being an autonomous institute, departments receive considerable academic independence. Faculties involved in the Academic Council and Governing Body influence institutional polity. Apart from these, the institution holds several sub-committees. Many of the faculties are members and conveners of these committees. Effective leadership is demonstrated by the members of these committees in order to ensure smooth functioning of the institute considering various directions of academic and administrative functioning. The various committees and their subdivisions are describes in a tabular form as follows:

Statutory Committees

1. Governing Body
2. Academic Council
3. Board of Studies
4. Finance committee
5. Faculty council

Non Statutory Committees

1. Administration

1. Discipline
2. Anti-ragging
3. Sexual harassment
4. Equal opportunity

5. Grievance redressal
6. College web site maintenance
7. Planning and Monitoring
8. Purchase / Tender
9. Scholarship
10. Green Campus

1. Academics

1. IQAC
2. Academic audit
3. Research
4. Library
5. College examination

1. Cultural and Sports

1. NSS
2. Sports
3. Cultural Programme

1. Placement, Training and Career Counseling

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

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

A Strategic Plan is adopted by the Institute based on various institutional practices such as decentralization and participative management.

- Administration: Various statutory committees e.g., Anti Ragging Committee, Grievance Redressal Committee, Admission Committee, Examination Committee, Establishment Committee for SC/ST) help the institute to run the administration smoothly.

- **Academics:** BOS, Academic Council help the institute in academic matters.
- **Quality Assurance:** IQAC, Library Committee etc. help the institute in Quality management.
- Practices of decentralization and participative management are observed in several areas. The college is under the administrative control of Higher Education Department, Government of West Bengal and is overseen by the Directorate of Technical Education.
- The institution follows West Bengal Service Rules and West Bengal Financial Rules. Proposals in respect of upgradation and augmentation of infrastructure are initiated from the departmental level with inputs from the students and other stake-holders, which are then placed before the Principal.
- After making necessary formalities for purchase, the matter is placed to the purchase committee, consisting of faculties and administrative staff.
- For any new construction, proposal is placed before the GB for recommendation and onward transmission to the HE department through the Directorate of Technical education, Govt. of West Bengal for administrative approval and sanction of funds for the same for both the cases.
- Apart from that, all faculties and stake holders are involved in the development of the curriculum of the college.
- The proposals received in respect of designing of the curriculum modification of course, if any, are discussed in the departmental meetings and placed in the respective Board of Studies. This is then placed to the Academic Council and finally to the Governing Body for approval and implementation.

The academic regulations are also framed and approved and implemented following the same procedures. This is worth mentioning that there is representation of faculty, administrative staff and external experts in the respective Boards of Studies of all departments, the Academic Council and Governing Body.

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

6.2 - Strategy Development and Deployment

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

The institutional Strategic/Perspective plan is clearly articulated and implemented in areas of (1) Teaching and learning, (2) Research and development, (3) Community engagement, (4) Human Resource planning & development and (5) Industry interaction & Placement. The College always focuses on excelling in physical and academic ambience and infrastructural development.

Teaching and learning: Teaching-learning process is a multi-faceted concept comprising many conceptual, developmental, psychological and instrumental issues.

- The College always strives for excellence in teaching learning process which is reflected by the placement record of our graduates.
- The College has various learning resources like well-equipped library with access to lots of e-books and e-journals along with conventional books and journals. It has well equipped laboratories with sophisticated machineries and latest softwares.
- All class rooms are provided with multimedia projection facility for ICT enabled teaching learning methodologies. Apart from these, college also has five smart class rooms.
- Hi-speed internet connection is available in the laboratories helping students to expose themselves to information explosion around the world.
- A state-of-the-art language laboratory is present to enhance the communication skill of the students.
- The College also promotes interactive learning through study tours, industrial training, workshops and academic seminars.
- Project work in the final year course gives the students a new learning experience.
- Academic progress of the students are assessed through class tests, assignment etc.
- The College gives utmost emphasis on continuous evaluation system.
- The barriers of slow learners are addressed by the faculties in the form of remedial classes and laboratories.
- Apart from that, provisions are made for recording the online classes and provide the recording links to the students for repeated use. The AICTE based course curriculums are also directed towards dynamic restructuring the courses with an eye towards rapid industrial development.

- College has purchased access to G-Suite. All academic activities such as taking classes, sharing documents to students, forwarding topic of assignments as well as, the process of examination are conducted through the Google Classroom.

Research and development: In-house research activities of the college are planned very systematically.

- There is a dedicated research committee in the College which helps encouraging a culture of research among teaching staff, research scholars and students.
- Teachers take up sponsored research projects. They organize / attend conferences and seminars so as to get updated with the latest trends in research, methodologies used in their field/s of interest.
- Publication of research findings and presentation of research paper in national and international conferences is common practice of faculty members.
- Final year project works of UG and PG students are taken up by faculty members either independently or in form of collaborative works with industry, research laboratories, other academic institutes
- College also publishes a research journal "Scientific Voyage" to encourage research activities among students and faculties. The journal publishes four issues in a year.

Community engagement:

- The NSS unit of the college is very active in community engagement programmes like tree plantation, road rally on hygiene, environment awareness camps etc.
- Observation of world environmental day with the neighbouring school children, computer literacy among the local people is also practiced.
- Camps on fly ash brick preparation, ceramic pottery for skilled labourers have been undertaken by the College from time to time.
- Showing fly ash brick preparation process to the skilled labour, ceramic pottery awareness is some other community engagement programme undertaken by the College from time to time.
- College holds in-campus eye camp for students, faculties and neighbouring people.
- College holds yoga classes for students, faculties and college staff.

- College holds self defense classes (karate) for girl students and neighbouring girls.
- The college alumni association frequently conducts homeopathy camps within college premises as community development programme.
- Apart from these community engagement programmes, different environmental and green energy plans are also encouraged among all. These include energy saving plans such as installation of solar panels, awareness campaigning by installing displays written with 'save water' all over the campus are also parts of green environment initiatives.

Human resource planning and development:

- The College endeavors in the development of its highest human resource, i.e., students, by providing high class learning environment, offering world class course curricula, latest infrastructural facilities. The students are exposed to industrial problems, so that they know the kind of situation they may find in their service life. They are encouraged to take challenges, represent themselves as a responsible citizen in the society.
- Faculties are provided with career advancement scheme (CAS) as per rules of Govt. of West Bengal for their career development.

Industry interaction and Placement:

- The College has developed an Industry Institute Cell which keeps a close liaison with the industries.
- The Placement Cell also has a strong industry linkage which leads to substantial placement of the students from the campus. Students are also exposed to industry training as a part of their course curricula.
- Some students undertake industry project as their student project.

Industrial experts are frequently invited to the college to deliver lectures on their work experiences which help improve the understanding of the students about the industry. These efforts are reflected from the high impressive placement records achieved every year during the campus interview process.

| File Description | Documents |
|--|---------------------------|
| Strategic Plan and deployment documents on the website | View File |
| 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.

The college is under the administrative control of Higher Education Department, Government of West Bengal and is overseen by the Directorate of Technical Education. The institution follows West Bengal Service Rules and West Bengal Financial Rules. The college follows the rules set by the Government of West Bengal regarding the service rules. The appointment of faculty and staff recruitment is governed by the Public Service Commission (PSC) of the Government of West Bengal.

The college is under the Department of Technical Education, directly under the control of Higher Education Department, Government of West Bengal. The Department of Technical Education deploys Principal in the college and has direct administrative control over the college. Principal and the Governing Body are responsible for the primary decision making of the institution; followed by the subsequent departments and faculty members.

Governing Body: The Board of Governors of the college is constructed with a total fourteen members, out of which six of them are external members; with one of them chairing the board. The Principal is Ex-Officio Member Secretary of the board. Other members of the board are the four Head of the Departments, one teacher representative, Controller of Examinations and Registrar.

Administrative Set Up: Principal and Registrar are the core of the administration within college, including financial matters. Principal puts forward the financial projects and grants received from the Higher Education Department to the Accounts Officer, who holds a major role in executing the financial aspects. The financial aspects are governed by the Financial Management Committee (FMC) of the Government. Principal, with the help from the Departmental Heads and the Administrative office and Accounts section executes the major administrative decisions.

Academic Set Up: Academic decision makings are primarily relying on the Statutory Committees such as Board of studies and Academic Council, followed by Departmental Heads, the IQAC Coordinator, and finally, Principal.

Other functional bodies: There are several other Statutory and Non-Statutory Committees. Statutory Committees, such as Governing Body, Academic Council, Board of Studies and Finance committee are primarily involved in the primary decision making of the institute. Other Non Statutory Committees involve administrative, academic, Cultural and Sports and Placement, Training and Career Counseling aspects. Administrative issues, other than Grievance Redressals, are dealt by the Planning and Monitoring committee, College web site committee, Purchase committee, Scholarship committee and Green Campus committee. Academics matters are discussed with IQAC, Faculty council, Academic audit committee, Research committee, Library committee and College examination committee. NSS, Sports and Cultural Programmes are overlooked by the Cultural and Sports committee and Placement cells helps in Placement, Training and Internship of the students.

Service Rules, Procedures, Recruitment and Promotion Policies: All rules and regulations under West Bengal Service Rule (WBSR) are followed as the college is under direct administrative control of Higher Education Department, Government of West Bengal. Recruitment and Promotion Policies are guided by the Government of West Bengal following Revision of Pay and Allowance (ROPA), West Bengal.

Grievance Redressal Mechanisms: There are several committees in the college to take care of the Grievances from different stakeholders. The college holds Non Statutory Committees such as Discipline committee, Anti-ragging committee, Sexual harassment committee, Equal opportunity committee, Grievance Redressal committee and Internal Complaint Committee. Registrar of the college is the appellate authority in regard to RTI Act, 2005.

| File Description | Documents |
|---|---|
| Paste link to Organogram on the institution webpage | http://gcct.ac.in/mandatory-disclosures/ |
| 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

B. Any three of the above

| File Description | Documents |
|---|---------------------------|
| ERP (Enterprise Resource Planning) Documen | View File |
| 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

The welfare measures for teaching and non-teaching staff are same as State Government schemes. Government policies are followed for all the teaching and non-teaching staff of the college.

- The permanent employees are getting benefit of general provident fund, gratuity on superannuation and pension as per state government rules.
- The employees are entitled to get residential accommodation in Government Housing Estates which spreads throughout the city.
- Provisions for various types of loans such as house building, computer, vehicle etc. from the Government are also available as per existing norms.
- All teaching and non-teaching staffs are entitled to get free medical treatment under the West Bengal Health Scheme (WBHS) for themselves and their dependent family members in all Government Hospitals as per existing rules. There is health scheme of the Government where every employee can enroll himself to get medical reimbursement of their treatment expenses in a list of major private hospitals throughout the country.
- There is group insurance policy for every employees of the College as per Govt. rules.
- Child Care Leave can also be availed by the employees, which is a paid leave. Female employees can avail Child care leave of maximum 730 days and male employees can avail Paternity-cum-Child Care Leave of maximum 30 days apart from the

conventional leaves for grooming of their children up. This leave can be availed up to the age of eighteen years of the child under the Child Care Leave scheme

- Covid vaccination has been arranged for the employees by the Government of West Bengal
- Provision for LTC is also there as per the rules of Government of West Bengal.
- There is a provision for the festival bonus or advance of salary, depending on the basic pay of the employee.
- Apart from these, on demise of in-service Government staff (depending on pay scale), there is a provision for the appointment of his/her son/ unmarried daughter on compensatory ground.

Career advancement of the teaching staff is aided by the option of Career Advancement Scheme (CAS).

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

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

0

| File Description | Documents |
|---|---------------------------|
| Upload any additional information | No File Uploaded |
| Details of teachers provided with financial support to attend conference, workshops etc during the year (Data Template) | 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

4

| 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.)

17

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

6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly

College has statutory Financial Management Committee and a defined mechanism of CAG audit of its accounts regularly as per Govt. Finance rules. Office of Principal Accountant General (Audit), WB provides an Inspection Report of college accounts for onward transmission through the department of Higher Education.

Internal audit is conducted by Internal Audit Wing of Finance Department. Autonomy grants sanctioned by the UGC are audited by registered Chartered Accountants appointed by college. The Audited Utilization Certificate is sent to UGC within stipulated time. Other grants received for seminars, symposiums, research projects etc. are also audited by qualified auditors appointed by college

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

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

0

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

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

The institution takes the following strategies for mobilisation of funds and the optimal utilisation of resources:

1. The Budget Branch asks for Budget from each and every Department.
2. Department conveys the same to it's down the line Directorate and other offices to send the estimate of the current year expenditure on the basis of last year's expenditure.
3. By compiling the data Budget Branch publishes the Budget.
4. Departmental Financial Advisor send Statement-E for release of ceiling Balance (for Non plan head).
5. Budget Branch during the year releases ceiling Balance at 25%, 50%, 75% and 100% rates, then Admin Department from its end re-distribute fund directly to DDO (Drawing and Disbursing Officer) or any other sub-allotting officer. Then the concern sub-allotting officer needs to distribute the fund to DDO for the ultimate disbursement of fund from the Govt. eschequer.
6. After receiving fund at budgetary head, a DDO draw the fund by submitting bill at Pay and Accounts Office or Treasury through IFMS (Integrated Financial Management System).
7. DDO can send Budgetary Estimate Statement as and when required. In case of re-appropriation or augmentation of fund from one head to another, Statement-F is send to Budget Branch through proper channel.

8. For Non-Budgetary Head, Funds from UGC, Science and Technology Department, DST credited directly to the college Bank Account. We need to disburse the fund by issuing cheques. Proper audit is done at the end of the year and utilization Certificate needs to be provided to the concern Fund releasing Authority.

Clarification regarding Statement -F mentioned in point no 7 above:

When there is not enough fund in one Head, the money is borrowed from another head in which there is excess of fund. This is as per the definition re-appropriation and augmentation of fund in terms of accountancy.

| 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)

Incremental improvements made during the preceding year with regard to quality and post-accreditation quality initiatives are as follows:

IQAC formulates the quality policy of the whole academic system of the institute. The periodic monitoring of the adherence of the guidelines of the IQAC are made. Member of the IQAC physically visits different departments to assess the performance of the department and recommends steps to be taken for further betterment.

- It was observed that the class response, as well as the results of the students was improving after the implementation of the continuous evaluation process, which was implemented from 2018-19 academic session. This was one of the significant improvements observed post implementation. This is also reflected from the improved placement results, as well as, from the results of the students in the all India competitive examinations, such as GATE and others.

- Elective subjects based on requirement of the Industries for better employability have been incorporated in the syllabi of all programmes. Besides, Industry experts were invited to deliver lectures to fill the gap between technology taught and need of the industries. These altogether, helped the students keep themselves updated with the recent requirements of the industries.
- Additional classes for soft skill were arranged for first year students to improve their soft skills. This is done with an aim of developing the students into good professionals in their career. The result of the effort was observed in the proficiency of soft skill among students, especially their better English speaking ability during the classes.
- The feedbacks received from the students were discussed critically. It was recommended that every department should discuss the feedback amongst the faculty of the department to find out the deficiency, if any, in the academic delivery system. This analysis significantly helped the teachers in designing/modifying their teaching plan; which in turn, helped the students in better understanding.
- In spite of being under the COVID 19 pandemic and lockdown situation, different industries were approached to hold campus interviews through online mode and a good placement of students was achieved.
- Research was encouraged among the faculties. Two more faculties were awarded Ph.D degrees during this academic session, which signify improvement in quality of research among the faculties. Apart from that, the several research papers were published by many of the faculties, which also bear the signs of improvement of research, even under pandemic situations.
- The committee reviewed the best practices followed by the institute and found that it had been implemented in letter and spirit and improved the overall scenario from the previous sessions. One significant one of these is the Post publication answer scripts review/scrutiny was simplified with more transparency. This has resulted in no application for review of the answer scripts by the students, which clearly point out that a transparent evaluation system is in practice in the institute.
- Encouragement for best performance in the examination by making provision of best graduate award has also been paid off as the urge to receive the award has been increased among the students.
- Continuation of Comprehensive Lab Assessment through a panel

of external experts of respective field for assessing students' performance in lab paper has improved transparency in evaluation; as well as, helped in developing the laboratory concepts from an external expert.

- Continuation of Honours courses with additional 20 credit points to be acquired through the online MOOC, as was introduced from 2018-19, has significantly improved their knowledge beyond the syllabus as the students are observed more interested in taking up the courses.
- Preparation for submission of NBA application is in progress.
- Plans for the prospective conduction of seminars and workshops for the academic year 2020-21 were taken by the cell. It was decided that during the pandemic of COVID19, virtual seminars (webinars) would be the only viable option. Hence, the departments were advised to organize such webinars of interest to students and faculty inviting experts from different institutes/industries. Departments were successful in conducting similar activities; and more importantly, in collaboration with other technical institutions and universities. The list of Seminars/Programmes organized by the institution during this pandemic affected session is given below:

Name of quality initiative organized by the institution

Date From

Date To

Duration

Faculty Development Program on Artificial Intelligence using Python, conducted by Govt. College of Engineering & Ceramic Technology, Kolkata in collaboration with Brainovision Solutions India Pvt.Ltd.

14-09-2020

19-09-2020

6 Days

Webinar on Future Generation Computing and Applications: Smart Devices; conducted jointly by Govt. College of Engineering & Ceramic Technology, Kolkata and School of Mobile Computing & Communication, Jadavpur University, Kolkata

19-09-2020

19-09-2020

1 Day

Webinar on Future Generation Computing and Applications: Cloud Computing; conducted jointly by Govt. College of Engineering & Ceramic Technology, Kolkata and School of Mobile Computing & Communication, Jadavpur University, Kolkata

26-09-2020

26-09-2020

1 Day

Webinar on Future Generation Computing and Applications: A walk through of Deep Learning, Social Networking, Internet of Things and Quantum Computing; conducted by Govt. College of Engineering & Ceramic Technology, Kolkata

08-08-2020

09-08-2020

2 Days

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

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

- The status of online interaction of the faculties with students as a substitute for face-to-face classrooms and the mode of future examination procedures in view of pandemic situation and consequent lockdown were reviewed.
- Due to COVID 19 pandemic, institute had to be closed as per Govt. notification. During the pandemic phase (16th March 2020

onwards), utmost care was taken to see that academic activities go unhampered during the lockdown period. Online mode in Google Meet platform was adopted for conduction of both for theory and practical classes.

- Online classes continued as per time table prepared. Google Classrooms were created for each and every paper. Official GSuite IDs were issued to every teacher and student for conduction of academic activities in the classrooms. The whole gamut of activities under the GSuite platform was managed by system administrator including the Principal.
- The conduction of the online classes was monitored periodically by the Principal, the Chairman of the IQAC, regarding the attendance of the students, availability of course material to the students etc. These records were obtained from the System Administrator engaged to manage online classes. The faculties were advised to record each of the classes and share the link of the recorded classes with students. The Principal periodically monitored these activities and the teachers, who shared less number of classroom recordings, were advised repeatedly to upload all the lectures. Attendance of the students was also monitored and the defaulters were communicated by the faculties, mostly over phone, to explain the reason of absence.
- The IQAC also recommended the teachers for uploading quizzes and assignments periodically as a part of continuous evaluation process.
- Teachers were advised to prepare/modify the course material and follow the same during the online classes. The teachers were also advised by the IQAC to be careful while developing the learning outcomes from the modules, and link each of the sub-topic of the module to the corresponding Course Outcomes and the Program Outcomes.
- Teachers were advised to frame the mid semester and end semester question papers keeping in mind the intended learning outcomes and Course Outcomes of the respective subjects. They were also advised to link each question with the respective Course Outcome in order to estimate the attainment of the student in each of the question, as well as, in that particular subject on an overall analysis.
- Since, most of the session was within COVID 19 pandemic, it was decided that the mid-term examinations, which were two major components of the continuous evaluation scheme, would be conducted online. It was also decided that the Semester End Examinations for the ensuing batches would be comprising of two components; viz., online examination of 50 marks of MCQ type prepared in Google Form and viva voce of 25 marks in each

theory paper conducted in online mode (Google Meet). All practical examinations were decided to be held in online mode (Google Meet platform).

- After completion of examinations, viewing of answer scripts was allowed to students as per Academic Regulation, in online mode.
- All departments discussed the feedback amongst the faculty of the department to find out the deficiency, if any, in the academic delivery system. Apart from that, based on the recommendations of the graduate survey, the departments have been advised to enhance skills among the students as per the Program Outcomes and the need of the industries and follow up the same.

The committee reviewed overall conduct of academic practices and found that online academic activities were being conducted as per prescribed time table in Google Classroom platform (G-Suite).

| 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)

B. Any 3 of the above

| File Description | Documents |
|--|---|
| Paste the web link of annual reports of the Institution | http://gcect.ac.in/annual-report/ |
| Upload e-copies of accreditations and certification | View File |
| Upload details of quality assurance initiatives of the institution | View File |
| Upload any additional information | View File |

INSTITUTIONAL VALUES AND BEST PRACTICES

7.1 - Institutional Values and Social Responsibilities

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

a) The institute desires to see women's full and effective participation and leadership in all areas of life to drive all-round progress of humanity. With a view to promote this message International Women's Day was celebrated on 8th March, 2021, online in which both male and female students deliberated on the theme, keeping focus upon means and ways of more empowerment of women .

b) The institute remains always committed to deliver the benefit of Kanyashree Prakalpa (a project aiming at empowerment of women of West Bengal) run by the Government of West Bengal to the eligible female students. The project seeks to improve the status and wellbeing of girls, specifically those from socio-economically disadvantaged families through Conditional Cash Transfers by:Incentivizing them to continue in education for a longer period of time, thereby giving them a better footing in both the economic and social spheres.The schemes benefits are paid directly to bank accounts in the girls' names, leaving the decision of utilization of the money in their hands.A female student is eligible for a One-Time Grant of Rs. 25,000/-, to be paid after she turns 18, provided that she is engaged in an academic or occupational pursuit and is unmarried.

In the year 2020-21, one girl student, Smt. Saheli Mahapatra, was selected for this grant and in the previous year the number of beneficiaries stood at five.

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

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

A. Any 4 or All of the above

| File Description | Documents |
|--------------------------------|---------------------------|
| Geotagged Photographs | View File |
| Any other relevant information | View File |

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)

In order to maintain cleanliness and hygiene the institute always keeps watch upon proper disposal of waste generated every day. Being situated in the heart of Kolkata city, the institute gets the service of waste disposal squad of Kolkata Municipal Corporation which collects the waste from the premises on daily basis. Large plastic vats are kept at strategic positions inside the premises for dumping separately biodegradable and non-biodegradable waste materials.

At one corner of the boundary a pit is maintained where biodegradable materials like dry leaves & dead seasonal flower plants are dumped from time to time for composting which after maturing are recycled as plant nutrients.

| File Description | Documents |
|---|---------------------------|
| Relevant documents like agreements/MoUs with Government and other approved agencies | No File Uploaded |
| Geotagged photographs of the facilities | View File |
| 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 **C. Any 2 of the above**

| File Description | Documents |
|--|---------------------------|
| Geotagged photographs / videos of the facilities | View File |
| Any other relevant information | View File |

7.1.5 - Green campus initiatives include

7.1.5.1 - The institutional initiatives for greening the campus are as follows: **A. Any 4 or All of the above**

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

| File Description | Documents |
|--|---------------------------|
| Geotagged photos / videos of the facilities | View File |
| 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

7.1.6.1 - The institution's initiatives to preserve and improve the environment and harness energy are confirmed through the following: **B. Any 3 of the above**

1. Green audit
2. Energy audit
3. Environment audit
4. Clean and green campus recognitions/awards

5. Beyond the campus environmental promotional activities

| File Description | Documents |
|---|---------------------------|
| Reports on environment and energy audits submitted by the auditing agency | View File |
| Certification by the auditing agency | No File Uploaded |
| Certificates of the awards received | No File Uploaded |
| Any other relevant information | No File Uploaded |

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

A. Any 4 or all of the above

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

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

Being a wholly owned state government institution, the entry is restricted to domiciled candidates only, which implies that there exists fairly enough harmony among the students in terms of cultural, regional, linguistic, communal identities from the very beginning. Domiciled students include people settled from different

regions of India pursuing various faiths. The state of West Bengal seldom witnessed any kind of communal tension in recent history. Apart from the fact, to iron out differences which may cause tension among different sections, the institute regularly organizes various programs. The freshers have to undergo a two-week orientation program, before they join their formal classrooms, in which they get to know each other more closely apart from bonding with faculty members as their mentors. Throughout the whole year the students are encouraged to organize and participate in various programs like JAGRITI Festival, KARMATECH festival, Freshers' Welcome, Farewell for outgoing students, Teachers' Day celebration, Independence Day and Republic Day celebration and myriad other activities to make sure that no sections of students feel left out and their sense of separate identity, whatsoever, gets hurt.

| File Description | Documents |
|--|---------------------------|
| Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution) | View File |

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

The objective of the institute is to produce employable engineering graduates with strong human values and awareness about the rights and duties of responsible Indian citizens. To fulfil this objective, study of the basics of Indian constitution has been made compulsory in the course-curriculum across all departments. To reinforce the training of the students in this regard, they are encouraged to participate in various NSS programs. The NSS unit of the institute headed by a dedicated faculty member regularly organizes events to promote values enshrined in the constitution. It celebrated International Women's Day on 08.03.2021. Red Ribbon Club, a wing of the NSS Unit also organized a quiz on the same day.

It is also the duty of the institute to create awareness among the employees about the essence of Indian Constitution in order to make them more equipped to live with the neighbours in complete harmony both in their workplace and dwelling territory. Lectures are organized with employees as participants under the guidance of knowledgeable persons to discuss the features of constitutional obligations and how those elements play out in real life to avoid serious social conflict.

| File Description | Documents |
|---|---------------------------|
| Details of activities that inculcate values necessary to transform students into responsible citizens | View File |
| Any other relevant information | View File |

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

A. All 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 | View File |

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

The institute never intends to keep its students confined to their professional goal in narrow material sense. It always desires to mould them in such a manner so that they come out as professionally competent and highly spirited, sociable persons at the end of their study. To realize this, the institute celebrates important national and international days in attractive ways with due respect and allows students to organize many events themselves so that through these initiatives they could learn to quickly pick up skills like striking friendship effortlessly with fellow people and leading a group in organizing events, which would benefit them greatly in future in performing tasks with ease in community environment.

The institute celebrates independence Day and Republic Day to commemorate the contribution of freedom fighters, maintaining all standard protocols. The students, on their part, also play their role in befitting manner by organising events like birthday celebration of Rabindranath Tagore and Kazi Nazrul Islam, Teachers' Day, Swaraswati and Biswakarma Puja etc. every year. Moreover, during the pandemic, the students, on their own, regularly organized online cultural programs to buck up the sagging morale of all and sundry.

| File Description | Documents |
|--|---------------------------|
| Annual report of the celebrations and commemorative events for during the year | View File |
| Geotagged photographs of some of the events | View File |
| Any other relevant information | View File |

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

BEST PRACTICE I

1. Title of the practice:

Research and development activities in relevant engineering disciplines and allied fields of basic science

1. The objective of the Practice (in about 20 words)

The objective is to attain excellence by expanding the horizon of knowledge base of the institute and encourage the faculty members to bring projects on upcoming areas from various funding agencies which may lead to development of useful products.

1. The context (in about 30 words)

The college has a strong tradition of research activities including some collaborative endeavours which led to development of useful engineering product. In 2011 a collaborative project with IIT Kharagpur and National Jute Board culminated in development of an engineering material called Jute Fibre Reinforced Concrete which has

been granted a patent in 2021.

Therefore, the institute decided to encourage the young faculties to engage in such research activities, apart from publishing the outcome in reputed journals, which may lead to development of new useful engineering material.

1. The Practice (in about 50 words)

In line with the expectation of the institute, Dr. B. K. Sanfui, Asst. Professor of Ceramic Technology has concentrated upon development of new engineering materials like ceramic membrane for separation of CO₂ from flue gas, value added products prepared from agricultural waste and coal ash like light weight building block and abrasion resistant ceramic respectively, low energy consuming refractory etc.

Apart from it, many faculty members are engaged in various research areas, the outcome of which is being regularly published in reputed journals.

1. Evidence of success (in about 40 words)

Beside successfully completing two major research projects funded by DST and valued at about rupees one crore, Dr. B. K. Sanfui published a paper in an international journal with impact factor 9.22. His laboratory developed product coal ash-based abrasion resistant ceramics got wide publicity in DD News (<https://ddnews.gov.in/national/industrially-important-ceramic-products-bottom-ash-thermal-plants-may-reduce-waste-worries>). It was also highlighted in the leading newspaper "The Hindu-Business line" (<https://www.thehindubusinessline.com/specials/ceramics-from-ash/article33372248.ece>). Dr. Sanfui also filed application for granting one patent for his newly developed product.

The following faculty members also published their research findings in reputed national and international journals in the year 2020-21:

Dr. K. Das, Dr. T. K. Bhattacharya, Dr. M. Maitra, Sri. S. Chowdhury, Dr. K. Chatterjee, Sri. A. Mukherjee, Dr. N. Mazumder, Sri. P. Halder, Dr. S. Roy and Smt. P. Dey.

1. Notes (optional)

The institute may consider offering a certificate course or a

component of a programme if a newly established laboratory becomes self-sufficient in terms of resources in course of development of a product.

BEST PRACTICE II

1. Title of the practice:

Introduction of online teaching and evaluation

1. The objective of the Practice (in about 20 words)

The objective is to make the most of online method of teaching and evaluation so that the students' career does not suffer due to their inability to attend offline classes and sit for examinations in pen and paper mode which was the standard practice before the onset of the pandemic.

1. The context (in about 30 words)

As the pandemic began to set in in the month of March 20, the academic institutes started gradually reducing their normal offline activities and by the end of March almost all academic institutions closed the gates for physical entry as per the order of the government. In absence of any specific guideline in the beginning, the faculties tried to explore the features of online platforms to continue imparting lessons to the students in an unscheduled manner. However, that can no way be construed as a proper substitute of the existing method of teaching and evaluation.

1. The Practice (in about 50 words)

Formal online classes were started after obtaining official license of GSuite platforms, with provisions for individual classroom for each and every paper to be conducted as per class routine prepared by the respective department. Under the arrangement, the teachers had been able to record all lectures, share the video recordings in the classroom, take online quizzes, give assignments and assess the classwork/assignments in the classroom itself. The recording of lectures provided the students access to it at his/her convenient time beyond the class hours. The entire offline mid-term and semester end examinations were substituted by online examination system for which necessary approval was accorded by the Academic

Council.

1. Evidence of success (in about 40 words)

The method of online teaching and evaluation was accepted by the students without slightest hitch as it was introduced most transparently having taken them into confidence. The classes and examinations were conducted at regular intervals. The results were published maintaining a time schedule.

Most importantly, the graduates passing through the system didn't face any discrimination in the job market and the employment record for the year 2020-21 bore testimony to this fact.

1. Problems encountered and resources required (in about 30 words)

Given the fact that many of the students come from remote corners of the state and during the pandemic they had to rush back home, access to online classes for them suffered to some extent due to poor connectivity of the internet in remote areas. They were also denied the advantage of learning from the peers which was an integral part of off-line physical classroom.

The resource for setting up online classroom and question papers were entirely borne the college authority.

1. Notes (optional)

Given the wide flexibility that a virtual classroom offers, the institute may introduce a hybrid method of teaching comprising both online and offline classroom in future for the benefit of the students.

| File Description | Documents |
|---|---|
| Best practices in the Institutional website | http://gcect.ac.in/igac/ |
| 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 fixed its priorities as detailed below:

- to make students employable
- to make students fit for working in a social environment
- to groom the students in such a manner so that they come out at the end of the study as good human beings.
- to impart the students the lesson of life-long learning

In order to achieve the above goals, the thrust areas were chosen in the following manner:

- imparting technical knowledge along with sound communication skill
- both verbal and written and providing scope for internship in industry
- conducting NSS activities under the guidance of motivated faculties and encouraging students to participate in various types of competitions and various cultural functions including celebration of International and National days
- organizing motivating lectures by eminent persons from different walks of life of the society
- imparting industrial training to provide the scope of extended practical learning and arranging group discussions and seminars to enhance general promptness of mind and the ability of self learning.

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 curriculum of the institute is designed addressing the recent technologies and the opportunities existing in regional and global level with all necessary fundamentals. The Institute has the three layer structures for development, revision and implementation of curriculum of all the departments. The prime objective of the institute is to create excellence in technical field, fulfilling both academia and industrial requirement.

Methodologies for Curriculum Design:

The Curriculum is designed to ensure that the students have the required domain knowledge, skills and application aptitude.

For references in framing of syllabus, the institute uses

1. Model curriculum prescribed by AICTE
2. Syllabus of various Indian and International institutes of repute
3. The Program Specific Outcomes of professional bodies
4. Suggestions and feedback by industry experts
5. Suggestions by industry alumni
6. Syllabi of various competitive exams like GATE, subject GRE
7. Current research and industrial trend

The curriculum is designed through three layers of hierarchy of the institute. At first, it passes through departmental meeting. Then it is discussed and ratified through Board of studies (BOS). Experts of different reputed organizations (Generally three from academia and one from industry) act as the external members of BOS. After that the syllabus is ratified by the highest academic body of the institute, i.e. Academic Council (AC), composed of internal and external experts.

The students may acquire minimum additional 20 credits by undertaking MOOCs through NPTEL to attain B. Tech. degree with honours. Further, the summer training / internship is made

compulsory for all students to make them acquainted with the industrial practices and ethics and learn to perform in a practical environment. It is also mandatory for all students to carry out a project, complying with the PO, PSO and CO of the respective departments.

In addition to the curriculum, students' skills are upgraded by arranging various value added courses conducted by Wipro and TCS, and help them become industry ready. Institute has a provision where students can have industry internship in their final year, in which they provide assistance to the industry against a stipend in completing a project.

Implementation of Outcome Based Education (OBE) in the Curriculum:

- The initial step for ensuring academic quality is the design of the curriculum, in particular, the types of courses, the number of electives with complete details of the course title and course contents as per the regulations.
- In the next step, Course Outcomes (COs) for every course is mapped with the Program Outcomes (POs) and the Program Specific Outcomes (PSOs) of the program in line with the vision and mission of the organization.
- An effective implementation of this Outcome Based Education (OBE) ensures that our graduating engineers have attained skills with global attributes as per the POs as defined by National Board of Accreditation to compete in a global platform. Specific to every program, the Institute has Program Educational Objectives (PEOs) that are measured through the performance of the outgoing batches of graduate students. The Institute monitors the attainments of PEO, PO and PSO on a regular basis for the respective programs.

| 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

| 3 | |
|---|---------------------------|
| File Description | Documents |
| Minutes of relevant Academic Council/BOS meeting | View File |
| 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 | |
| 5 | |
| File Description | Documents |
| Curriculum / Syllabus of such courses | View File |
| Minutes of the Boards of Studies/ Academic Council meetings with approval for these courses | View File |
| 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 | |
| 6 | |
| 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 | |
| 5 | |

| File Description | Documents |
|--|---------------------------|
| Minutes of relevant Academic Council/BoS meetings | View File |
| Any additional information | View File |
| 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

Technological revolution and industrial progress (both manufacturing and service) with consequent economic growth are the core agenda of Government of India. In addition, eradication of poverty, unemployment and corruption; health-care and sanitation; clean environment and development of basic infrastructure are other needs of the country. Another very important responsibility of any educational institution is to inculcate human values in the students so that they finally become responsible citizens of the country. All these aspects have been taken care of in designing the various curricula of the College.

Syllabi of the institute is designed focusing on the following issues:

1. All the courses are aimed at the overall development of the students as competent professionals with human values.
2. There is a mandatory course on ethics and human rights to inculcate human values among the students for becoming responsible citizens.
3. The curriculum includes courses on environmental studies to create awareness among students about burning issues like global warming, pollution, conservation of natural resources etc.
4. To adopt fast changing global technology, several emergent core engineering topics are included in the course curriculum.
5. A state-of-the-art language laboratory has been set up to improve soft skills of the students to meet the national / international requirements.
6. To make the students aware of their rights and duties, a course on Indian constitution has been introduced in the curriculum. Gender Equality is taught in this course as

well.

7. Cyber law and related ethics are introduced as a course in the curriculum of Information Technology and Computer science. As cyber applications are very common nowadays and different cyber-crimes take place, it is essential to know cyber ethics and protection against cybercrime.
8. Green computing, which reduces the consumption of power and saves the natural environment, are introduced into different courses like mobile computing, cloud computing and sensor network.
9. In course on ceramic raw material, different eco-friendly methodologies are introduced. In the glass science course, the students are taught how to convert waste into wealth. In the course on Cement, Concrete & Monolithic Refractories, methods of Waste material utilization are taught.
10. Topic of Green energy resources are taught.

All the courses offered in both UG and PG levels are aimed at grooming a student with technological skill to address the need of the society and are relevant to the development of the nation as a whole. Along with professional courses, topics on ethics, moral and human values are taken care of in the time of preparation of courses. Choice based credit systems are introduced into the curriculum using MOOC. Course Baskets are designed in such a manner so that not only professional courses are offered, but courses based on human value, professional ethics, environment sustainability are included.

Other than syllabus designing, different extra-curricular activities are conducted at the institute.

1. Gender: Major gender issues are focused and addressed through the activities like Save girl child campaign, Essay and poster exhibitions, wall paper presentations, etc. NSS unit of the institution regularly organizes programmes on gender equity.
2. Environment and Sustainability: N.S.S. promotes environmental protection through tree plantation and other sustainable development programs. Every year, N.S.S. unit undertakes a host of activities in the college campus and organizes various environment related programs including tree plantation, locality cleanliness, cleaning of gutters, digging of soak pits, plastic free campaign, Poster Competition, Debate Competition, etc. Various activities like quiz and poster competitions, invited talks are

organized to create awareness about nature, biodiversity, environment and sustainability. Celebration of various days like World Environment Day, N.S.S. Day, Swachh Bharat Abhiyan are conducted at college campus.

3. Human Values and Professional Ethics: National festivals like Independence Day and Republic Day serve as a platform to enliven patriotic and moral values. Different social activities like Health and Hygiene awareness programs, Medical check-up camps, Road safety Campaign, Blood donation camps, etc. have been initiated by the college .

| 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 | View File |
| Any additional information | No File Uploaded |

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

3

| 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

296

| 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

117

| File Description | Documents |
|---|---------------------------|
| List of programmes and number of students undertaking field projects / internships / student projects | View File |
| Any additional information | View File |

1.4 - Feedback System

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

A. All 4 of the above

| File Description | Documents |
|---|---|
| Provide the URL for stakeholders' feedback report | http://gcect.ac.in/igac |
| Upload the Action Taken Report of the feedback as recorded by the Governing Council / Syndicate / Board of Management | View File |
| Any additional information | No File Uploaded |

1.4.2 - The feedback system of the Institution comprises the following

A. Feedback collected, analysed and action taken made available on the website

| File Description | Documents |
|---|---|
| Provide URL for stakeholders' feedback report | http://gcect.ac.in/igac |
| 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

140

| 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)

29

| 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 proficiency of students is diverse not just in terms of regional and linguistic aspects but also their level and pace of comprehensibility. Students' level of comprehension, classroom observation, interaction, continuous and periodic assessment are used as measuring tools to assess the learning levels of the students.
- Institute has drawn up the schedule for organising remedial classes for slow learners. Teachers are able to give one to one attention in remedial classes and focus on individual problems in a better manner. The departments use monitoring and mentoring to keep track of slow learners' progress. Tutoring by peers and senior students are encouraged. Corrected assignments and answer scripts are shared with each student and discussed to enable students to recognize their problem areas and improve. Faculty makes it a point to be patient and accessible to students personally, over the phone, mail, and social apps. Training and Placement Cell conducts grooming sessions and mock interviews for all students with special emphasis for slow learners to enhance their employability.
- Advanced learners are encouraged to study additional reference books on the subject of study. Gold Medals are awarded to the toppers in the Graduate Day celebration. Students are encouraged to participate in seminars, conferences and workshops to gain knowledge. The faculty

facilitates students to publish their articles in renowned peer-reviewed journals.

| 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 | 462 | 54 |

| 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:

GCECT adopts student-centric teaching-learning methodologies for enhancing the learning experiences of students. The details of experiential learning, participative learning and problem-solving methodologies adopted by the institute are given below.

1. Experiential learning:

1.1. Project method:

Students have to undertake project work as per the requirement of the curriculum. The project work stimulates students' interest in the subject and provides the student with an opportunity for freedom of thoughts and the free exchange of different views.

1.2. Participation in competition at various levels

For real-life exposure, students are encouraged to participate in competitions of National and International Level.

1.3. Industrial Visits

Departments Plan and Organise industrial visits for students to provide exposure to industrial practices.

1.4. Invited Lecture:

Invited lectures by eminent experts from industry and academia of repute are organised to supplement the teaching process and provide experiential learning.

2. Participative learning:

2.1. Teamwork

The students get involved in group activities while attending laboratory classes, projects, seminars, group discussions etc. under the guidance of teachers.

Institute organizes different activities to promote the spirit of Teamwork through NSS. The activities are tree plantation, health awareness camp, campaigning for road safety, water conservation, SwachBharatetc. NSS also organises self-defence programs like karate training. Student welfare association also organises different programs like TechFest, CulturalFest, Hackathons etc to promote team spirit.

3. Problem-solving methodologies:

3.1. Case studies

Students are provided with some real-life problems to solve with their logical thinking and practical knowledge. For example, a group of students have developed the result management software of the institute.

3.2. Research Activities

Research activities are conducted in each Department under the guidance of faculty where the students get knowledge about the emerging areas which help them to inculcate the research acumen.

| 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

College uses Information and Communication Technology (ICT) in education to support, enhance, and optimize the delivery of education. The following tools are used by the Institute

ICT Tools:

1. Overhead LCD Projectors- Overhead LCD projectors are available in all classrooms and few laboratories
2. Desktop and Laptops- Computational facilities are available in all laboratories of Computer Science and Engineering and Information Technology Departments. Few Laptops are available for the use of faculties in addition to desktop computers.
3. Printers- Printers are available in all computational laboratories. Printing facilities are also available in different laboratories of the Ceramic Technology department. Faculties are provided with printers.
4. Photocopier machines - Multifunctional photocopier machines are available in all academic and administrative departments.
5. Scanners- Scanners are available in all academic and administrative departments.
6. Conference Rooms- Three conference rooms are equipped with audio-visual facilities.
7. Smart Board- Five smart boards are installed in the smart classrooms of the campus.
8. Auditorium- It is equipped with state of the art audio-visual facilities.
9. Online Classes are conducted through the licensed version of Google Suite.
10. Students have access to the facility of classes of MOOC, NPTEL, Coursera etc.
11. The library has subscribed to the resources of digital library (UGC INFLIBNET N LIST)

12. Language Lab: One state of the art language lab is present in the campus with ISILS software (Interactive Software Integrated Learning System) CACM, (CACM, STEP IIT Kharagpur)

13. Library has a good repository of recorded lectures of NPTEL procured from IIT Kharagpur.

Moreover, teachers use the following e-resources like MHRD-Virtual Lab, SWAYAM, NPTEL, Youtube videos, e-pathsala, UGC INFLIBNET N LIST etc.

| File Description | Documents |
|--|---|
| Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process | http://gcect.ac.in/igac/ |
| 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

54

| File Description | Documents |
|---|---------------------------|
| Upload year-wise number of students enrolled and full-time teachers on roll | View File |
| Circulars with regard to assigning mentors to mentees | View File |

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

Preparation and Adherence of Academic Calendar: The institution prepares the academic calendar in the meeting of the examination committee at the beginning of each academic year. The academic calendar has schedule of commencement of classes, dates of Mid Term Examinations, filling of the examination form, End semester examinations and publication of examination results. The academic calendar is displayed on the website of the institute. Thereafter, the timetable is prepared by the departments as per the academic calendar. Utmost care is taken to adhere to the academic calendar of the institute.

Preparation and Adherence of Teaching Plan: The concerned faculties prepare teaching plans for their respective subjects they teach. These plans are made at the beginning of the class and serve as a guideline for outcome-based teaching in the class. The Principal and HODs assess the progress of each subject to ensure timely and effective completion of course as per academic calendar.

| File Description | Documents |
|---|---------------------------|
| Upload the Academic Calendar and Teaching Plans during the year | View File |

2.4 - Teacher Profile and Quality

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

32

| 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 | View File |
| 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

19

| 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)

423

| 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

| 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 | View File |
| 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

The following reforms have been implemented in the examination system: (a) continuous assessment (b) 50% weight in continuous evaluation and 50% weightage in end semester examination and (c) viewing of answer script before the publication of result.

The classes were held in online mode due to COVID-19 pandemic situation using G-Suite platform for education in the academic year 2020-21. Class notes and recorded lectures were shared amongst

the students. Assignments were uploaded by the teacher in the Google classroom and the same had been submitted by the students online. Teachers evaluated the assignments and given appropriate feedback to the students for further improvement digitally. Mid-term examinations as well as the semester-end examinations were conducted in digital mode. In this specific academic year, the semester-end examination of 75 marks was divided into two evaluation methods comprising of MCQ for 50 marks and Viva Voce of 25 marks for each subject. The students were allowed to view their answer scripts in the presence of the evaluator of the answer script after evaluation before finalising the marks awarded to them. This has brought proper evaluation of the answer script and transparency in the examination process.

Institute has developed an in-house examination management system in which different activities such as filling of forms, admit card generation, uploading of marks, result preparation are done in a very efficient manner.

| 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

Programme Outcomes of each program are displayed in prominent locations in the departments of the institute. The Course Outcomes of each subject has been inserted in the course content of each subject of the syllabi. Detailed curriculum of each program has been made available on the college website. This enables the teachers and students of the institute to get easy access to the document.

The following mechanism is followed by the institution to frame the Course outcomes:

- The departmental committee frames the initial draft of the syllabus of different courses along with course outcomes in line with program outcomes.
- The Board of studies of each department approves the syllabus after thorough scrutiny.

- Thereafter, the syllabus is placed before the Academic Council for its approval.

| File Description | Documents |
|--|---------------------------|
| Upload COs for all courses (exemplars from the Glossary) | View File |
| 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

CO attainment:

COs' attainment could be found out by direct methods like Classroom Quizzes, Mid Term Tests, Assignments, Semester end examinations and by indirect methods like Course End Survey. Course End survey is conducted at the end of the course by the faculty concerned to evaluate course outcome attainment contributing to programme outcome. In indirect method of CO attainment, questionnaires are formed to assess in qualitative terms e.g., Excellent, Very Good or Strongly agree, Agree etc. The qualitative terms so defined have been given a weight to convert into quantitative terms e.g., Excellent=5, Very Good=4 etc.

80% weightage is given to Direct assessment and 20% weightage is given to Indirect assessment.

Step 1:

The detailed syllabus is available in the college website. All stakeholders have access to the content, evaluation scheme and Course Outcome of each course.

Step 2:

Teachers are required to set questions in the examinations (Mid Term exam and Semester End examinations) keeping in mind the COs of the particular subject and thereafter a report is generated to visualize the CO wise marks distribution.

Step 3:

After the examination is complete, the CO attainment level is measured using the following formula:

CO attainment for ith CO= (SUM OF MARKS ATTAINED/SUM OF ALL MARKS ALLOTTED TO ith CO)X100%

PO attainment:

Each programme outcome is assessed using data collected from direct and indirect methods as described below:

Direct method of assessment for programme outcome consists of mapping Course Outcomes with Programme Outcomes and Programme Specific Outcomes.

Indirect method of assessment for programme outcomes consists of:

1. Alumni survey
2. Employer survey
3. Course end survey
4. Graduate survey
5. Student Satisfaction Survey

| 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

117

| 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

<http://gcect.ac.in/igac/>

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

RESEARCH POLICY OF GCECT, KOLKATA (AUTONOMOUS)

Objectives of Research

Our research policy is intended to provide a multidisciplinary platform to initiate scholarly research with the following objectives:

To create and promote a culture of research among the faculty and scholars of GCECT.

To identify research areas and research topics of academic, applicable and socially relevant significance.

To organize seminars/conferences/workshops on research topics and training programmes in research methodology.

To ensure quality, integrity and ethics in research.

To publish research material in appropriate media and to make available such published information to the end users.

To facilitate the publication of reports submitted by the

research scholars.

To bring about an annual/periodic compendium (A quarterly journal ``Scientific Voyage'' has been published since February 2015) of abstracts/papers presented by the faculties and scholars in various seminars / conferences / workshops.

To serve as a facilitator providing professional guidance, technical support and recommendation for financial assistance.

The Management of GCECT (Autonomous) hereby affirms the following principles concerning research:

Individual research scholars should be free to select the subject matter of their research, to seek support from any legal financial source for their work, and to arrive at their own findings and conclusions. These findings and conclusions should be available for scrutiny and criticism of peers.

Research techniques should not violate established professional ethics pertaining to the health, safety, privacy, and other personal rights of human beings or to the infliction of injury or pain on animals.

The Management should create an environment conducive to research by providing suitable infrastructural facilities such as space, library, lab facilities, and funding if available, based on the educational merit of the proposed research.

The Principal will initiate, promote and monitor the research activities in the institution by constituting an Office of the Dean of Research - consisting of the Heads of the different Departments and two members of the faculty designated by the Management (already a committee has been function in the name of ``Research Committee'' in connection to Projects based on UGC Norms). The Principal shall appoint the Dean from among this team.

| | |
|--|--|
| | |
|--|--|

| File Description | Documents |
|--|---------------------------|
| Upload the Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption | View File |
| Provide URL of policy document on promotion of research uploaded on the website | Nil |
| 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)

0

| File Description | Documents |
|---|---------------------------|
| Minutes of the relevant bodies of the institution regarding seed money | View File |
| 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

1

| File Description | Documents |
|---|---------------------------|
| e-copies of the award letters of the teachers | View File |
| 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)

3360600

| 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

4

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

3.2.3 - Number of teachers recognised as research guides

5

| 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.

Dr. B. K. Sanfui, Asst. Professor of Ceramic Technology has concentrated upon development of new engineering materials like ceramic membrane for separation of CO₂ from flue gas, value added products prepared from agricultural waste and coal ash like light weight building block and abrasion resistant ceramic respectively, low energy consuming refractory etc.

His laboratory developed product coal ash-based abrasion resistant ceramics got wide publicity in DD News (<https://ddnews.gov.in/national/industrially-important-ceramic-products-bottom-ash-thermal-plants-may-reduce-waste-worries>). It was also highlighted in the leading newspaper "The Hindu-Business line" (<https://www.thehindubusinessline.com/specials/ceramics-from-ash/article33372248.ece>). Dr.Sanfui also filed application for granting one patent for his newly developed product.

| File Description | Documents |
|---------------------------------------|---|
| Upload any additional information | No File Uploaded |
| Paste link for additional information | https://www.thehindubusinessline.com/speci als/ceramics-from- ash/article33372248.ece |

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

| File Description | Documents |
|--|---------------------------|
| Report of the events | View File |
| 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 | View File |
| Any additional information | View File |

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

7

| 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

1.44

| 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

0.91

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

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

3.4.5.1 - Total number of Citations in Scopus during the year

39

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

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

82

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

0

| 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 | No File Uploaded |
| Any additional information | No File Uploaded |

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

0

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

3.6 - Extension Activities

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

Tree Plantation in the GCECT campus, Health checkup camp organized in the GCECT campus Celebration of International Women's Day Quiz on HIV and AIDS Celebration of International Yoga Day

| File Description | Documents |
|---------------------------------------|---------------------------|
| Upload any additional information | View File |
| 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

2

| File Description | Documents |
|--|---------------------------|
| Number of awards for extension activities in during the year | View File |
| e-copy of the award letters | View File |
| 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)

4

| 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

136

| 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

97

| 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)

1

| File Description | Documents |
|---|---------------------------|
| e-copies of the MoUs with institution/ industry/ corporate house | View File |
| 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.

The institute runs both UG & PG courses in engineering and for this purpose suitable number of classrooms are available with adequate seating arrangement and ventilation. Importantly, quite a few of these classrooms are having ICT facilities (total 11 numbers) while some of the classrooms are purely dedicated as smart classrooms (total 5 numbers). Moreover, 18 numbers of LCD projectors are also available for classrooms and laboratories while most of these classrooms are having Wi-Fi facility with 100 mbps internet connection (provided by NKN) bandwidth. Apart from these, the institute also provides sufficient well-equipped furnished laboratories for the students to carry out their experimental works. In this context, some department specific important laboratories are mentioned below-

Ceramic Technology Laboratories

CSE & IT Laboratories

Basic Science & Engineering Laboratories

Refractory Lab

Cement & Concrete Lab

Unit Operation Lab

White ware Lab

Glass Lab

Coating Lab

Instrumental Analysis Lab

Nano Materials and Sol-gel Lab

Energy Engineering Lab

Thin Film Lab

Project Lab

Physical Testing Lab

Basic Computing Lab

System Administration Lab

Object Technology Lab

Digital Electronics Lab

Microprocessor Lab

Communication Engineering Lab

Distributed Computing Lab

Physics Lab

Chemistry Lab

Engineering Drawing Lab

Modern English Language Lab

Central Computing Lab

Basic Electronics Lab

Mechanical Workshop

Electrical Engineering Lab

In addition, some specialized advanced labs are also set up by utilizing the grants received from the National Funding Agencies. Among these labs VLSI Lab, Image Processing & GIS Lab, Image Processing & Computer Vision Lab are the most important pioneer labs in recent times. Also, these basic and advanced labs are providing enough state-of-the-art computing facilities (including machineries/hardware/software) to groom the students for the global market. In this aspect, more than 200 desktop computers are available for the laboratories with internet connections while all such computers are providing good computing facilities. Additionally, the institute also hosts some specialized instruments/equipment for advanced study/research and these are mentioned below-

Specialized equipment of Ceramic Technology

Specialized equipment / software of CSE & IT

Nano Particle Size Analyser

Sedigraph

Fully automatic Micro-hardness tester

Horizontal Dilatometer

High Temperature Viscometer

Lanmuir-Blodgett Thin film Apparatus

Spin and Dip Coater

Furnace(Spectro Photometer & pc control)

Fully Computer Controlled high precision compressive strength testing machines

Non destructive elastic property analyzer

ERDAS Imagine Professional

ENVI

IGIS

IDL

Virtual GIS

Multisim

VSLI Design Toolset

P sim Software

Amplifier

ISILS Software for Language Lab

Operating System Winpro

| 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.)

The institute always encourages their stakeholders in various extra-curricular activities for improving their physical and mental health. Hence, several infrastructures are built and maintained regularly to promote such extracurricular activities for both students and staff. Among these facilities, air-conditioned indoor auditorium with 250 seating capacity is used for organising the different cultural events, seminars and get togethers while one seminar hall (seating capacity around 50) is also available for hosting the technical seminars, workshops and conferences etc. Importantly, both these halls are having in-built sound system facility and electrical systems. Apart from these, the institute also has one dedicated yoga/karate room for hosting the different yoga/karate training/events on a regular basis. Additionally, the institute also encourages indoor games like chess, table tennis, carrom etc. with competitions being organized in periodic intervals. Further, the institute has also set up a gymnasium with cycling, treadmill and weight lifting facilities. Finally, provisions for outdoor games are also

available with two playgrounds adjacent to the main building which are frequently used for hosting the different sports events from time to time.

| File Description | Documents |
|---------------------------------------|---------------------------|
| Geotagged pictures | View File |
| 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

18

| File Description | Documents |
|---|---------------------------|
| Upload any additional information | No File Uploaded |
| 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)

12.06

| File Description | Documents |
|--|---------------------------|
| Upload audited utilization statements | View File |
| 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)

Library is fully automated using integrated library management software LIBSYS which is a fully proprietary product of LIBSYS Corporation. It has been functioning since 2005. But the Library Committee considering the advantage of using open source library

management software decided to switchover from LIBSYS to KOHA and accordingly KOHA was installed. KOHA is fully featured, award winning open source integrated library management system. It is being used worldwide in libraries of all sizes. Its development is driven by a growing community of users collaborating to achieve their technology goals. KOHA's features continue to evolve and expand to meet the needs of its user base.

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

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

A. Any 4 or more of the above

| File Description | Documents |
|---|---------------------------|
| Details of subscriptions like e-journals, e-books, e-ShodhSindhu, Shodhganga membership | 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)

11.171

| File Description | Documents |
|---|---------------------------|
| Audited statements of accounts | View File |
| 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

| 5.08 | |
|--|---------------------------|
| File Description | Documents |
| Upload details of library usage by teachers and students | View File |
| 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 the facility of both wired and Wi-Fi internet connections with 100 mbps bandwidth (provided by NKN). In this context, it is to be noted that, there is no such distribution of bandwidths between wired and wireless networks and the whole bandwidth is available for both of them. The cyber security issues of the institute mainly based on a proxy server and an application-level firewall. Moreover, the institute takes proper initiatives for updating and maintaining these IT infrastructures. Importantly, this maintenance process is need based, where the institute places the requisition to the Higher Education Department, Govt of West Bengal and after proper approval, the work is executed as per the West Bengal Govt. financial rules by utilizing the state govt. allotted budget.

The IT policies adopted in the institute for procurement, maintenance and augmentation of computational and network facilities including Wi-Fi and cyber security aspects are as follows:

- 1) Each student is to be provided with a PC in the laboratory to carry out his experimental and project related work.
- 2) Few PCs with printing and scanning facility are to be allocated for administrative staff of the institute.
- 3) Every faculty are to be allotted a PC with printing and scanning facility.
- 4) All PCs are to be connected to network having internet facilities.
- 5) All PCs of the institute are to be connected to online/stand-alone UPS.

6) All PCs and accessories should be under Annual Maintenance Contract.

7) Internet connectivity should be made available to all the VLANs with a provision of 1gbps and above speed.

8) Campus wide Wi-Fi connectivity should be made available to all users.

9) Access to the network should be proxy based and password protected.

10) The internal networks are to be protected by means of application level firewall and a proxy server.

11) All laboratories are to be equipped with fire fighting equipment.

12) IT infrastructure and its functioning are to be monitored by a committee.

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

4.3.2 - Student - Computer ratio

| Number of Students | Number of Computers |
|--------------------|---------------------|
| 462 | 324 |

| 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 | View File |

| | |
|--|----------------------------------|
| 4.3.4 - Institution has facilities for e-content development: Facilities available for e-content development Media Centre Audio-Visual Centre Lecture Capturing System (LCS) Mixing equipments and software for editing | B. Any three 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) | No File Uploaded |

4.4 - Maintenance of Campus Infrastructure

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

34.59

| File Description | Documents |
|-----------------------------------|---------------------------|
| Audited statements of accounts | View File |
| Upload any additional information | View File |

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 College being a government institute, Public Works Department (Civil and Electrical division), Govt. of West Bengal looks after the maintenance work of all the physical infrastructures as and when required. In this aspect, PWD carries out detailed inspection as per requisition of the institute and submits the estimated budget for the proposed work. This budget is then placed to the Higher Education Department for their approval and the work is subsequently executed. For urgent plumbing and

sanitary maintenance work, the College authority can execute it and submit the bill to the Kolkata Pay A/Cs office for payment. The PWD electrical division has set up an office within the college campus for day-to-day maintenance activities of all the electrical appliances and installations. In addition to these, there are certain procedures adopted for maintenance and purchase of academic as well as other support facilities. The concerned faculty puts forward requisition through the HODs to the Principal to decide on purchase and maintenance of laboratory equipment under the State budget. All purchases and maintenance are decided by the Purchase committee, with the Registrar of the College as the convener. Any purchase costing over Rs. 10,000/- is done following West Bengal Financial Rules. Occasionally, few equipment which are not covered under annual maintenance contract are looked after by faculty and support staff. In addition

to this, a network maintenance committee is also constituted with faculties and technical assistant to look after the smooth functioning of the internet connection facilities within the college campus. Finally, the college authority ensures regular cleaning and sanitization of the whole campus including gym and play-ground area of the institute. Security and house keeping services are outsourced by following the Govt. rules. To meet the information need of the teachers, students and research scholars, the concerned HODs, in consultation with the teachers, selects the books and e-contents for collection. Students' demands are noted down in the book requisition register maintained in the library. Collected materials are processed either by the librarian or through outsourcing depending upon the volume of collection. Day to day house keeping operation viz. accessioning, shelving, retrieval, issue, return, restoration, shelf rectification, cataloguing, data entry are done by the librarian. Dusting and cleaning, pest controlling and binding of damaged books are done through outsourcing. Collection of books are examined periodically for the purpose of repair, replacement or removal. Maintenance of computer and photocopier machines are done through AMC. The library committee members are regularly framing various policies and procedures for the development as well as betterment of the library.

| 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 | |
| 66 | |
| File Description | Documents |
| Upload self-attested letters with the list of students receiving scholarships | View File |
| Upload any additional information | View File |
| 5.1.2 - Number of students benefitted by scholarships and freeships provided by the institution and non-government agencies during the year | |
| 61 | |
| File Description | Documents |
| Upload any additional information | View File |
| Institutional data in prescribed format | No File Uploaded |
| 5.1.3 - The following Capacity Development and Skill Enhancement activities are organised for improving students' capabilities Soft Skills Language and Communication Skills Life Skills (Yoga, Physical fitness, Health and Hygiene) Awareness of Trends in Technology | C. Any 2 of the above |
| File Description | Documents |
| Link to Institutional website | http://gcect.ac.in/ |
| Details of capability development and schemes | View File |
| Any additional information | No File Uploaded |
| 5.1.4 - Number of students benefitted from guidance/coaching for competitive examinations and career counselling offered by the institution during the year | |

| 102 | |
|---|---------------------------|
| 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 |

| | |
|--|-----------------------------------|
| <p>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</p> | <p>A. All of the above</p> |
|--|-----------------------------------|

| 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

| 61 | |
|---------------------------------------|---------------------------|
| 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

10

| 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

09

| 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

Nil

| 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

Student Welfare Association and its representatives are responsible for organizing various co-curricular activities for 400 plus students in the campus and assessing the requirements of the students for putting them before the Principal of the college

for necessary action. Also, they look after the welfare of the students as a whole and put forward grievances of the student community, if there be any, before the authority. The students' representatives work as facilitators for the functions of training and placement cell of the college. The students' welfare Association are also responsible for assisting, motivating, counselling and organizing various events during Jagriti, their cultural annual fest and Karmatec, an inter college technical fest held at the campus respectively. General Secretary of the Welfare Association is a member of the Governing Body of the college. A few student representatives are also actively involved in assisting the HODs and training placement cell for organizing industrial training, industry visits and both on and off campus placement drives.

| File Description | Documents |
|---------------------------------------|---|
| Upload any additional information | View File |
| Paste link for additional information | http://gcect.ac.in/students-welfare-associations |

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

9

| 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 college has a registered Alumni association. The Alumni Association of Govt. College of Engineering and Ceramic Technology is very active and functional. The alumni association is working continuously to organize special lectures, different technical seminars, academic convention, workshops and yearly event like National symposium cum Alumni meet at the college

campus to strengthen the bonding between the former students and current students and faculties of the institution. Alumni Association also funds different programmes jointly organized with the institution for the benefit of students and faculty. Some alumni members are members of BOS of Ceramic Technology as well as Academic Council of the institution. Many alumni make scope for the internship to the present students. Few alumni are senior VPs/Managing Directors of reputed industries, few are heading production, international marketing, project divisions etc. For this session the Alumni Association has organized a virtual program on "Reconnecting, Restoring and Revigorating the GCECTian spirits" on 30th January, 2021. It maintains a secured website: <https://www.gcectalumnus.org> for communicating purpose, the association uses an email id: gcectalumnus@gmail.com. The College collects feedback from the alumnas and suggestions from that end are being well considered for developing the curricula and other developmental activities of the College.

| File Description | Documents |
|---------------------------------------|---|
| Upload any additional information | View File |
| Paste link for additional Information | https://www.gcectalumnus.org/ |

5.4.2 - Alumni's financial contribution during the year

E. <2 Lakhs

| File Description | Documents |
|-----------------------------------|---------------------------|
| Upload any additional information | View File |

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

Vision of the Institute:

To be a centre of excellence in various fields of engineering and technology by imparting core knowledge to the students

Mission of the Institute:

M1: To impart high quality technical education with ethical

values that will produce globally competitive engineers & technologists.

M2: To inculcate entrepreneurial skill and leadership quality amongst potential students.

M3: To motivate students for acquiring and eventually generating advanced knowledge.

M4: To create compassionate, responsible and innovative global citizens.

M5: To strengthen Institute-Industry interaction to make the students aware of real problems in the Industries and solutions thereof.

The institution follows a participatory mode of governance and management with all stakeholders. The Governing Body of the institution delegates authority to the Principal. Principal, with due consultation with different subsequent levels of functionaries, such as, the Heads of Departments, Academic council, Board of studies, various committees, faculties and staff representatives of the institution and other decision-making bodies takes decision in determining and implementing different institutional policies.

The institution has different perspective/strategic plans for systematic running of the institute. Grants are received from government sources viz. UGC, AICTE etc. and non-government sources such as Alumni Association for administrative and academic utilization. Administrative purposes include infrastructural expansion for accommodating more classrooms, laboratories, auditoria, staffrooms, hostels etc., as well as, renovation of ageing infrastructures, washrooms etc. Academic upgradation includes emphasizing ICT enabled teaching-learning, upgradation of subjects and curriculum with an eye towards the modern industrial requirements. Emphasis is also paid on research. Faculties are encouraged to apply for grants in the state, national and international level; as well as, encouraged for collaborative research with other institutes.

Faculties are also instrumental in implementing the vision and mission of the institution and play a leading role in various decision-making processes, in consultation with the Principal. Being an autonomous institute, departments receive considerable academic independence. Faculties involved in the Academic Council

and Governing Body influence institutional polity. Apart from these, the institution holds several sub-committees. Many of the faculties are members and conveners of these committees. Effective leadership is demonstrated by the members of these committees in order to ensure smooth functioning of the institute considering various directions of academic and administrative functioning. The various committees and their subdivisions are describes in a tabular form as follows:

Statutory Committees

1. Governing Body
2. Academic Council
3. Board of Studies
4. Finance committee
5. Faculty council

Non Statutory Committees

1. Administration

1. Discipline
2. Anti-ragging
3. Sexual harassment
4. Equal opportunity
5. Grievance redressal
6. College web site maintenance
7. Planning and Monitoring
8. Purchase / Tender
9. Scholarship
10. Green Campus

1. Academics

1. IQAC
2. Academic audit
3. Research
4. Library
5. College examination

1. Cultural and Sports

1. NSS
2. Sports
3. Cultural Programme

1. Placement, Training and Career Counseling

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

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

A Strategic Plan is adopted by the Institute based on various institutional practices such as decentralization and participative management.

- Administration: Various statutory committees e.g., Anti Ragging Committee, Grievance Redressal Committee, Admission Committee, Examination Committee, Establishment Committee for SC/ST) help the institute to run the administration smoothly.
- Academics: BOS, Academic Council help the institute in academic matters.
- Quality Assurance: IQAC, Library Committee etc. help the institute in Quality management.
- Practices of decentralization and participative management are observed in several areas. The college is under the administrative control of Higher Education Department,

Government of West Bengal and is overseen by the Directorate of Technical Education.

- The institution follows West Bengal Service Rules and West Bengal Financial Rules. Proposals in respect of upgradation and augmentation of infrastructure are initiated from the departmental level with inputs from the students and other stake-holders, which are then placed before the Principal.
- After making necessary formalities for purchase, the matter is placed to the purchase committee, consisting of faculties and administrative staff.
- For any new construction, proposal is placed before the GB for recommendation and onward transmission to the HE department through the Directorate of Technical education, Govt. of West Bengal for administrative approval and sanction of funds for the same for both the cases.
- Apart from that, all faculties and stake holders are involved in the development of the curriculum of the college.
- The proposals received in respect of designing of the curriculum modification of course, if any, are discussed in the departmental meetings and placed in the respective Board of Studies. This is then placed to the Academic Council and finally to the Governing Body for approval and implementation.

The academic regulations are also framed and approved and implemented following the same procedures. This is worth mentioning that there is representation of faculty, administrative staff and external experts in the respective Boards of Studies of all departments, the Academic Council and Governing Body.

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

6.2 - Strategy Development and Deployment

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

The institutional Strategic/Perspective plan is clearly articulated and implemented in areas of (1) Teaching and learning, (2) Research and development, (3) Community engagement, (4) Human Resource planning & development and (5) Industry interaction & Placement. The College always focuses on excelling in physical and academic ambience and infrastructural development.

Teaching and learning: Teaching-learning process is a multi-faceted concept comprising many conceptual, developmental, psychological and instrumental issues.

- The College always strives for excellence in teaching learning process which is reflected by the placement record of our graduates.
- The College has various learning resources like well-equipped library with access to lots of e-books and e-journals along with conventional books and journals. It has well equipped laboratories with sophisticated machineries and latest softwares.
- All class rooms are provided with multimedia projection facility for ICT enabled teaching learning methodologies. Apart from these, college also has five smart class rooms.
- Hi-speed internet connection is available in the laboratories helping students to expose themselves to information explosion around the world.
- A state-of-the-art language laboratory is present to enhance the communication skill of the students.
- The College also promotes interactive learning through study tours, industrial training, workshops and academic seminars.
- Project work in the final year course gives the students a new learning experience.
- Academic progress of the students are assessed through class tests, assignment etc.
- The College gives utmost emphasis on continuous evaluation system.
- The barriers of slow learners are addressed by the faculties in the form of remedial classes and laboratories.
- Apart from that, provisions are made for recording the online classes and provide the recording links to the students for repeated use. The AICTE based course curriculums are also directed towards dynamic restructuring the courses with an eye towards rapid industrial development.

- College has purchased access to G-Suite. All academic activities such as taking classes, sharing documents to students, forwarding topic of assignments as well as, the process of examination are conducted through the Google Classroom.

Research and development: In-house research activities of the college are planned very systematically.

- There is a dedicated research committee in the College which helps encouraging a culture of research among teaching staff, research scholars and students.
- Teachers to take up sponsored research projects. They organize / attend conferences and seminars so as to get updated with the latest trends in research, methodologies used in their field/s of interest.
- Publication of research findings and presentation of research paper in national and international conferences is common practice of faculty members.
- Final year project works of UG and PG students are taken up by faculty members either independently or in form of collaborative works with industry, research laboratories, other academic institutes
- College also publishes a research journal "Scientific Voyage" to encourage research activities among students and faculties. The journal publishes four issues in a year.

Community engagement:

- The NSS unit of the college is very active in community engagement programmes like tree plantation, road rally on hygiene, environment awareness camps etc.
- Observation of world environmental day with the neighbouring school children, computer literacy among the local people is also practiced.
- Camps on fly ash brick preparation, ceramic pottery for skilled labourers have been undertaken by the College from time to time.
- Showing fly ash brick preparation process to the skilled labour, ceramic pottery awareness is some other community engagement programme undertaken by the College from time to time.
- College holds in-campus eye camp for students, faculties and neighbouring people.
- College holds yoga classes for students, faculties and college staff.

- College holds self defense classes (karate) for girl students and neighbouring girls.
- The college alumni association frequently conducts homeopathy camps within college premises as community development programme.
- Apart from these community engagement programmes, different environmental and green energy plans are also encouraged among all. These include energy saving plans such as installation of solar panels, awareness campaigning by installing displays written with 'save water' all over the campus are also parts of green environment initiatives.

Human resource planning and development:

- The College endeavors in the development of its highest human resource, i.e., students, by providing high class learning environment, offering world class course curricula, latest infrastructural facilities. The students are exposed to industrial problems, so that they know the kind of situation they may find in their service life. They are encouraged to take challenges, represent themselves as a responsible citizen in the society.
- Faculties are provided with career advancement scheme (CAS) as per rules of Govt. of West Bengal for their career development.

Industry interaction and Placement:

- The College has developed an Industry Institute Cell which keeps a close liaison with the industries.
- The Placement Cell also has a strong industry linkage which leads to substantial placement of the students from the campus. Students are also exposed to industry training as a part of their course curricula.
- Some students undertake industry project as their student project.

Industrial experts are frequently invited to the college to deliver lectures on their work experiences which help improve the understanding of the students about the industry. These efforts are reflected from the high impressive placement records achieved every year during the campus interview process.

| File Description | Documents |
|--|---------------------------|
| Strategic Plan and deployment documents on the website | View File |
| 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.

The college is under the administrative control of Higher Education Department, Government of West Bengal and is overseen by the Directorate of Technical Education. The institution follows West Bengal Service Rules and West Bengal Financial Rules. The college follows the rules set by the Government of West Bengal regarding the service rules. The appointment of faculty and staff recruitment is governed by the Public Service Commission (PSC) of the Government of West Bengal.

The college is under the Department of Technical Education, directly under the control of Higher Education Department, Government of West Bengal. The Department of Technical Education deploys Principal in the college and has direct administrative control over the college. Principal and the Governing Body are responsible for the primary decision making of the institution; followed by the subsequent departments and faculty members.

Governing Body: The Board of Governors of the college is constructed with a total fourteen members, out of which six of them are external members; with one of them chairing the board. The Principal is Ex-Officio Member Secretary of the board. Other members of the board are the four Head of the Departments, one teacher representative, Controller of Examinations and Registrar.

Administrative Set Up: Principal and Registrar are the core of the administration within college, including financial matters. Principal puts forward the financial projects and grants received from the Higher Education Department to the Accounts Officer, who holds a major role in executing the financial aspects. The financial aspects are governed by the Financial Management Committee (FMC) of the Government. Principal, with the help from the Departmental Heads and the Administrative office and Accounts section executes the major administrative decisions.

Academic Set Up: Academic decision makings are primarily relying on the Statutory Committees such as Board of studies and Academic Council, followed by Departmental Heads, the IQAC Coordinator, and finally, Principal.

Other functional bodies: There are several other Statutory and Non-Statutory Committees. Statutory Committees, such as Governing Body, Academic Council, Board of Studies and Finance committee are primarily involved in the primary decision making of the institute. Other Non Statutory Committees involve administrative, academic, Cultural and Sports and Placement, Training and Career Counseling aspects. Administrative issues, other than Grievance Redressals, are dealt by the Planning and Monitoring committee, College web site committee, Purchase committee, Scholarship committee and Green Campus committee. Academics matters are discussed with IQAC, Faculty council, Academic audit committee, Research committee, Library committee and College examination committee. NSS, Sports and Cultural Programmes are overlooked by the Cultural and Sports committee and Placement cells helps in Placement, Training and Internship of the students.

Service Rules, Procedures, Recruitment and Promotion Policies: All rules and regulations under West Bengal Service Rule (WBSR) are followed as the college is under direct administrative control of Higher Education Department, Government of West Bengal. Recruitment and Promotion Policies are guided by the Government of West Bengal following Revision of Pay and Allowance (ROPA), West Bengal.

Grievance Redressal Mechanisms: There are several committees in the college to take care of the Grievances from different stakeholders. The college holds Non Statutory Committees such as Discipline committee, Anti-ragging committee, Sexual harassment committee, Equal opportunity committee, Grievance Redressal committee and Internal Complaint Committee. Registrar of the college is the appellate authority in regard to RTI Act, 2005.

| File Description | Documents |
|---|---|
| Paste link to Organogram on the institution webpage | http://gcect.ac.in/mandatory-disclosures/ |
| 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 | B. Any three of the above |
|--|----------------------------------|

| File Description | Documents |
|---|---------------------------|
| ERP (Enterprise Resource Planning) Document | View File |
| 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

The welfare measures for teaching and non-teaching staff are same as State Government schemes. Government policies are followed for all the teaching and non-teaching staff of the college.

- The permanent employees are getting benefit of general provident fund, gratuity on superannuation and pension as per state government rules.
- The employees are entitled to get residential accommodation in Government Housing Estates which spreads throughout the city.
- Provisions for various types of loans such as house building, computer, vehicle etc. from the Government are also available as per existing norms.
- All teaching and non-teaching staffs are entitled to get free medical treatment under the West Bengal Health Scheme (WBHS) for themselves and their dependent family members in all Government Hospitals as per existing rules. There is health scheme of the Government where every employee can enroll himself to get medical reimbursement of their treatment expenses in a list of major private hospitals throughout the country.
- There is group insurance policy for every employee of the College as per Govt. rules.
- Child Care Leave can also be availed by the employees, which is a paid leave. Female employees can avail Child

care leave of maximum 730 days and male employees can avail Paternity-cum-Child Care Leave of maximum 30 days apart from the conventional leaves for grooming of their children up. This leave can be availed up to the age of eighteen years of the child under the Child Care Leave scheme

- Covid vaccination has been arranged for the employees by the Government of West Bengal
- Provision for LTC is also there as per the rules of Government of West Bengal.
- There is a provision for the festival bonus or advance of salary, depending on the basic pay of the employee.
- Apart from these, on demise of in-service Government staff (depending on pay scale), there is a provision for the appointment of his/her son/ unmarried daughter on compensatory ground.

Career advancement of the teaching staff is aided by the option of Career Advancement Scheme (CAS).

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

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

0

| File Description | Documents |
|---|---------------------------|
| Upload any additional information | No File Uploaded |
| Details of teachers provided with financial support to attend conference, workshops etc during the year (Data Template) | 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

4

| 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.)

17

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

6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly

College has statutory Financial Management Committee and a defined mechanism of CAG audit of its accounts regularly as per Govt. Finance rules. Office of Principal Accountant General (Audit), WB provides an Inspection Report of college accounts for onward transmission through the department of Higher Education.

Internal audit is conducted by Internal Audit Wing of Finance Department. Autonomy grants sanctioned by the UGC are audited by registered Chartered Accountants appointed by college. The Audited Utilization Certificate is sent to UGC within stipulated time. Other grants received for seminars, symposiums, research projects etc. are also audited by qualified auditors appointed by college

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

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

0

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

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

The institution takes the following strategies for mobilisation of funds and the optimal utilisation of resources:

1. The Budget Branch asks for Budget from each and every Department.
2. Department conveys the same to it's down the line Directorate and other offices to send the estimate of the current year expenditure on the basis of last year's expenditure.
3. By compiling the data Budget Branch publishes the Budget.
4. Departmental Financial Advisor send Statement-E for release of ceiling Balance (for Non plan head).
5. Budget Branch during the year releases ceiling Balance at 25%, 50%, 75% and 100% rates, then Admin Department from its end re-distribute fund directly to DDO (Drawing and Disbursing Officer) or any other sub-allotting officer. Then the concern sub-allotting officer needs to distribute the fund to DDO for the ultimate disbursement of fund from the Govt. eschequer.
6. After receiving fund at budgetary head, a DDO draw the fund by

submitting bill at Pay and Accounts Office or Treasury through IFMS (Integrated Financial Management System).

7. DDO can send Budgetary Estimate Statement as and when required. In case of re-appropriation or augmentation of fund from one head to another, Statement-F is send to Budget Branch through proper channel.

8. For Non-Budgetary Head, Funds from UGC, Science and Technology Department, DST credited directly to the college Bank Account. We need to disburse the fund by issuing cheques. Proper audit is done at the end of the year and utilization Certificate needs to be provided to the concern Find releasing Authority.

Clarification regarding Statement -F mentioned in point no 7 above:

When there is not enough fund in one Head, the money is borrowed from another head in which there is excess of fund. This is as per the definition re-appropriation and augmentation of fund in terms of accountancy.

| 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)

Incremental improvements made during the preceding year with regard to quality and post-accreditation quality initiatives are as follows:

IQAC formulates the quality policy of the whole academic system of the institute. The periodic monitoring of the adherence of the guidelines of the IQAC are made. Member of the IQAC physically visits different departments to assess the performance of the department and recommends steps to be taken for further betterment.

- It was observed that the class response, as well as the results of the students was improving after the implementation of the continuous evaluation process, which was implemented from 2018-19 academic session. This was one of the significant improvements observed post implementation. This is also reflected from the improved placement results, as well as, from the results of the students in the all India competitive examinations, such as GATE and others.
- Elective subjects based on requirement of the Industries for better employability have been incorporated in the syllabi of all programmes. Besides, Industry experts were invited to deliver lectures to fill the gap between technology taught and need of the industries. These altogether, helped the students keep themselves updated with the recent requirements of the industries.
- Additional classes for soft skill were arranged for first year students to improve their soft skills. This is done with an aim of developing the students into good professionals in their career. The result of the effort was observed in the proficiency of soft skill among students, especially their better English speaking ability during the classes.
- The feedbacks received from the students were discussed critically. It was recommended that every department should discuss the feedback amongst the faculty of the department to find out the deficiency, if any, in the academic delivery system. This analysis significantly helped the teachers in designing/modifying their teaching plan; which in turn, helped the students in better understanding.
- In spite of being under the COVID 19 pandemic and lockdown situation, different industries were approached to hold campus interviews through online mode and a good placement of students was achieved.
- Research was encouraged among the faculties. Two more faculties were awarded Ph.D degrees during this academic session, which signify improvement in quality of research among the faculties. Apart from that, the several research papers were published by many of the faculties, which also bear the signs of improvement of research, even under pandemic situations.
- The committee reviewed the best practices followed by the institute and found that it had been implemented in letter and spirit and improved the overall scenario from the previous sessions. One significant one of these is the Post

publication answer scripts review/scrutiny was simplified with more transparency. This has resulted in no application for review of the answer scripts by the students, which clearly point out that a transparent evaluation system is in practice in the institute.

- Encouragement for best performance in the examination by making provision of best graduate award has also been paid off as the urge to receive the award has been increased among the students.
- Continuation of Comprehensive Lab Assessment through a panel of external experts of respective field for assessing students' performance in lab paper has improved transparency in evaluation; as well as, helped in developing the laboratory concepts from an external expert.
- Continuation of Honours courses with additional 20 credit points to be acquired through the online MOOC, as was introduced from 2018-19, has significantly improved their knowledge beyond the syllabus as the students are observed more interested in taking up the courses.
- Preparation for submission of NBA application is in progress.
- Plans for the prospective conduction of seminars and workshops for the academic year 2020-21 were taken by the cell. It was decided that during the pandemic of COVID19, virtual seminars (webinars) would be the only viable option. Hence, the departments were advised to organize such webinars of interest to students and faculty inviting experts from different institutes/industries. Departments were successful in conducting similar activities; and more importantly, in collaboration with other technical institutions and universities. The list of Seminars/Programmes organized by the institution during this pandemic affected session is given below:

Name of quality initiative organized by the institution

Date From

Date To

Duration

Faculty Development Program on Artificial Intelligence using Python, conducted by Govt. College of Engineering & Ceramic Technology, Kolkata in collaboration with Brainovision Solutions

India Pvt.Ltd.

14-09-2020

19-09-2020

6 Days

Webinar on Future Generation Computing and Applications: Smart Devices; conducted jointly by Govt. College of Engineering & Ceramic Technology, Kolkata and School of Mobile Computing & Communication, Jadavpur University, Kolkata

19-09-2020

19-09-2020

1 Day

Webinar on Future Generation Computing and Applications: Cloud Computing; conducted jointly by Govt. College of Engineering & Ceramic Technology, Kolkata and School of Mobile Computing & Communication, Jadavpur University, Kolkata

26-09-2020

26-09-2020

1 Day

Webinar on Future Generation Computing and Applications: A walk through of Deep Learning, Social Networking, Internet of Things and Quantum Computing; conducted by Govt. College of Engineering & Ceramic Technology, Kolkata

08-08-2020

09-08-2020

2 Days

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

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

- The status of online interaction of the faculties with students as a substitute for face-to-face classrooms and the mode of future examination procedures in view of pandemic situation and consequent lockdown were reviewed.
- Due to COVID 19 pandemic, institute had to be closed as per Govt. notification. During the pandemic phase (16th March 2020 onwards), utmost care was taken to see that academic activities go unhampered during the lockdown period. Online mode in Google Meet platform was adopted for conduction of both for theory and practical classes.
- Online classes continued as per time table prepared. Google Classrooms were created for each and every paper. Official GSuite IDs were issued to every teacher and student for conduction of academic activities in the classrooms. The whole gamut of activities under the GSuite platform was managed by system administrator including the Principal.
- The conduction of the online classes was monitored periodically by the Principal, the Chairman of the IQAC, regarding the attendance of the students, availability of course material to the students etc. These records were obtained from the System Administrator engaged to manage online classes. The faculties were advised to record each of the classes and share the link of the recorded classes with students. The Principal periodically monitored these activities and the teachers, who shared less number of classroom recordings, were advised repeatedly to upload all the lectures. Attendance of the students was also monitored and the defaulters were communicated by the faculties, mostly over phone, to explain the reason of absence.
- The IQAC also recommended the teachers for uploading quizzes and assignments periodically as a part of continuous evaluation process.
- Teachers were advised to prepare/modify the course material and follow the same during the online classes. The teachers were also advised by the IQAC to be careful while developing

the learning outcomes from the modules, and link each of the sub-topic of the module to the corresponding Course Outcomes and the Program Outcomes.

- Teachers were advised to frame the mid semester and end semester question papers keeping in mind the intended learning outcomes and Course Outcomes of the respective subjects. They were also advised to link each question with the respective Course Outcome in order to estimate the attainment of the student in each of the question, as well as, in that particular subject on an overall analysis.
- Since, most of the session was within COVID 19 pandemic, it was decided that the mid-term examinations, which were two major components of the continuous evaluation scheme, would be conducted online. It was also decided that the Semester End Examinations for the ensuing batches would be comprising of two components; viz., online examination of 50 marks of MCQ type prepared in Google Form and viva voce of 25 marks in each theory paper conducted in online mode (Google Meet). All practical examinations were decided to be held in online mode (Google Meet platform).
- After completion of examinations, viewing of answer scripts was allowed to students as per Academic Regulation, in online mode.
- All departments discussed the feedback amongst the faculty of the department to find out the deficiency, if any, in the academic delivery system. Apart from that, based on the recommendations of the graduate survey, the departments have been advised to enhance skills among the students as per the Program Outcomes and the need of the industries and follow up the same.

The committee reviewed overall conduct of academic practices and found that online academic activities were being conducted as per prescribed time table in Google Classroom platform (G-Suite).

| 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

B. Any 3 of the above

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)

| File Description | Documents |
|--|---|
| Paste the web link of annual reports of the Institution | http://gcect.ac.in/annual-report/ |
| Upload e-copies of accreditations and certification | View File |
| Upload details of quality assurance initiatives of the institution | View File |
| Upload any additional information | View File |

INSTITUTIONAL VALUES AND BEST PRACTICES

7.1 - Institutional Values and Social Responsibilities

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

a) The institute desires to see women's full and effective participation and leadership in all areas of life to drive all-round progress of humanity. With a view to promote this message International Women's Day was celebrated on 8th March, 2021, online in which both male and female students deliberated on the theme, keeping focus upon means and ways of more empowerment of women .

b) The institute remains always committed to deliver the benefit of Kanyashree Prakalpa (a project aiming at empowerment of women of West Bengal) run by the Government of West Bengal to the eligible female students. The project seeks to improve the status and wellbeing of girls, specifically those from socio-economically disadvantaged families through Conditional Cash Transfers by:Incentivizing them to continue in education for a longer period of time, thereby giving them a better footing in both the economic and social spheres.The schemes benefits are paid directly to bank accounts in the girls' names, leaving the decision of utilization of the money in their hands.A female student is eligible for a One-Time Grant of Rs. 25,000/-, to be paid after she turns 18, provided that she is engaged in an

academic or occupational pursuit and is unmarried.

In the year 2020-21, one girl student, Smt. Saheli Mahapatra, was selected for this grant and in the previous year the number of beneficiaries stood at five.

| File Description | Documents |
|---------------------------------------|---------------------------|
| Upload any additional information | View File |
| 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

A. Any 4 or All of the above

| File Description | Documents |
|--------------------------------|---------------------------|
| Geotagged Photographs | View File |
| Any other relevant information | View File |

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)

In order to maintain cleanliness and hygiene the institute always keeps watch upon proper disposal of waste generated every day. Being situated in the heart of Kolkata city, the institute gets the service of waste disposal squad of Kolkata Municipal Corporation which collects the waste from the premises on daily basis. Large plastic vats are kept at strategic positions inside the premises for dumping separately biodegradable and non-biodegradable waste materials.

At one corner of the boundary a pit is maintained where biodegradable materials like dry leaves & dead seasonal flower plants are dumped from time to time for composting which after maturing are recycled as plant nutrients.

| File Description | Documents |
|---|---------------------------|
| Relevant documents like agreements/MoUs with Government and other approved agencies | No File Uploaded |
| Geotagged photographs of the facilities | View File |
| 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 | C. Any 2 of the above |
|--|------------------------------|

| File Description | Documents |
|--|---------------------------|
| Geotagged photographs / videos of the facilities | View File |
| Any other relevant information | View File |

| | |
|--|-------------------------------------|
| 7.1.5 - Green campus initiatives include | |
| 7.1.5.1 - The institutional initiatives for greening the campus are as follows: <ol style="list-style-type: none"> 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 | View File |
| 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 | <p>B. Any 3 of the above</p> |
|--|-------------------------------------|

| File Description | Documents |
|---|---------------------------|
| Reports on environment and energy audits submitted by the auditing agency | View File |
| 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, reader, scribe, soft copies of reading materials, screen reading, etc.</p> | <p>A. Any 4 or all of the above</p> |
|--|--|

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

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

Being a wholly owned state government institution, the entry is restricted to domiciled candidates only, which implies that there exists fairly enough harmony among the students in terms of cultural, regional, linguistic, communal identities from the very beginning. Domiciled students include people settled from different regions of India pursuing various faiths. The state of West Bengal seldom witnessed any kind of communal tension in recent history. Apart from the fact, to iron out differences which may cause tension among different sections, the institute regularly organizes various programs. The freshers have to undergo a two-week orientation program, before they join their formal classrooms, in which they get to know each other more closely apart from bonding with faculty members as their mentors. Throughout the whole year the students are encouraged to organize and participate in various programs like JAGRITI Festival, KARMATECH festival, Freshers' Welcome, Farewell for outgoing students, Teachers' Day celebration, Independence Day and Republic Day celebration and myriad other activities to make sure that no sections of students feel left out and their sense of separate identity, whatsoever, gets hurt.

| File Description | Documents |
|--|---------------------------|
| Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution) | View File |

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

The objective of the institute is to produce employable engineering graduates with strong human values and awareness about the rights and duties of responsible Indian citizens. To fulfil this objective, study of the basics of Indian constitution has been made compulsory in the course-curriculum across all departments. To reinforce the training of the students in this regard, they are encouraged to participate in various NSS programs. The NSS unit of the institute headed by a dedicated faculty member regularly organizes events to promote values enshrined in the constitution. It celebrated International Women's Day on 08.03.2021. Red Ribbon Club, a wing of the NSS Unit also organized a quiz on the same day.

It is also the duty of the institute to create awareness among the employees about the essence of Indian Constitution in order to make them more equipped to live with the neighbours in complete harmony both in their workplace and dwelling territory. Lectures are organized with employees as participants under the guidance of knowledgeable persons to discuss the features of constitutional obligations and how those elements play out in real life to avoid serious social conflict.

| File Description | Documents |
|---|---------------------------|
| Details of activities that inculcate values necessary to transform students into responsible citizens | View File |
| Any other relevant information | View File |

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

A. All 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 | View File |

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

The institute never intends to keep its students confined to their professional goal in narrow material sense. It always desires to mould them in such a manner so that they come out as professionally competent and highly spirited, sociable persons at the end of their study. To realize this, the institute celebrates important national and international days in attractive ways with due respect and allows students to organize many events themselves so that through these initiatives they could learn to quickly pick up skills like striking friendship effortlessly with fellow people and leading a group in organizing events, which would benefit them greatly in future in performing tasks with ease in community environment.

The institute celebrates independence Day and Republic Day to commemorate the contribution of freedom fighters, maintaining all standard protocols. The students, on their part, also play their role in befitting manner by organising events like birthday celebration of Rabindranath Tagore and Kazi Nazrul Islam, Teachers' Day, Swaraswati and Biswakarma Puja etc. every year. Moreover, during the pandemic, the students, on their own, regularly organized online cultural programs to buck up the sagging morale of all and sundry.

| File Description | Documents |
|--|---------------------------|
| Annual report of the celebrations and commemorative events for during the year | View File |
| Geotagged photographs of some of the events | View File |
| Any other relevant information | View File |

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

BEST PRACTICE I

1. Title of the practice:

Research and development activities in relevant engineering disciplines and allied fields of basic science

1. The objective of the Practice (in about 20 words)

The objective is to attain excellence by expanding the horizon of knowledge base of the institute and encourage the faculty members to bring projects on upcoming areas from various funding agencies which may lead to development of useful products.

1. The context (in about 30 words)

The college has a strong tradition of research activities including some collaborative endeavours which led to development of useful engineering product. In 2011 a collaborative project with IIT Kharagpur and National Jute Board culminated in development of an engineering material called Jute Fibre Reinforced Concrete which has been granted a patent in 2021.

Therefore, the institute decided to encourage the young faculties to engage in such research activities, apart from publishing the outcome in reputed journals, which may lead to development of new useful engineering material.

1. The Practice (in about 50 words)

In line with the expectation of the institute, Dr. B. K. Sanfui,

Asst. Professor of Ceramic Technology has concentrated upon development of new engineering materials like ceramic membrane for separation of CO₂ from flue gas, value added products prepared from agricultural waste and coal ash like light weight building block and abrasion resistant ceramic respectively, low energy consuming refractory etc.

Apart from it, many faculty members are engaged in various research areas, the outcome of which is being regularly published in reputed journals.

1. Evidence of success (in about 40 words)

Beside successfully completing two major research projects funded by DST and valued at about rupees one crore, Dr. B. K. Sanfui published a paper in an international journal with impact factor 9.22. His laboratory developed product coal ash-based abrasion resistant ceramics got wide publicity in DD News (<https://ddnews.gov.in/national/industrially-important-ceramic-products-bottom-ash-thermal-plants-may-reduce-waste-worries>). It was also highlighted in the leading newspaper "The Hindu-Business line" (<https://www.thehindubusinessline.com/specials/ceramics-from-ash/article33372248.ece>). Dr.Sanfui also filed application for granting one patent for his newly developed product.

The following faculty members also published their research findings in reputed national and international journals in the year 2020-21:

Dr. K.Das, Dr.T.K.Bhattacharya, Dr. M.Maitra, Sri. S.Chowdhury, Dr. K.Chatterjee, Sri. A.Mukherjee, Dr. N.Mazumder, Sri. P.Halder, Dr. S.Roy and Smt. P.Dey.

1. Notes (optional)

The institute may consider offering a certificate course or a component of a programme if a newly established laboratory becomes self-sufficient in terms of resources in course of development of a product.

BEST PRACTICE II

1. Title of the practice:

Introduction of online teaching and evaluation

1. The objective of the Practice (in about 20 words)

The objective is to make the most of online method of teaching and evaluation so that the students' career does not suffer due to their inability to attend offline classes and sit for examinations in pen and paper mode which was the standard practice before the onset of the pandemic.

1. The context (in about 30 words)

As the pandemic began to set in in the month of March 20, the academic institutes started gradually reducing their normal offline activities and by the end of March almost all academic institutions closed the gates for physical entry as per the order of the government. In absence of any specific guideline in the beginning, the faculties tried to explore the features of online platforms to continue imparting lessons to the students in an unscheduled manner. However, that can no way be construed as a proper substitute of the existing method of teaching and evaluation.

1. The Practice (in about 50 words)

Formal online classes were started after obtaining official license of GSuite platforms, with provisions for individual classroom for each and every paper to be conducted as per class routine prepared by the respective department. Under the arrangement, the teachers had been able to record all lectures, share the video recordings in the classroom, take online quizzes, give assignments and assess the classwork/assignments in the classroom itself. The recording of lectures provided the students access to it at his/her convenient time beyond the class hours. The entire offline mid-term and semester end examinations were substituted by online examination system for which necessary approval was accorded by the Academic Council.

1. Evidence of success (in about 40 words)

The method of online teaching and evaluation was accepted by the students without slightest hitch as it was introduced most transparently having taken them into confidence. The classes and examinations were conducted at regular intervals. The results

were published maintaining a time schedule.

Most importantly, the graduates passing through the system didn't face any discrimination in the job market and the employment record for the year 2020-21 bore testimony to this fact.

1. Problems encountered and resources required (in about 30 words)

Given the fact that many of the students come from remote corners of the state and during the pandemic they had to rush back home, access to online classes for them suffered to some extent due to poor connectivity of the internet in remote areas. They were also denied the advantage of learning from the peers which was an integral part of off-line physical classroom.

The resource for setting up online classroom and question papers were entirely borne the college authority.

1. Notes (optional)

Given the wide flexibility that a virtual classroom offers, the institute may introduce a hybrid method of teaching comprising both online and offline classroom in future for the benefit of the students.

| File Description | Documents |
|---|---|
| Best practices in the Institutional website | http://gcect.ac.in/igac/ |
| 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 fixed its priorities as detailed below:

- to make students employable
- to make students fit for working in a social environment
- to groom the students in such a manner so that they come out at the end of the study as good human beings.

- to impart the students the lesson of life-long learning

In order to achieve the above goals, the thrust areas were chosen in the following manner:

- imparting technical knowledge along with sound communication skill - both verbal and written and providing scope for internship in industry

- conducting NSS activities under the guidance of motivated faculties and encouraging students to participate in various types of competitions and various cultural functions including celebration of International and National days

- organizing motivating lectures by eminent persons from different walks of life of the society

- imparting industrial training to provide the scope of extended practical learning and arranging group discussions and seminars to enhance general promptness of mind and the ability of self learning.

| File Description | Documents |
|---|---|
| Appropriate link in the institutional website | http://gcect.ac.in/nss/ |
| Any other relevant information | No File Uploaded |

7.3.2 - Plan of action for the next academic year

Strengthening and continuing all present activities:

With the onset of 1st wave of COVID 19 pandemic across the country which resulted into nationwide lockdown since March 24, 2020, the institute, as per plan of 2019-20 AQAR, arranged full fledged online activities in respect of academics through licensed GSuite platform. While individual classrooms were created with individual unique official gcect ID for each student and teacher, all arrangements were made for reaping the full benefit of the platform in respect of organizing online quizzes, taking assignments, checking and uploading the same for onward viewing of students and most importantly, recording the whole lecture delivered for being shared to students for further attention. With the concurrence of Academic Council, examinations were conducted online using Google Form, taking online viva voce of 25% weightage of the total marks.

In a nut shell, all academic activities as mentioned 2019-20 AQAR as future plan for 2020-21, went off pretty well during 2020-21 academic session. Few online training programmes by renowned industries by TATA STEEL and HR JHONSON were organized during 2020-21 session.

With the advent of 2nd wave of COVID 19 pandemic during late 2020-21 and continuing complete closure of educational institutes across the country, it is decided to continue with online activities in 2021-22 session with hope of relaxation of norms at some point of time. In the event of any possibility of advisory of the Government in respect of relaxation of norms and opening of educational institution, the institute would immediately start functioning in offline mode with its smart classrooms, labs and other classrooms, that have been sanitized and maintained all through the pandemic situation by the authority.

In addition, the institute would continue having the licence of Google for online activities also, so that, a mixed / hybrid mode of operation can also be possible if needed. Students of outgoing B.Tech, who would be sent for internship in an industry, would be given opportunity to complete their academic activities through online mode. The curriculum has been made flexible to enable them to avail the internship facility in the industries. M. Tech students would also be provided with the similar facility.

Strengthening Placement:

More effort would be made to enhance the opportunity of placement of the students with introduction of more courses of soft skill development and technical knowledge. Infrastructure for online campus interviews that are already in place, would be augmented further.

Maintaining harmony & Women empowerment initiatives:

The institute gives utmost importance to National harmony. Different National and International memorable days like 26th January, 15th August, International Women's Day, International Yoga Day would be celebrated in a befitting manner for strengthening harmony.

There is a necessity of well furnished girls' common room in Institute. It is planned to have a girls' common room at the earliest.

More seminars, awareness about rights and duties as responsible citizen:

Schedule of events of co curricular or extra curricular activities would be prepared so that students remain engaged throughout the year. More seminars, workshops, webinars on technical topics and other topics of interest e.g., rights and duties of a responsible citizen would be organised.

Research & development:

Research and development is an important activity in an institute of higher learning. Faculties and students would be encouraged to take initiative for research and development. The institute would provide infrastructure for such activities as and when required. It is proposed to have a tech club for students to promote research and developmental activities among them. In case it develops to its full potential, it may be highlighted as one of the best practices of the institute in near future.