



## **YEARLY STATUS REPORT - 2020-2021**

### **Part A**

#### **Data of the Institution**

|                                                                  |                                                      |                                      |
|------------------------------------------------------------------|------------------------------------------------------|--------------------------------------|
| <b>1.Name of the Institution</b>                                 |                                                      | <b>B.M.S. COLLEGE OF ENGINEERING</b> |
| • Name of the Head of the institution                            | <b>Dr.S.Muralidhara</b>                              |                                      |
| • Designation                                                    | <b>PRINCIPAL</b>                                     |                                      |
| • Does the institution function from its own campus?             | <b>Yes</b>                                           |                                      |
| • Phone No. of the Principal                                     | <b>08026622130</b>                                   |                                      |
| • Alternate phone No.                                            | <b>08026614356</b>                                   |                                      |
| • Mobile No. (Principal)                                         | <b>9845942068</b>                                    |                                      |
| • Registered e-mail ID (Principal)                               | <b>principal@bmsce.ac.in</b>                         |                                      |
| • Address                                                        | <b>P.O.Box. No.1908, Bull Temple Road, Bengaluru</b> |                                      |
| • City/Town                                                      | <b>Bengaluru</b>                                     |                                      |
| • State/UT                                                       | <b>Karnataka</b>                                     |                                      |
| • Pin Code                                                       | <b>560019</b>                                        |                                      |
| <b>2.Institutional status</b>                                    |                                                      |                                      |
| • Autonomous Status (Provide the date of conferment of Autonomy) | <b>01/07/2008</b>                                    |                                      |
| • Type of Institution                                            | <b>Co-education</b>                                  |                                      |
| • Location                                                       | <b>Urban</b>                                         |                                      |

|                                                                                                                                                                                                  |                                                                                                                                                                                                                                                       |                |                             |                   |                   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----------------------------|-------------------|-------------------|
| • Financial Status                                                                                                                                                                               | <b>Self-financing</b>                                                                                                                                                                                                                                 |                |                             |                   |                   |
| • Name of the IQAC Co-ordinator/Director                                                                                                                                                         | <b>Dr. Shambhavi B R</b>                                                                                                                                                                                                                              |                |                             |                   |                   |
| • Phone No.                                                                                                                                                                                      | <b>08026614356</b>                                                                                                                                                                                                                                    |                |                             |                   |                   |
| • Mobile No:                                                                                                                                                                                     | <b>9886784959</b>                                                                                                                                                                                                                                     |                |                             |                   |                   |
| • IQAC e-mail ID                                                                                                                                                                                 | <b>iqac@bmsce.ac.in</b>                                                                                                                                                                                                                               |                |                             |                   |                   |
| <b>3.Website address (Web link of the AQAR (Previous Academic Year)</b>                                                                                                                          | <a href="https://bmsce.ac.in/assets/files/aqar/aqar_2019-20.pdf">https://bmsce.ac.in/assets/files/aqar/aqar_2019-20.pdf</a>                                                                                                                           |                |                             |                   |                   |
| <b>4.Was the Academic Calendar prepared for that year?</b>                                                                                                                                       | <b>Yes</b>                                                                                                                                                                                                                                            |                |                             |                   |                   |
| • if yes, whether it is uploaded in the Institutional website Web link:                                                                                                                          | <a href="https://bmsce.ac.in/CalendarEvents/Calendar%20of%20Events%20for%20First%20Year%20B.E.%20Students%20AY%202020-21.pdf">https://bmsce.ac.in/CalendarEvents/Calendar%20of%20Events%20for%20First%20Year%20B.E.%20Students%20AY%202020-21.pdf</a> |                |                             |                   |                   |
| <b>5.Accreditation Details</b>                                                                                                                                                                   |                                                                                                                                                                                                                                                       |                |                             |                   |                   |
| Cycle                                                                                                                                                                                            | Grade                                                                                                                                                                                                                                                 | CGPA           | Year of Accreditation       | Validity from     | Validity to       |
| <b>Cycle 1</b>                                                                                                                                                                                   | <b>A</b>                                                                                                                                                                                                                                              | <b>3.41</b>    | <b>2013</b>                 | <b>05/01/2013</b> | <b>04/01/2018</b> |
| <b>Cycle 2</b>                                                                                                                                                                                   | <b>A++</b>                                                                                                                                                                                                                                            | <b>3.83</b>    | <b>2019</b>                 | <b>02/03/2019</b> | <b>24/03/2024</b> |
| <b>6.Date of Establishment of IQAC</b>                                                                                                                                                           |                                                                                                                                                                                                                                                       |                | <b>01/03/2014</b>           |                   |                   |
| <b>7.Provide the list of Special Status conferred by Central and/or State Government on the Institution/Department/Faculty/School (UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC, etc.)?</b> |                                                                                                                                                                                                                                                       |                |                             |                   |                   |
| Institution/ Department/Faculty/School                                                                                                                                                           | Scheme                                                                                                                                                                                                                                                | Funding Agency | Year of Award with Duration | Amount            |                   |
| <b>All Departments</b>                                                                                                                                                                           | <b>TEQIP III</b>                                                                                                                                                                                                                                      | <b>NPIU</b>    | <b>01/06/2020</b>           | <b>21184405</b>   |                   |
| <b>8.Provide details regarding the composition of the IQAC:</b>                                                                                                                                  |                                                                                                                                                                                                                                                       |                |                             |                   |                   |
| • Upload the latest notification regarding the composition of the IQAC by the HEI                                                                                                                |                                                                                                                                                                                                                                                       |                | <a href="#">View File</a>   |                   |                   |

|                                                                                                                                                                                            |                  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|--|
| <b>9.No. of IQAC meetings held during the year</b>                                                                                                                                         | <b>2</b>         |  |
| <ul style="list-style-type: none"> <li>Were the minutes of IQAC meeting(s) and compliance to the decisions taken uploaded on the institutional website?</li> </ul>                         | <b>Yes</b>       |  |
| <ul style="list-style-type: none"> <li>If No, please upload the minutes of the meeting(s) and Action Taken Report</li> </ul>                                                               | No File Uploaded |  |
| <b>10.Did IQAC receive funding from any funding agency to support its activities during the year?</b>                                                                                      | <b>No</b>        |  |
| <ul style="list-style-type: none"> <li>If yes, mention the amount</li> </ul>                                                                                                               |                  |  |
| <b>11.Significant contributions made by IQAC during the current year (maximum five bullets)</b>                                                                                            |                  |  |
| 1. Constant encouragement to promote research aptitude, policies, research ethics among faculty members, Scholars & students                                                               |                  |  |
| 2. Promoting Instructional / Digital Intervention Strategies for Online Teaching during Pandemic                                                                                           |                  |  |
| 3. Introduction of new (UG-BE Course) in UG Artificial Intelligence and Machine Learning.                                                                                                  |                  |  |
| 4. IQAC suggested creation of Institute Social Responsibility Cell with an aim to form a common platform for various units conducting various extension & Social Responsibility activities |                  |  |
| 5. The IQAC Presented the Strategic Plan (2021-2025) before the Strategic Plan Review Committee                                                                                            |                  |  |
| <b>12.Plan of action chalked out by IQAC at the beginning of the academic year towards quality enhancement and the outcome achieved by the end of the academic year:</b>                   |                  |  |
|                                                                                                                                                                                            |                  |  |

| Plan of Action                                                                                 | Achievements/Outcomes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Adoption of NEP 2020 in the curriculum and its awareness to all the stakeholders</b></p> | <p>The institution is continuously putting efforts needed to effectively implement the NEP Policy as envisioned. For the first-year students, the college has implemented NEP curriculum based on the University guidelines. For higher semesters, Open electives are being offered by the Department of MBA with the courses being taught by Law College faculty. The college is regularly organizing Webinars / panel / seminars and conducting meetings to discuss regarding challenges and opportunities towards successful implementation of NEP.</p> |
| <p><b>Enhancement of ERP applications</b></p>                                                  | <p>Enhanced ERP automates and streamlines all the processes to significantly to improve the effectiveness of allocating and operating academic resources better. Efforts are being made to develop digital infrastructure, simplify Admission Process, Automate Fee Payments, Centralized Data Management, Quicker Management Process and ensure Data Security. The Institution has procured five cloud servers and deployed various applications Viz., College Website, BMSCE Campus ERP Portal, Fee Collection modules and various student projects.</p> |
| <p><b>Provide community services during the pandemic</b></p>                                   | <p>Many of our faculty and staff members have volunteered to serve as frontline COVID warriors. They were involved in disseminating information,</p>                                                                                                                                                                                                                                                                                                                                                                                                       |

creating awareness and participating in field surveillance. They acted as essential links between the healthcare facilities and the community. Multiple vaccination drives were conducted by the institution in association with the BBMP, for the benefit of students, staff, family members and community at large. With an aim to ensure strict compliance of COVID SOPs/Guidelines and government advisories towards health and safety protocols, the college constituted a Task Team comprising of faculty members on 15.03.2021. The task team ensures that strict compliance of COVID SOPs / restrictions are adhered to.

**13. Was the AQAR placed before the statutory body?**

**Yes**

- Name of the statutory body

| Name of the statutory body | Date of meeting(s) |
|----------------------------|--------------------|
| <b>IQAC</b>                | <b>27/10/2021</b>  |

**14. Was the institutional data submitted to AISHE ?**

**Yes**

- Year

| Year              | Date of Submission |
|-------------------|--------------------|
| <b>28/02/2021</b> | <b>28/02/2021</b>  |

### Extended Profile

#### 1. Programme

|                                                                                                    |                           |
|----------------------------------------------------------------------------------------------------|---------------------------|
| 1.1                                                                                                | 29                        |
| Number of programmes offered during the year:                                                      |                           |
| File Description                                                                                   | Documents                 |
| Institutional Data in Prescribed Format                                                            | <a href="#">View File</a> |
| <b>2.Student</b>                                                                                   |                           |
| 2.1                                                                                                | 6932                      |
| Total number of students during the year:                                                          |                           |
| File Description                                                                                   | Documents                 |
| Institutional data in Prescribed format                                                            | <a href="#">View File</a> |
| 2.2                                                                                                | 1578                      |
| Number of outgoing / final year students during the year:                                          |                           |
| File Description                                                                                   | Documents                 |
| Institutional Data in Prescribed Format                                                            | <a href="#">View File</a> |
| 2.3                                                                                                | 10677                     |
| Number of students who appeared for the examinations conducted by the institution during the year: |                           |
| File Description                                                                                   | Documents                 |
| Institutional Data in Prescribed Format                                                            | <a href="#">View File</a> |
| <b>3.Academic</b>                                                                                  |                           |
| 3.1                                                                                                | 1097                      |
| Number of courses in all programmes during the year:                                               |                           |
| File Description                                                                                   | Documents                 |
| Institutional Data in Prescribed Format                                                            | <a href="#">View File</a> |
| 3.2                                                                                                | 384                       |
| Number of full-time teachers during the year:                                                      |                           |

| File Description                                                                                      | Documents                 |
|-------------------------------------------------------------------------------------------------------|---------------------------|
| Institutional Data in Prescribed Format                                                               | <a href="#">View File</a> |
| 3.3<br>Number of sanctioned posts for the year:                                                       | <b>384</b>                |
| <b>4.Institution</b>                                                                                  |                           |
| 4.1<br>Number of seats earmarked for reserved categories as per GOI/State Government during the year: | <b>590</b>                |
| 4.2<br>Total number of Classrooms and Seminar halls                                                   | <b>135</b>                |
| 4.3<br>Total number of computers on campus for academic purposes                                      | <b>2408</b>               |
| 4.4<br>Total expenditure, excluding salary, during the year (INR in Lakhs):                           | <b>3766.67</b>            |

## 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 is designed to ensure that students acquire the required domain knowledge, skills and attitude. Curriculum design considers Model curriculum of AICTE, Curricular structure of VTU, Program Specific Criteria of professional bodies, Syllabus of various premier institutions and recent technological developments.**

**After the curriculum design, Course Outcomes (COs) for every course are defined and mapped with Program Outcomes (POs) and Program Specific Outcomes (PSOs). It is ensured that every PO is addressed by atleast two courses. In addition, assessment tools to measure COs, strength of CO-PO mapping and CO-PSO mapping constitute an**

effective curriculum design. An effective implementation of this Outcomes Based Education ensures that our graduating engineers attain the 12 POs, and hence can compete on a global platform.

The initial version of the curriculum based on the said process is prepared through discussions with stakeholders. The curriculum is then placed for discussion/approval by Department Advisory Board and Board of Studies which includes industry, academic experts, faculty and student members. The curriculum (suitably revised) is then placed for approval during the Academic Council. Curriculum is finally evolved. The academic autonomy of the Institution enables timely revision of the curriculum based on needs and suggestions of various stake holders.

| 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

26

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

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

884

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

## 1.2 - Academic Flexibility

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

**85**

| File Description                                        | Documents                 |
|---------------------------------------------------------|---------------------------|
| Minutes of relevant Academic Council/BoS meetings       | <a href="#">View File</a> |
| Any additional information                              | <b>No File Uploaded</b>   |
| Institutional data in prescribed format (Data Template) | <a href="#">View File</a> |

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

**29**

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

## 1.3 - Curriculum Enrichment

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

**The curriculum includes several courses to address Professional Ethics and Human Values. A new course 'Universal Human Values' was**

introduced during 2020-21 for first year students to develop holistic perspective of the harmony in human beings, family, society and nature/existence. The institute core course on 'Constitution of India, Professional Ethics and Human Rights' is included in the second year of all programs to help inculcate human values and professional ethics in all students. The curriculum includes mandatory course on 'Personality Development and Communication' and 'IPR' to develop human values and communication skills.

Program Curriculum also includes courses to address Environment and Sustainability. Institute core course on 'Environmental studies' (based on the AICTE mandatory guideline) is included in second year UG curriculum. . In addition, individual programs (both UG and PG) have also included additional courses to address Professional Ethics, human values, environment and sustainability.

In the present curricular structure, specific course to address gender equality is not included. The Women Cell and College Internal Complain Committee (CICC) continuously offer various programs like Debate, seminar, panel discussions on gender sensitization. The impact of these programs is evident through the confidence portrayed by all students irrespective of their gender.

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

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

12

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

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

690

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

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

1157

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

**1.4 - Feedback System**

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

A. All 4 of the above

| File Description                                                                                                      | Documents                                                                                                                                                                                                                                                               |
|-----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Provide the URL for stakeholders' feedback report                                                                     | <a href="https://bmsce.ac.in/assets/files/aqar/documents/2020-21/1.4.1-Structured%20feedback%20and%20review%20of%20the%20syllabus.pdf">https://bmsce.ac.in/assets/files/aqar/documents/2020-21/1.4.1-Structured%20feedback%20and%20review%20of%20the%20syllabus.pdf</a> |
| Upload the Action Taken Report of the feedback as recorded by the Governing Council / Syndicate / Board of Management | <a href="#">View File</a>                                                                                                                                                                                                                                               |
| Any additional information                                                                                            | No File Uploaded                                                                                                                                                                                                                                                        |

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

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

| File Description                              | Documents                                                                                                                                                                                                                                                               |
|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Provide URL for stakeholders' feedback report | <a href="https://bmsce.ac.in/assets/files/aqar/documents/2020-21/1.4.1-Structured%20feedback%20and%20review%20of%20the%20syllabus.pdf">https://bmsce.ac.in/assets/files/aqar/documents/2020-21/1.4.1-Structured%20feedback%20and%20review%20of%20the%20syllabus.pdf</a> |
| Any additional information                    | <a href="#">View File</a>                                                                                                                                                                                                                                               |

## TEACHING-LEARNING AND EVALUATION

### 2.1 - Student Enrollment and Profile

#### 2.1.1 - Enrolment of Students

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

**1823**

| File Description                        | Documents                 |
|-----------------------------------------|---------------------------|
| Any additional information              | <b>No File Uploaded</b>   |
| Institutional data in prescribed format | <a href="#">View File</a> |

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

**590**

| File Description                                              | Documents                 |
|---------------------------------------------------------------|---------------------------|
| Any additional information                                    | <b>No File Uploaded</b>   |
| Number of seats filled against seats reserved (Data Template) | <a href="#">View File</a> |

### 2.2 - Catering to Student Diversity

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

**Learning levels of the students are based on criteria such as performance in internal tests, semester end exams, lab tests and Absenteeism. Informal assessments in theory classes and labs also help us to gauge their learning ability. Programmes are designed both at the institute and department level to support both slow and advanced learners.**

**Faculty mentor slow learners by way of interactions, remedial**

classes advising them on learning and studying techniques to be adopted, best practices, and the right approach required to tackle different types of courses. The faculty advisory system (Proctor) help and motivate such students to improve their overall academic performance through counselling sessions. For students joining under the lateral entry system, the college offers special coaching, bridge programmes and peer guidance.

Advanced learners are encouraged to participate and present papers in various Seminars/ Conferences/ Workshops/ Inter Collegiate Competitions and student club/forum activities of their respective department. Meritorious students from every semester in the respective departments are provided with a scholarship of Rs. 10000/- along with a certificate of merit. GATE coaching classes are conducted to motivate them to pursue higher studies. They are also encouraged to enroll for VTU honors degree.

| 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 |
|------------|--------------------|--------------------|
| 01/06/2020 | 6797               | 384                |

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

## 2.3 - Teaching- Learning Process

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

The institution witnessed a paradigm shift during the AY 2020-21 due to the adoption of online Teaching Learning Process. Students were supported to explore new horizons of learning and research. Google Classroom was used as the Learning Management System (LMS). Google Meet, GoToMeeting, WebEx were used for the conduction of online classes. Digital writing pad and digital boards replaced the black boards. PowerPoint presentations and videos were used to provide

audio visual experience to the students. To augment the learning, educational videos were also posted on the Education YouTube channel of the Institute. Students were trained in virtual labs and modern simulation tools. Online quizzes were conducted regularly. Class recordings were made available on Google drive.

MOOC courses imbibed into the curriculum fostered the learnability coefficient of the graduates. They constantly engaged in learning using Coursera and edX sponsored by the institute.

All departments evolved many best practices with student centric methods. Series of online workshops, webinars and training programs were conducted. The institute organized a 3-day online hackathon "Beat the COVID pandemic". Students from all the programs actively participated in this hackathon and presented their ideas. Thus, the Institution ensured overall development of students through participatory learning experience.

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

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

In the wake of COVID 19 pandemic, the usage of ICT enabled tools in TLP increased multi-fold in our institution. Online learning became a necessity for the students rather than an option. Our faculty utilised this opportunity to explore new horizons of teaching and research.

All teachers switched to Google Classroom as the LMS and Google meet for the conduction of online classes. Some faculty also explored zoom, Webex, GoToMeeting and other video conferencing tools for online classes.

Digital writing pads and digital boards (TEQIP III sponsored) replaced the black boards. PowerPoint presentations and videos were used to provide audio visual experience to the students. Recordings of online classes were made available on Google drive.

Faculty shot educational videos and posted them on the education YouTube channel of the institute. Virtual labs and modern simulation tools were used to augment the understanding of lab experiments.

Educational videos from Khan Academy, NPTEL, Coursera, Jove, LinkedIn learning and Alison Courses were used by the educators to augment the student learning.

Continuous Internal Evaluations were in online mode using Google Classroom and Google form. The institute sponsored MOOC courses for both students and faculty on Coursera and edX to foster the learnability coefficient.

| File Description                                                                                                             | Documents                                                                                                                                                                                                         |
|------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process | <a href="https://bmsce.ac.in/assets/files/aqar/documents/2020-21/2.3.2-Usage%20of%20ICTenabled%20tools.pdf">https://bmsce.ac.in/assets/files/aqar/documents/2020-21/2.3.2-Usage%20of%20ICTenabled%20tools.pdf</a> |
| 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

384

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

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

The institute took utmost care to bring uniformity in the functioning of the Semester Scheme for all academic programmes across the College during the pandemic period of AY 2020-21. Academic year included three semesters. Two regular semesters (Odd, Even) with a minimum of 90 working days per semester. In addition, there was a supplementary/Fast track semester of 8 weeks. The calendar included important academic activities to assist the students and the faculty. This enabled the students to be well prepared, minimize their chances of failure in CIE and/or SEE and take full advantage of the flexibility provided by the credit system. Induction program for the first-year students was conducted in online mode during Dec 2020 and May 2021. The process of course registration were done online at the beginning of the semester.

Adherence to the academic calendar is ensured through audits conducted at the department level and at the institute level by IQAC and Dean – Academic.

Each faculty prepare the teaching plans for their respective courses. All faculties teaching the same course come to consensus about syllabus coverage for every CIE and alternate assessments. Delivery methods and pedagogy for various topics are also stated in the lesson plan.

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

## 2.4 - Teacher Profile and Quality

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

**384**

| File Description                                               | Documents                 |
|----------------------------------------------------------------|---------------------------|
| Year-wise full-time teachers and sanctioned posts for the year | <a href="#">View File</a> |
| List of the faculty members authenticated by the Head of HEI   | <a href="#">View File</a> |
| 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

**227**

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

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

**14**

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

## 2.5 - Evaluation Process and Reforms

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

8

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

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

13

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

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

Standard examination procedures as outlined in the Institution's Examination Manual are followed. This involves conduction of Continuous Internal Evaluation by the departments adhering to the time table issued by the Principal's Office. The Semester End Examination is conducted centrally by the Office of the Controller of Examinations. The examination officials are appointed by the Principal's Office in consultation with the CoE. The CoE's office also facilitates the evaluation of answer books, announcement of

results and the issue of credentials.

The solution is in place to automate the processes of calculation of student eligibility post the entry of CIE marks and attendance by the faculty. The solution also takes care of printing of hall tickets, seating allotment, generation of examination attendance, answer script coding, evaluation reports after de-coding, announcement of results, detailed student history report, generation of grade cards, transcripts and the provisional degree certificate.

The CIE entry portal has been customized to take care eighty different types of assessment. The faculty can choose the required type of assessment from the menu made available. This ensures the autonomy in the CIE assessment.

| 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

**Course Outcomes (COs)** defined for every course, are statements that describe the competencies gained by the student through the course and. Every CO is aligned to one or more Programme Outcome (POs), and is measured at the end of the course, through various assessment tools.

PO is available on the respective department webpage of the institute website. Well defined COs and the CO-PO mapping with its strength is included in the syllabus. The syllabus copy is made available to every student and is uploaded on the college website.

Vision-Mission, PEOs, POs, PSOs of the Programme offered by the department are displayed in respective department's classrooms, labs, HoD cabin and staff rooms. The course handouts for every program also includes these details along with COs of core courses of the Curriculum. Institute's central library keeps all the POs, PSOs and COs for easy access to students and faculty through the syllabus books of various programs.

All POs, PSOs and COs of specific lab course are printed on lab

manuals and issued to all students at the beginning of every semester. All the faculty members prepare course file for each semester that lists the POs, PSOs and COs.

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

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

The Departments have developed the curriculum taking all the POs and PSOs into consideration and assuring that the curriculum strongly maps to all the POs. The COs are framed as the abilities of the student after completing the course. The framed COs are then mapped with POs and PSOs. The framed COs for a course are measured by tools: The Direct Assessment Tools given by performance in Continuous Internal Evaluation and Semester End Examination and Indirect Assessment Tool given by the Course End Survey.

At the end of the course, COs of all the courses in that semester are computed. A qualitative analysis is done on the attainment of the COs by the course instructor. The observations, actions taken and to be taken and recommendations are reported as part of the CO analysis.

For a graduating batch, POs/PSOs are calculated using the CO computations of all the COs that are mapped to a PO/PSO and through Exit Survey. A thorough analysis on these attainment levels is done by the department. This analysis includes finding the weak areas towards the attainment of POs/PSOs and a detailed plan of action of events which would help in the further attainment of the POs/PSOs.

| 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****1376**

| File Description                                                                                      | Documents                                                                                                                                                                                                   |
|-------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Upload list of Programmes and number of students appear for and passed in the final year examinations | <a href="#">View File</a>                                                                                                                                                                                   |
| Upload any additional information                                                                     | <b>No File Uploaded</b>                                                                                                                                                                                     |
| Paste link for the annual report                                                                      | <a href="https://www.bmsce.ac.in/assets/files/aqar/documents/2020-21/2.6.3-PassPercentageofStudents.pdf">https://www.bmsce.ac.in/assets/files/aqar/documents/2020-21/2.6.3-PassPercentageofStudents.pdf</a> |

**2.7 - Student Satisfaction Survey**

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

<https://bmsce.ac.in/assets/files/aqar/documents/2020-21/2.7.1-Student%20feedback%20on%20TLP.pdf>

**RESEARCH, INNOVATIONS AND EXTENSION****3.1 - Promotion of Research and Facilities**

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

The institute promotes research and development activities within the college and has a well-defined policy in place to encourage faculty members to take R&D activities to higher level. There is a dedicated centralized center for R&D activities consisting of faculty experts across all research domain led by the Principal. The center facilitates the R&D activities to both faculties and students across Undergraduate, Graduate and Ph.D. levels. It includes

- dissemination of available call for proposals/grants,
- processing grant applications,
- identifying the right journals to publish,
- organising workshops/training related to research
- IPR filing and processing
- Liaison between Ph.D. scholars and the university
- dissemination of research achievements of faculty and students

| File Description                                                                                                         | Documents                                                                                                                                   |
|--------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Upload the Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption | <a href="#">View File</a>                                                                                                                   |
| Provide URL of policy document on promotion of research uploaded on the website                                          | <a href="https://bmsce.ac.in/RulesAndRegulations/Management%20Norms.pdf">https://bmsce.ac.in/RulesAndRegulations/Management%20Norms.pdf</a> |
| Any additional information                                                                                               | <b>No File Uploaded</b>                                                                                                                     |

### 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)

**73.45**

| File Description                                                                                            | Documents                 |
|-------------------------------------------------------------------------------------------------------------|---------------------------|
| Minutes of the relevant bodies of the institution regarding seed money                                      | <a href="#">View File</a> |
| Budget and expenditure statements signed by the Finance Officer indicating seed money provided and utilized | <a href="#">View File</a> |
| List of teachers receiving grant and details of grant received                                              | <a href="#">View File</a> |
| Any additional information                                                                                  | <b>No File Uploaded</b>   |

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

**3**

| File Description                                                  | Documents                 |
|-------------------------------------------------------------------|---------------------------|
| e-copies of the award letters of the teachers                     | <a href="#">View File</a> |
| List of teachers and details of their international fellowship(s) | <a href="#">View File</a> |
| Any additional information                                        | <b>No File Uploaded</b>   |

### 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)

**370.19**

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

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

**72**

| File Description                          | Documents                 |
|-------------------------------------------|---------------------------|
| Upload any additional information         | <b>No File Uploaded</b>   |
| Paste link for additional Information     | <b>Nil</b>                |
| List of research projects during the year | <a href="#">View File</a> |

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

**150**

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

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

**19**

| File Description                          | Documents                                             |
|-------------------------------------------|-------------------------------------------------------|
| Supporting document from Funding Agencies | <a href="#">View File</a>                             |
| Paste link to funding agencies' website   | <a href="https://dst.gov.in/">https://dst.gov.in/</a> |
| Any additional information                | <b>No File Uploaded</b>                               |

### 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.

R&D department at the institution level is established to promote research & innovation among the faculty and students. The center helps in developing co-operative and complimentary research across departments under BMSCE. The centre holds periodical review meetings and guides in writing project proposals, scientific papers leading to publication and identifying results of research for filing patents.

Propel labs related to Robotics, 3D printing, Aerospace, Bullz racing are established. Student groups (multidisciplinary) work on engineering projects in these labs - concept to designing the prototype. Each lab is headed by a faculty and supported by competent technical staffs who ensure that students conduct the research. Currently about 300 students are working in these labs.

Institution Innovation Council of BMSCE helps in building an ecosystem of innovation and entrepreneurship. The cell conducts start up awareness activities such as workshops, idea competition, innovation center labs visits round the year. Students are encouraged to participate in events and competitions from SIH, IIDC. Startup week - an annual workshop is organized to create awareness about design thinking, patent filing, ideation to productization and enable students to pitch in their proposal. The selected ideas are awarded seed money by BMSCE Management to take their proposals forward.

| File Description                      | Documents               |
|---------------------------------------|-------------------------|
| Upload any additional information     | <b>No File Uploaded</b> |
| Paste link for additional information | <b>Nil</b>              |

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

84

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

### 3.4 - Research Publications and Awards

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

**A. All of the above**

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

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

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

298

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

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

0.39

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

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

0.12

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

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

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

253

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

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

**Index of the University****3.4.6.1 - h-index of Scopus during the year****43**

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

**3.5 - Consultancy****3.5.1 - Revenue generated from consultancy and corporate training during the year (INR in lakhs)****106.63**

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

**3.5.2 - Total amount spent on developing facilities, training teachers and clerical/project staff for undertaking consultancy during the year****6.95**

| File Description                                                                                                                                        | Documents                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| Audited statements of accounts indicating the expenditure incurred on developing facilities and training teachers and staff for undertaking consultancy | <a href="#">View File</a> |
| List of training programmes, teachers and staff trained for undertaking consultancy                                                                     | No File Uploaded          |
| List of facilities and staff available for undertaking consultancy                                                                                      | <a href="#">View File</a> |
| 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

Orientation programs are conducted for first-year students where they are sensitized and motivated to enroll for the National Service Scheme (NSS) Cell, National Cadet Corps (NCC), Women Cell, Rotaract Club, Student Forums/Clubs etc. Participation of students in programs organized by these various cells and bodies ensure their involvement in extension and outreach programs.

The NSS Unit of BMSCE has actively conducted various plantation and cleanliness drives, plogruns and volunteering activities in NGOs. The students actively volunteered for all the events and made sure to perform their duties with utmost precision, keeping all the Covid SOPs in mind. As responsible citizens, the students turning up for the plogruns conducted by the college has fulfilled their duties of keeping their nation clean. Various volunteering activities were also conducted where students from college volunteered to dedicate their time on weekends for teaching and community building activities among children through i-teach program.

The institution has received four awards at the Rotaract Elite Awards in recognition of its contribution towards social responsibility and community development activities. All extension activities taking place under BMSCE had a deep-rooted connection with the moral duties of an ideal citizen and sets an example for its students.

| File Description                      | Documents               |
|---------------------------------------|-------------------------|
| Upload any additional information     | <b>No File Uploaded</b> |
| Paste link for additional information | <b>Nil</b>              |

### 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

**9**

| File Description                                             | Documents                 |
|--------------------------------------------------------------|---------------------------|
| Number of awards for extension activities in during the year | <a href="#">View File</a> |
| e-copy of the award letters                                  | <a href="#">View File</a> |
| Any additional information                                   | <b>No File Uploaded</b>   |

### 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)

**69**

| File Description                | Documents                 |
|---------------------------------|---------------------------|
| Reports of the events organized | <a href="#">View File</a> |
| Any additional information      | <a href="#">View File</a> |

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

**6349**

| File Description           | Documents                 |
|----------------------------|---------------------------|
| Reports of the events      | <a href="#">View File</a> |
| Any additional information | <a href="#">View File</a> |

## 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

**559**

| File Description                               | Documents                 |
|------------------------------------------------|---------------------------|
| Copies of documents highlighting collaboration | <a href="#">View File</a> |
| Any additional information                     | <b>No File Uploaded</b>   |

**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)**

**26**

| File Description                                                                                                            | Documents                 |
|-----------------------------------------------------------------------------------------------------------------------------|---------------------------|
| e-copies of the MoUs with institution/ industry/ corporate house                                                            | <a href="#">View File</a> |
| Details of functional MoUs with institutions of national, international importance, other institutions etc. during the year | <a href="#">View File</a> |
| Any additional information                                                                                                  | <a href="#">View File</a> |

**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 institution has excellent infrastructural facilities like well-furnished classrooms, state-of the-art laboratories, spacious library, sufficient faculty rooms, conference halls, auditoriums and ubiquitous computing facilities. The infrastructure is beyond the minimum specified requirement by affiliating University. The facilities are integrated for the students to learn effectively.

There is a total of over 120 classrooms, out of which 92 are for UG programs and remaining for PG programs. Most of the classrooms are ICT enabled with projectors, desktops, screen and LAN connection. There are 14 interactive digital boards set up for increased student engagement. In addition to classrooms, there are smaller rooms for group discussion and tutorial sessions.

Laboratory facilities enable hands-on-training for UG and PG students, as well as PhD scholars. There are over 50 laboratories in the campus, with most of them being Industry sponsored laboratories.

The campus has complete Wi-Fi Connectivity, Internet & Intranet facility available in academic blocks, laboratories and hostels. The total internet bandwidth available is 700 Mbps. The IT infrastructure is maintained by the Data Centre. Other infrastructure facilities in the campus are training and placement center, on campus Health Care Centre, Office of COE, Student Counseling Cell, Centers of Excellence, Incubation Centers and Innovative Labs.

| 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 institution offers multiple facilities on campus to cater to the physical development of students. The college has amenities for both indoor and outdoor games. The Indoor Sports Complex houses six Badminton courts, Volleyball and a Basketball court with gallery. The Outdoor stadium has facilities for Volleyball, Throw ball, Kho-Kho, Kabaddi and Handball. Dedicated gymnasiums are established for boys and girls in college and hostels.

The Cultural forum fosters talents of students in Dance, Music, Fine arts, Literary and theatre, etc. There are specialized student art clubs to bring like-minded people together to network, learn and progress. There are two state-of-the-art auditoriums with 250 and 150 seating capacity. In addition, for a bigger audience, indoor stadium is transformed into an event venue.

Utilization of these facilities during 2020-21 had taken a back seat due to pandemic, but students were educated through online sessions to maintain physical and mental health during this stressful time.

Health and Fitness Classes (Yoga and Meditation, Recreational Games) were conducted for all 1st year students. Students are always encouraged to participate in sports and cultural activities, which in turn leads to their overall well-being. Cash incentives are given to outstanding Sports and Cultural achievers every year.

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

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

**109**

| File Description                                                                          | Documents                 |
|-------------------------------------------------------------------------------------------|---------------------------|
| Upload any additional information                                                         | <b>No File Uploaded</b>   |
| Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template) | <a href="#">View File</a> |

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

**2519.24**

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

### 4.2 - Library as a Learning Resource

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

**Libraries play a vital role in the development of any society by enhancing the cause of education and academic research. They cater to the information needs of thousands of peoples.**

**The library of the institution is aesthetically located in a central place of the college & is very prominently housed in a big and space of Platinum Jubilee Academic Block with a floor area of 49500 Sq.ft.**

**The Library resources have been completely Bar Coded and automated**

using LIBSYS 9 (EJB) Release 1.0. Library Package helps in Transactions, OPAC (Online Public Access of Catalogues) and reservation of Books etc., for the users.

- The college has a voluminous computerized Library, which caters to the needs of students, research scholars and faculty.
- It has a seating capacity for 650 users at a time. The Library has a rich collection of 155650 Volumes of books comprising of 48302 titles.
- The digital library of the college provides online access to e-resources on Science, Technology, Engineering and Management subjects for Study and research.
- The library has access to more than 1887 e-journals & 11113 e-books on various branches of Science, Technology, Engineering & Management.
- In addition it has 125 National and International printed journals.

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

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

**75.36**

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

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

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

446

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

#### 4.3 - IT Infrastructure

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

The Data Centre monitors the Campus Wide Networking (CWN) facility of the institution for ubiquitous network connectivity throughout the campus. At present CWN is having three redundant high end carrier class core switches and 100 access switches. The Connectivity between the core switch to access switch is thorough multimode fiber optic backbone. The existing bandwidth of the intranet is 10 GBPS. Currently CWN is supplemented with 1.5 GBPS of redundant internet link to cater to the internet requirement of the campus. The college has hosted a private cloud on virtualized environment of blade servers and flex servers with fiber SAN storage to meet the computing requirement of the campus. Campus intranet has paved way to provide seamless access to e-journals, online lecture streaming and application software. The Data Centre also hosts e-mail and web servers of the institution. CWN is supplemented with mobility aware wireless connectivity of wireless network enabled electronic gadgets of students and staff. APNIC, of which BMSCE is a proud member, has allotted three blocks of static IP addresses and ASNs. This facilitated the institution a global presence in the internet domain. In India BMSCE is the first educational institution to obtain APNIC membership and static IP addresses.

| File Description                      | Documents               |
|---------------------------------------|-------------------------|
| Upload any additional information     | <b>No File Uploaded</b> |
| Paste link for additional information | <b>Nil</b>              |

**4.3.2 - Student - Computer ratio**

|                    |                     |
|--------------------|---------------------|
| Number of Students | Number of Computers |
| <b>6932</b>        | <b>2408</b>         |

| File Description                  | Documents               |
|-----------------------------------|-------------------------|
| Upload any additional information | <b>No File Uploaded</b> |

**4.3.3 - Bandwidth of internet connection in the Institution and the number of students on campus**
**A. 250 Mbps**

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

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

| File Description                                             | Documents                 |
|--------------------------------------------------------------|---------------------------|
| Upload any additional information                            | <b>No File Uploaded</b>   |
| Paste link for additional information                        | <b>Nil</b>                |
| List of facilities for e-content development (Data Template) | <a href="#">View File</a> |

**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)

**1247.43**

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

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.

**Classrooms:** Classrooms and seminar/conference halls are maintained cleanly on regular basis. Facilities such as lights and fans, LCD projector and sound system, availability of internet connections are inspected on regular basis.

**Laboratory:** Laboratories are regularly augmented with latest equipment and maintained as per manual/process. Equipments are maintained properly, calibrated and serviced periodically. Software license renewal is done as per the license period. Lab technician checks the working condition of the equipment/systems on daily basis. Do's and Don'ts are displayed and list of experiments are displayed in all the laboratories.

**ICT tools:** The computers are monitored and maintained from time-to-time. The Data Centre monitors the Campus Wide Networking (CWN) facility of the institution for ubiquitous network connectivity throughout the campus.

**Library:** The Library holdings consist of books, journals, Library Software (LIBSYS), e-journals, e-books etc. The books and journals are bounded. The library has Online Public Access Catalogue (OPAC) for easy search of books for the benefit of students and staff.

The Building section oversees maintenance of Potable Water Supply, Solid Waste Management, Sewage Disposal, Chemical Waste, e-waste disposal and other facilities.

**Electric Power Backup:** Sufficient back up power supply has been maintained in case of power failure from BESCO.

| File Description                      | Documents               |
|---------------------------------------|-------------------------|
| Upload any additional information     | <b>No File Uploaded</b> |
| Paste link for additional information | <b>Nil</b>              |

## 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

**292**

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

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

**314**

| File Description                        | Documents                 |
|-----------------------------------------|---------------------------|
| Upload any additional information       | <b>No File Uploaded</b>   |
| Institutional data in prescribed format | <a href="#">View File</a> |

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

**A. All of the above**

| File Description                              | Documents                                                                                                                                                                                                                                                                         |
|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Link to Institutional website                 | <a href="https://bmsce.ac.in/assets/files/aqar/documents/2020-21/5.1.3-Capacity%20Development%20and%20Skill%20Enhancement%20activities.pdf">https://bmsce.ac.in/assets/files/aqar/documents/2020-21/5.1.3-Capacity%20Development%20and%20Skill%20Enhancement%20activities.pdf</a> |
| Details of capability development and schemes | <a href="#">View File</a>                                                                                                                                                                                                                                                         |
| Any additional information                    | <b>No File Uploaded</b>                                                                                                                                                                                                                                                           |

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

**1200**

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

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

**A. All of the above**

| File Description                                                                                                                         | Documents                 |
|------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| Minutes of the meetings of students' grievance redressal committee, prevention of sexual harassment committee and Anti-ragging committee | <a href="#">View File</a> |
| Details of student grievances including sexual harassment and ragging cases                                                              | <a href="#">View File</a> |
| Upload any additional information                                                                                                        | <b>No File Uploaded</b>   |

## 5.2 - Student Progression

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

**773**

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

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

**56**

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

### 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**

**67**

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

### 5.3 - Student Participation and Activities

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

**14**

| File Description                           | Documents                 |
|--------------------------------------------|---------------------------|
| e-copies of award letters and certificates | <a href="#">View File</a> |
| Any additional information                 | <a href="#">View File</a> |

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

**BMSCE offers students the opportunity to participate in various types of academic and campus activities. The student representatives are regularly invited to the BOG Meetings. Inputs from them towards betterment of the institution are valued. The Board of Studies of the all programmes have student representatives and their views are considered while initiating new courses, curriculum framing, teaching methodology etc. The College offers numerous Student Forums/Clubs to provide opportunity to students to participate in wide range of Co-Curricular, Extra-Curricular, Social and Community Development Activities. Throughout the year numerous events are organized for the students to pursue their hobbies. Students participate in the feedback system. Students provide feedback on faculty (4 times in a year), HODs & Principal (once in a year) and Institution (2 times in a year). Few Student Representatives from various branches are invited to Academic Council Meetings. The students are part of service and extension activities through NSS, NCC, Rotaract, Women Cell units. Student representatives are also part of IQAC, Anti ragging committee, Grievance Redressal Cell and other committees.**

| File Description                      | Documents               |
|---------------------------------------|-------------------------|
| Upload any additional information     | <b>No File Uploaded</b> |
| Paste link for additional information | <b>Nil</b>              |

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

**1**

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

## 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 BMSCE Alumni Network(BMSCEAN) established and registered under the Societies Registration Act 21 of 1860 is now 25000 members strong.**

**The Alumni Contribute in the Curriculum Design process. The Department Advisory Board has representation from alumni. BoS includes alumni representatives. Alumni actively participate in the Institutional initiatives like PhaseShift, Conferences, Workshops and department level technical symposia etc. The guest lectures by alumni pave the way for interaction to improve TLP. Alumni are mentoring students for national and international programmes like SAE Baja events, SAE Aerospace and general activities like the career counseling. Alumni are part of IQAC, Departmental Advisory Board, Alumni Executive Committee etc. Alumni provide feedback once in a year about the institution. Alumni Survey and their feedback help effective implementation of the OBE Process.**

**BMSCE Alumni Interest Free Education loans were rolled out in 2013 for the needy students of BMSCE. As on 31.06.2021, 80 students have benefited so far. A total loan amount of Rs.295.00 Lakhs has been disbursed. The BMSCE Alumni Network recognizes meritorious students by giving BMSCEAN Merit Scholarships at the end of every semester.**

The toppers are recognized during the Annual Alumni Day with a cash prize of Rs.10000/- each and a merit certificate

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

#### 5.4.2 - Alumni's financial contribution during the year A. ? 15 Lakhs

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

### GOVERNANCE, LEADERSHIP AND MANAGEMENT

#### 6.1 - Institutional Vision and Leadership

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

The founders have envisaged the vision of providing skilled and competent workforce to society by imparting quality education and training.

The administration is overseen by the Board of Governors (BOG). The BOG is constituted as per the statutory provisions. Governing body meetings are conducted regularly in an open manner. The members of BOG make active contributions for academic growth and development.

The BOG approves the strategic Plan, Vision & Mission, Short Term and Long Term goals and Budget based on the Strategic Plan. The BOG ensures that all decisions on the matters such as admission, new programmes, infrastructure, TLP and Placements are arrived based on the fundamental concerns of the Institution. The Institution has brought out a Good Governance Document (GGD), adhering to the good governance practice guide of TEQIP. Many senior faculty members occupy pivotal academic and administrative positions. Regular academic and administrative audits are conducted. The faculties are actively involved in decision making process. Suggestions from all stakeholders are also given prominence for the improvement and the effectiveness of all institutional processes.

Effective and participative decision making process is adopted to

achieve the vision, mission and the goals of the institution and also in building effective organizational culture.

| 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

Governing body meets regularly and is conducted in a transparent manner. Faculty members and student representatives are invited to the BOG meetings and their views obtained are duly considered. The minutes of the BOG, Academic Council and Annual Report are published on college website. The relevant information is shared with the employees through various meetings/circulars. The finance committee appraises the BOG pertaining to finances of the college. Budgetary provisions for the departments are made based on the requirements/inputs provided by the HOD.

The principal provides leadership for the academic administration and creates an effective conducive environment. Several committees comprising of key stakeholders including faculty, staff, industry, employer, alumni, parent and students continuously monitor/guide the academic and administrative activities.

All HoDs are members of the Academic Council, College Council and vested with academic power. Senior faculty members occupy pivotal administrative positions like the Vice-Principal, Deans, Placement Officer, IQAC Chief Coordinator, Hostel Secretaries, Wardens, Controller of Examination etc. The management has devised the policy of rotation of these key roles with an aim to groom the next in line leaders.

At the department level, as part of the Departmental Academic Committee [DAC], the faculty provide their inputs on all academic related matters.

| File Description                                              | Documents                 |
|---------------------------------------------------------------|---------------------------|
| Upload strategic plan and deployment documents on the website | <a href="#">View File</a> |
| Upload any additional information                             | <b>No File Uploaded</b>   |
| Paste link for additional Information                         | <b>Nil</b>                |

## 6.2 - Strategy Development and Deployment

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

### To Establish Collaborative Laboratory in support of industry

1. To set up laboratories to pursue research with some of the reputed companies.
2. Create Experiential learning opportunities by providing live industry projects.

industry supported laboratories were created during the assessment period (2013-2020)

SNo

Dept

Industry/

Organization

Lab

Date of

Establishment

1

ME

3D PLM Systems, Dassault Sys

Product Innovation Lab

**06.09.2016**

**2**

**ME**

**CARL ZEISS INDIA PVT. LTD**

**Pre Consultancy Preparedness**

**18.01.2016**

**3**

**EE**

**Texas Instruments India**

**TI Innovation Lab**

**18.12.2014**

**4**

**EE**

**Cares Renewable Private Limited**

**BMSCE-CARES-CoE in Solar**

**18.12.2017**

**5**

**EE**

**Dassault Systems La Foundation**

**BMSCE-La Foundation-Virtual Reality Lab**

**10.12.2018**

**6**

**EC**

**NOVOTON, B.lore**

**Embedded Systems Lab**

**21.05.2014**

**7**

**EC**

**ARM, B,lore**

**Embedded System Design**

**06.12.2013**

**8**

**EC**

**Keysight Technologies, B.lore**

**Advanced communication lab/RF and wireless Lab**

**06.12.2016**

**9**

**EC**

**ESSCI, New Delhi**

**Skill sector Lab**

**12.03.2015**

**10**

**EC**

**Robert Bosch, B.lore**

**R&D Lab**

**02.04.2015**

11

IS

HPE-HEWLETT Packard Enterprise

HPE-Incubation Center for Virtualization and Security

12.02.2020

12

CS

Intel

Sensors and Big Data lab

14.10.2015

13

MCA

Altrimetrik

Innovation Cluster Lab (ICL)

03.12.2014

14

Intn

Mitsubishi Electric India

PLC and Scada Lab

15.02.2020

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

**B.M.S. College of Engineering has many statutory and non-statutory bodies carrying out functions and responsibilities in pursuit of institutional mission and core values.**

The administration is overseen by the Board of Governors (BOG). The BOG approves the strategic Plan, Vision & Mission and the Budget based on the Strategic Plan. The institution is well known for its good administrative practices and work culture.

The Academic Council (AC) is the highest academic body which decides and advices on all academic matters. Academic proposals of BoS from each department are scrutinized and approved with or without modifications by the AC. The recruitment of faculty / staff is a crucial activity. The Board of Appointment (BOA) is constituted specifically for governing the recruitment procedure.

The faculty are extended with the revised AICTE scales (Sixth Pay Commission 2006 with DA). Eligible faculty members are given promotion under Career Advancement Scheme [CAS] as recommended by the Screening Committee. The staff welfare measures include monetary benefits. Additional increments, reimbursement of fees for pursuing higher studies, deputations with financial assistance, Rewards system for research projects etc. The Non-Teaching staff members are extended with state scales of pay and eligible for earned leave benefits as per norms.

| File Description                                    | Documents                                                                                                                                                               |
|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Paste link to Organogram on the institution webpage | <a href="https://bmsce.ac.in/assets/files/aqar/documents/2020-21/6.2.2-Organogram.pdf">https://bmsce.ac.in/assets/files/aqar/documents/2020-21/6.2.2-Organogram.pdf</a> |
| Upload any additional information                   | <b>No File Uploaded</b>                                                                                                                                                 |
| Paste link for additional Information               | <b>Nil</b>                                                                                                                                                              |

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

**A. All of the above**

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

## 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

**Teaching Staff: CAS, Earned leave, Cash Incentive for writing Technical & Literature books, reimbursement of book purchased: Upto a limit of Rs. 15000/-. Encashment of EL as per norms, Maternity/Paternity Leave, Retirement benefits, VRS scheme, Medical Insurance coverage upto a limit of Rs.2,00,000/- for employee, spouse and two children, Employees Welfare Fund, Festival & Medical Advance, Laptop Loan, Car Loan, Providing Management Quota Seats to wards of teaching faculty with fee reduction, BMSET Employees Credit Co-operative society, Providing cash incentives for research publications in the referred international/national journals, Incentive of 5% from management funds (of the total grant amount) is provided to faculty who fetch grants from external agencies, CII TDB T NET Centre to facilitate consultancy activities. Incentives to enthruse faculty to take up research endeavors like Annual book allowance, 100% and 75% Annual Membership Fee reimbursements with respect to any Indian & Foreign Professional Body respectively,**

**National Pension Scheme (NPS).**

**Non-Teaching: Time Bound Increment, Earned Leave, Maternity Leave, Retirement benefits, Family welfare Fund, VRS Scheme, Medical Insurance (Spouse & Children), Festival and Medical Advance. Educational Aid: Rs. 10000/- p.a. for one child, Two Wheeler Loan, Management Quota seats to wards, Loan facility through BMSET Employees Credit Co-operative society**

| File Description                      | Documents               |
|---------------------------------------|-------------------------|
| Upload any additional information     | <b>No File Uploaded</b> |
| Paste link for additional information | <b>Nil</b>              |

**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**
**25**

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

**6.3.3 - Number of professional development / administrative training programmes organized by the Institution for its teaching and non-teaching staff during the year**
**22**

| File Description                                                                           | Documents                 |
|--------------------------------------------------------------------------------------------|---------------------------|
| Reports of the Human Resource Development Centres (UGC HRDC/ASC or other relevant centres) | <a href="#">View File</a> |
| Upload any additional information                                                          | <a href="#">View File</a> |

**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.)**

218

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

## 6.4 - Financial Management and Resource Mobilization

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

The Institute has a mechanism for internal and external audit to ensure financial compliance. The observation of the auditors if any are immediately corrected / rectified.

**Internal Audit:** Qualified Internal Auditors from external resources have been permanently appointed and a team of staff under them do a thorough quarterly basis check and verification of all payments, receipts & journals vouchers of the transactions cash books, ledger account review that are carried out in each financial year on an accrual basis system.

**External Audit:** The external auditor appointed by the college performs audit of the financial statements of the college. The financial records are audited by qualified chartered accountants after the end of each fiscal year. Audit Report, statement of income and expenditure, balance sheet and supporting annexure, notes on accounts are certified.

Statutory financial audit of Institute is conducted in two sessions, first during November/December for period of six months starting from April to September and second during May/June for the period from October to March. Finalization of account is completed and audited in July. The audited statement is duly signed by Principal, Chairman and Chartered Accountant.

The Institution publishes audited financial statements on the institutions website.

| File Description                      | Documents               |
|---------------------------------------|-------------------------|
| Upload any additional information     | <b>No File Uploaded</b> |
| Paste link for additional information | <b>Nil</b>              |

#### 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)

**57.06**

| File Description                                                                                            | Documents                 |
|-------------------------------------------------------------------------------------------------------------|---------------------------|
| Annual statements of accounts                                                                               | <a href="#">View File</a> |
| Details of funds / grants received from non-government bodies, individuals, philanthropists during the year | <a href="#">View File</a> |
| Any additional information                                                                                  | <b>No File Uploaded</b>   |

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

Mobilization of funds in the institute is through several ways. The primary source is through collection of tuition fees and salary grants received from various bodies. The institute is a beneficiary of TEQIP, a world bank assisted funding from the last five years. In addition, financial assistance is obtained through external research projects and extensive consultancy works. The institute is part of the Global Initiative Academic Network approved by Government of India and is receiving funding through this segment also.

The Maximum resource mobilization is through tuition and miscellaneous fees collected from the students.

The details of fund mobilization under various heads is as shown below:

**Head**

**2020-21**

**Students' Fees**

**507464369**

**Salary Grants****16721520****Bank Interest****3779392****Misc Income****5067873****Funds from BMSET****434927032****TEQIP****16572878****External Grants****95046668****Consultancy Projects****10662851****Total****1090242583**

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

**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)

The Strategic plan (2013-2020) with long term and short term perspectives was in vogue. The implementation of the strategic plan was executed with the support and involvement of all the stake holders. The BOG periodically reviewed the implementation of strategic plan. The extent of compliance was presented to the Board of Governors from time to time. The college has been able to accomplish almost all the goals with the co-operation and support of all stakeholders.

The Strategic Plan (draft) 2021-2025 was prepared. The efforts were led by the committee comprising of Director, IQAC, Dr.S.Manoharan, - MBA and Dr.Chetan Nayak- CH. The IQAC Core in its meeting held on 21.09.2019 approved the Draft version of the plan. The Plan is now under the consideration of the AC & BoG.

The following basis was considered for formulating the strategic plan.

- SWOC Analysis conducted through external expert
- Observations of various assessing agencies
- Good Governance practices
- Improve standing under NIRF through focused improvement in all prescribed Parameters
- Support student success
- Improve Institutional outreach
- Focus on future challenges

Strategic Plan Steering Committee has been constituted to monitor its implementation of properly planning activities. IQAC is also in the process of revising the institute's quality related policies.

| 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

**IQAC significantly contributes towards improving Academic Environment, TLP, Curriculum and Evaluation Methods.**

The academic audit aids enhance the quality of TLP and OBE practice. It is conducted for all UG and PG programmes. The audit is conducted at faculty, department and institute level. Self-analysis by faculty is initially done. This comprises of parameters: COs defined for each course, CO-PO mapping, assessment tools adopted, CIE & SEE comparison, CO attainment and best practices achieved through the course. Department audit includes listing of best academic practices of the department, courses which need CO revision, courses where the CIE distribution is of concern, PO attainment etc. The final audit is conducted by IQAC at the institute level where a team of senior professors audit the departmental academic activities. This audit comprises of observations towards best academic practices of the institution and suggests areas for improvement. Finally, an audit summary is prepared and an action plan to improve the quality of academic activities is outlined.

In order to maintain quality assessment, question papers of internal tests are audited at the respective department and SEE question papers are audited by experts who are invited from other institutions. Corrective actions are taken based on audit.

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

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

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

| File Description                                                   | Documents                                                                                                         |
|--------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| Paste the web link of annual reports of the Institution            | <a href="https://bmsce.ac.in/home/BMSCE-Monthly-Activities">https://bmsce.ac.in/home/BMSCE-Monthly-Activities</a> |
| Upload e-copies of accreditations and certification                | <a href="#">View File</a>                                                                                         |
| Upload details of quality assurance initiatives of the institution | <a href="#">View File</a>                                                                                         |
| Upload any additional information                                  | <a href="#">View File</a>                                                                                         |

## INSTITUTIONAL VALUES AND BEST PRACTICES

### 7.1 - Institutional Values and Social Responsibilities

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

The institution makes sincere efforts to empower the women faculty and students. Members of Women Cell are constantly putting effort towards organizing events which largely benefit the society and ladies in particular. The Women Cell celebrates international women's day every year. There were webinars conducted on Gender Equality and Rights of Women, health awareness, Yoga and stress management. The College Internal Complaint Committee (CICC) holds interactions with the students and faculty during activities of the college. A student counsellor has been working since April 2016 in BMSCE.

The college has in place all necessary measures to ensure girl student safety. The Hostels are installed with CCTV surrounding the building to monitor the movements. The hostels are fenced and gated properly. Further, the inward and outward movements of outsiders are recorded and monitored by professional Security personnel. The Anti-ragging committee and squads monitor and ensure that the campus and hostels are ragging-free. The Women Hostel is under the constant vigil of Women Warden and staff. The entry register is maintained in all hostel blocks to monitor the movement of the students. The sanitary napkin incinerators and sanitary napkin vending machines are installed for the health and hygiene maintenance for the girls.

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

**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**

**B. Any 3 of the above**

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

**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)**

**For sustainable solid waste management, dry and wet solid wastes are collected separately in the colour coded bins provided at different locations in the campus and are transported to a dedicated collection yard. Subsequently, the wastes are collected and disposed as per the KSPCB norms by the BBMP approved contractor on daily basis. Meanwhile, for liquid waste management, an advanced wastewater treatment plant of 350 KLD capacity is provided involving membrane bioreactor (MBR) technology for treating the wastewater generated from hostels and different buildings in the institute. Meanwhile, in order to achieve zero liquid discharge, the treated effluent from wastewater treatment plant is being recycled through toilet flushing and gardening. On the other hand, for efficient handling and management of biomedical wastes generated in the campus premises are collected in the dedicated colour coded bins and are calcined through incinerator. Furthermore, e-waste generated from different departments are collected and outsourced to KSPCB authorized e-waste recyclers (M/s. Coral Communications and Networks Pvt. Ltd.). Besides, the institute does not generate any kind of radioactive wastes. However, the hazardous chemicals generated in the laboratories and other sources are neutralized and diluted at the source. Subsequently, they are sent to the wastewater treatment plant.**

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

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

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

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

**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                        | <a href="#">View File</a> |
| Various policy documents / decisions circulated for implementation | <a href="#">View File</a> |
| Any other relevant documents                                       | <b>No File Uploaded</b>   |

**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 | <a href="#">View File</a> |
| Certification by the auditing agency                                      | <a href="#">View File</a> |
| Certificates of the awards received                                       | No File Uploaded          |
| Any other relevant information                                            | <a href="#">View File</a> |

**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                 | <a href="#">View File</a> |
| Policy documents and brochures on the support to be provided | <a href="#">View File</a> |
| Details of the software procured for providing assistance    | <a href="#">View File</a> |
| Any other relevant information                               | <a href="#">View File</a> |

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).

Under BMSCE Unnat Bharat Abhiyaan adopted 5 villages in Kolar district were adopted and various activities related to their socio-economic development are being regularly conducted. In coordination with the UBA and NSS unit of the institute has conducted many activities like,

1. Conducting Lectures in these villages for increasing their environmental and ethical awareness.
2. Conducting Programmes to create awareness about contagious diseases, like COVID, precautions to be taken and social responsibility, vaccination and its importance.

The institution regularly conducted number of vaccination drives during the year 2020-21. Details of the activities are noted hereunder:

1. Free Covid-19 Vaccination Camp in association with BBMP, 250 members participated on 13.11.2020
2. Free Covid-19 Vaccination Camp in association with BBMP, 250 members participated on 08.07.2021
3. Free Covid-19 Vaccination Camp in association with BBMP, 300 members participated on 08.07.2021
4. Free RT PCR Test in association with BBMP, 250 members were participated on 16.03.2021
5. Free RT PCR Test in association with BBMP, 270 members were participated on 17.03.2021

About 20 faculty and staff members have been working as COVID Warriors and serving the society. They have been doing the assigned jobs of facilitating testing, vaccination drive, contact tracing, quarantine watch and other related activities.

| File Description                                                                                                                 | Documents                 |
|----------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution) | <a href="#">View File</a> |

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

**B.M.S.College of Engineering sensitises its students and employees to constitutional obligations through various initiatives to enable them to responsible citizens.**

Mandatory courses on Constitution of India and Professional Ethics is included in the curriculum. In these courses students are educated about the Supreme Law of the Land and an awareness about Civil Liberties is created. A new course on Universal Human Values was introduced with an aim to help students identify the importance of human values and skills for sustained happiness. The Activity point program of AICTE is effectively implemented in the institution with students being encouraged to participate in activities having social impact. The NSS Unit of BMSCE has actively conducted various plantation and cleanliness drives, plog runs and volunteering activities in NGOs. The students actively volunteered for all the events and made sure to perform their duties with utmost precision, keeping all the Covid SOPs in mind.

On 25th January 2021, 11th National Voters Day was celebrated with all faculty and staff members taking the 'Voter's pledge'. National festivals are celebrated in the campus emphasising the importance freedom struggle and constitution of India.

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

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

**A. All of the above**

**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**

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

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

**The institution celebrates National and international commemorative days, events and festivals to commemorate the ideology of nationalism and cultural diversity. Due to the COVID-19 lockdown and SOP adherence most events of year 2020-21 were conducted online or in blended mode.**

**International yoga day was celebrated through lecture demonstration by Dr. Omkar S N. Sadhbhavana Diwas was celebrated online with more than 100 student and staff participants. Teacher's Day and Engineer's Day was celebrated on 16th Sept 2020 in blended mode. Rashtriya Ekta Diwas was celebrated to reaffirm the inherent strength and resilience of our nation. The virtual Run for Unity allowed participants to run a certain distance while keeping track of their metrics on a fitness app. An informative webinar on National Cancer Awareness Day was conducted. Essay writing competition was organised on National Youth Day marking the birth anniversary of Swami Vivekananda. Webinars, poster making and essay writing events were arranged as part of "Azadi ka Amrut Mahotsav" celebrating India's glorious independence. National Science Day was celebrated on 1st March 2021. A week-long celebration of International Women's Day included walkathon and webinars on health, healthy diet, chair yoga. Ambedkar Jayanthi was observed as a symbolic event due to restrictions.**

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

## 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 1:

#### 1. Title of the Practice

#### Digitization of Examination Process

#### 2. Objectives of the Practice

1. Examination Process Automation-will lead to considerable reduction in the time and human resource requirement in the process of error free gathering and verification of the related data
2. Data Security and Accessibility-the process of digitization will ensure the highest data security and easy accessibility
3. Real time data and generation of reports-will lead to dynamic generation of results and subsequent issue of credentials

### BEST PRACTICE 2:

#### 1. Title of the Practice

#### BMSCE Hackathon: Beat the Pandemic

#### 2. Objectives of the Practice

The objective was to motivate student teams along with faculty mentors to build effective solutions to win battle against COVID19.

More details about the two best practices is available here: <https://bmsce.ac.in/assets/files/aqar/documents/2020-21/7.2.1-%20BestPractice-I%20&%20II.pdf>

| File Description                            | Documents                                                                                                                                                                                                       |
|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Best practices in the Institutional website | <a href="https://bmsce.ac.in/assets/files/aqar/documents/2020-21/7.2.1-%20BestPractice-I%20&amp;%20II.pdf">https://bmsce.ac.in/assets/files/aqar/documents/2020-21/7.2.1-%20BestPractice-I%20&amp;%20II.pdf</a> |
| Any other relevant information              | Nil                                                                                                                                                                                                             |

### 7.3 - Institutional Distinctiveness

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

During the Pandemic, the institute was facing the challenge of keeping the students engaged with theoretical and skill-based learning. As a measure to mitigate this issue, BMSCE devised multiple Digital Intervention initiatives. All faculty geared up for the paradigm shift and switched to Online TLP. Online classes were conducted on platforms like WebEx, Google Meet, Edmodo, Zoom, Skype. Google Classroom was the LMS used for conduction of online evaluations. Library resources were made available on the institute website. The institute partnered with Coursera (5000 licenses) and edx (5000 coupons) to complement the TLP. Webinars, Events, Workshops, FDPs & Placement training were conducted online. Laboratory sessions were recorded and shared on public domain. In collaboration with Dassault Systems the Institute developed virtual laboratory exercises on topics involving electrical machines, power systems, Kinematics of machines which allowed students to creatively showcase the experiment. BMSCE created 7 virtual labs for Electrical Engineering and 8 more virtual labs on Mechanical Engineering are in progress. Students remotely accessed the high-end computing facility in college using open-source screen sharing and were able to test the developed experiments. Thus, students and faculty community in the campus were nurtured to collaborate and develop new methods for 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 is designed to ensure that students acquire the required domain knowledge, skills and attitude. Curriculum design considers Model curriculum of AICTE, Curricular structure of VTU, Program Specific Criteria of professional bodies, Syllabus of various premier institutions and recent technological developments.

After the curriculum design, Course Outcomes (COs) for every course are defined and mapped with Program Outcomes (POs) and Program Specific Outcomes (PSOs). It is ensured that every PO is addressed by atleast two courses. In addition, assessment tools to measure COs, strength of CO-PO mapping and CO-PSO mapping constitute an effective curriculum design. An effective implementation of this Outcomes Based Education ensures that our graduating engineers attain the 12 POs, and hence can compete on a global platform.

The initial version of the curriculum based on the said process is prepared through discussions with stakeholders. The curriculum is then placed for discussion/approval by Department Advisory Board and Board of Studies which includes industry, academic experts, faculty and student members. The curriculum (suitably revised) is then placed for approval during the Academic Council. Curriculum is finally evolved. The academic autonomy of the Institution enables timely revision of the curriculum based on needs and suggestions of various stake holders.

| 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

**26**

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

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

**884**

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

## 1.2 - Academic Flexibility

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

**85**

| File Description                                        | Documents                 |
|---------------------------------------------------------|---------------------------|
| Minutes of relevant Academic Council/BoS meetings       | <a href="#">View File</a> |
| Any additional information                              | <b>No File Uploaded</b>   |
| Institutional data in prescribed format (Data Template) | <a href="#">View File</a> |

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

**29**

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

### 1.3 - Curriculum Enrichment

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

The curriculum includes several courses to address Professional Ethics and Human Values. A new course 'Universal Human Values' was introduced during 2020-21 for first year students to develop holistic perspective of the harmony in human beings, family, society and nature/existence. The institute core course on 'Constitution of India, Professional Ethics and Human Rights' is included in the second year of all programs to help inculcate human values and professional ethics in all students. The curriculum includes mandatory course on 'Personality Development and Communication' and 'IPR' to develop human values and communication skills.

Program Curriculum also includes courses to address Environment and Sustainability. Institute core course on 'Environmental studies' (based on the AICTE mandatory guideline) is included in second year UG curriculum. . In addition, individual programs (both UG and PG) have also included additional courses to address Professional Ethics, human values, environment and sustainability.

In the present curricular structure, specific course to address gender equality is not included. The Women Cell and College Internal Complain Committee (CICC) continuously offer various programs like Debate, seminar, panel discussions on gender sensitization. The impact of these programs is evident through the confidence portrayed by all students irrespective of their gender.

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

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

**12**

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

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

**690**

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

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

**1157**

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

## 1.4 - Feedback System

**1.4.1 - Structured feedback and review of the** **A. All 4 of the above**

syllabus (semester-wise / year-wise) is obtained from 1) Students 2) Teachers 3) Employers and 4) Alumni

| File Description                                                                                                      | Documents                                                                                                                                                                                                                                                               |
|-----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Provide the URL for stakeholders' feedback report                                                                     | <a href="https://bmsce.ac.in/assets/files/aqar/documents/2020-21/1.4.1-Structured%20feedback%20and%20review%20of%20the%20syllabus.pdf">https://bmsce.ac.in/assets/files/aqar/documents/2020-21/1.4.1-Structured%20feedback%20and%20review%20of%20the%20syllabus.pdf</a> |
| Upload the Action Taken Report of the feedback as recorded by the Governing Council / Syndicate / Board of Management | <a href="#">View File</a>                                                                                                                                                                                                                                               |
| Any additional information                                                                                            | No File Uploaded                                                                                                                                                                                                                                                        |

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

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

| File Description                              | Documents                                                                                                                                                                                                                                                               |
|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Provide URL for stakeholders' feedback report | <a href="https://bmsce.ac.in/assets/files/aqar/documents/2020-21/1.4.1-Structured%20feedback%20and%20review%20of%20the%20syllabus.pdf">https://bmsce.ac.in/assets/files/aqar/documents/2020-21/1.4.1-Structured%20feedback%20and%20review%20of%20the%20syllabus.pdf</a> |
| Any additional information                    | <a href="#">View File</a>                                                                                                                                                                                                                                               |

## TEACHING-LEARNING AND EVALUATION

### 2.1 - Student Enrollment and Profile

#### 2.1.1 - Enrolment of Students

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

**1823**

| File Description                        | Documents                 |
|-----------------------------------------|---------------------------|
| Any additional information              | No File Uploaded          |
| Institutional data in prescribed format | <a href="#">View File</a> |

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

590

| File Description                                              | Documents                 |
|---------------------------------------------------------------|---------------------------|
| Any additional information                                    | No File Uploaded          |
| Number of seats filled against seats reserved (Data Template) | <a href="#">View File</a> |

## 2.2 - Catering to Student Diversity

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

Learning levels of the students are based on criteria such as performance in internal tests, semester end exams, lab tests and Absenteeism. Informal assessments in theory classes and labs also help us to gauge their learning ability. Programmes are designed both at the institute and department level to support both slow and advanced learners.

Faculty mentor slow learners by way of interactions, remedial classes advising them on learning and studying techniques to be adopted, best practices, and the right approach required to tackle different types of courses. The faculty advisory system (Proctor) help and motivate such students to improve their overall academic performance through counselling sessions. For students joining under the lateral entry system, the college offers special coaching, bridge programmes and peer guidance.

Advanced learners are encouraged to participate and present papers in various Seminars/ Conferences/ Workshops/ Inter Collegiate Competitions and student club/forum activities of their respective department. Meritorious students from every semester in the respective departments are provided with a scholarship of Rs. 10000/- along with a certificate of merit. GATE coaching classes are conducted to motivate them to pursue higher studies. They are also encouraged to enroll for VTU honors degree.

| 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 |
|-------------------|--------------------|--------------------|
| <b>01/06/2020</b> | <b>6797</b>        | <b>384</b>         |

| File Description                  | Documents               |
|-----------------------------------|-------------------------|
| Upload any additional information | <b>No File Uploaded</b> |

**2.3 - Teaching- Learning Process**

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

The institution witnessed a paradigm shift during the AY 2020-21 due to the adoption of online Teaching Learning Process. Students were supported to explore new horizons of learning and research. Google Classroom was used as the Learning Management System (LMS). Google Meet, GoToMeeting, WebEx were used for the conduction of online classes. Digital writing pad and digital boards replaced the black boards. PowerPoint presentations and videos were used to provide audio visual experience to the students. To augment the learning, educational videos were also posted on the Education YouTube channel of the Institute. Students were trained in virtual labs and modern simulation tools. Online quizzes were conducted regularly. Class recordings were made available on Google drive.

MOOC courses imbibed into the curriculum fostered the learnability coefficient of the graduates. They constantly engaged in learning using Coursera and edX sponsored by the institute.

All departments evolved many best practices with student centric methods. Series of online workshops, webinars and training programs were conducted. The institute organized a 3-day online hackathon "Beat the COVID pandemic". Students from all the programs actively participated in this hackathon and presented their ideas. Thus, the Institution ensured overall development of students through participatory learning experience.

| File Description                  | Documents               |
|-----------------------------------|-------------------------|
| Upload any additional information | <b>No File Uploaded</b> |
| Link for additional Information   | <b>Nil</b>              |

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

In the wake of COVID 19 pandemic, the usage of ICT enabled tools in TLP increased multi-fold in our institution. Online learning became a necessity for the students rather than an option. Our faculty utilised this opportunity to explore new horizons of teaching and research.

All teachers switched to Google Classroom as the LMS and Google meet for the conduction of online classes. Some faculty also explored zoom, Webex, GoToMeeting and other video conferencing tools for online classes.

Digital writing pads and digital boards (TEQIP III sponsored) replaced the black boards. PowerPoint presentations and videos were used to provide audio visual experience to the students. Recordings of online classes were made available on Google drive.

Faculty shot educational videos and posted them on the education YouTube channel of the institute. Virtual labs and modern simulation tools were used to augment the understanding of lab experiments. Educational videos from Khan Academy, NPTEL, Coursera, Jove, LinkedIn learning and Alison Courses were used by the educators to augment the student learning.

Continuous Internal Evaluations were in online mode using Google Classroom and Google form. The institute sponsored MOOC courses for both students and faculty on Coursera and edX to foster the learnability coefficient.

| File Description                                                                                                             | Documents                                                                                                                                                                                                       |
|------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process | <a href="https://bmsce.ac.in/assets/files/aqar/documents/2020-21/2.3.2-Usage%20of%20ICTenable%20tools.pdf">https://bmsce.ac.in/assets/files/aqar/documents/2020-21/2.3.2-Usage%20of%20ICTenable%20tools.pdf</a> |
| Upload any additional information                                                                                            | <b>No File Uploaded</b>                                                                                                                                                                                         |

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

#### 2.3.3.1 - Number of mentors

**384**

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

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

The institute took utmost care to bring uniformity in the functioning of the Semester Scheme for all academic programmes across the College during the pandemic period of AY 2020-21. Academic year included three semesters. Two regular semesters (Odd, Even) with a minimum of 90 working days per semester. In addition, there was a supplementary/Fast track semester of 8 weeks. The calendar included important academic activities to assist the students and the faculty. This enabled the students to be well prepared, minimize their chances of failure in CIE and/or SEE and take full advantage of the flexibility provided by the credit system. Induction program for the first-year students was conducted in online mode during Dec 2020 and May 2021. The process of course registration were done online at the beginning of the semester.

Adherence to the academic calendar is ensured through audits conducted at the department level and at the institute level by IQAC and Dean - Academic.

Each faculty prepare the teaching plans for their respective courses. All faculties teaching the same course come to consensus

about syllabus coverage for every CIE and alternate assessments. Delivery methods and pedagogy for various topics are also stated in the lesson plan.

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

## 2.4 - Teacher Profile and Quality

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

**384**

| File Description                                               | Documents                 |
|----------------------------------------------------------------|---------------------------|
| Year-wise full-time teachers and sanctioned posts for the year | <a href="#">View File</a> |
| List of the faculty members authenticated by the Head of HEI   | <a href="#">View File</a> |
| 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

**227**

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

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

**14**

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

## 2.5 - Evaluation Process and Reforms

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

8

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

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

13

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

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

Standard examination procedures as outlined in the Institution's Examination Manual are followed. This involves conduction of Continuous Internal Evaluation by the departments adhering to the time table issued by the Principal's Office. The Semester End Examination is conducted centrally by the Office of the Controller of Examinations. The examination officials are appointed by the Principal's Office in consultation with the CoE. The CoE's office also facilitates the evaluation of answer books,

announcement of results and the issue of credentials.

The solution is in place to automate the processes of calculation of student eligibility post the entry of CIE marks and attendance by the faculty. The solution also takes care of printing of hall tickets, seating allotment, generation of examination attendance, answer script coding, evaluation reports after de-coding, announcement of results, detailed student history report, generation of grade cards, transcripts and the provisional degree certificate.

The CIE entry portal has been customized to take care eighty different types of assessment. The faculty can choose the required type of assessment from the menu made available. This ensures the autonomy in the CIE assessment.

| 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

**Course Outcomes (COs)** defined for every course, are statements that describe the competencies gained by the student through the course and. Every CO is aligned to one or more Programme Outcome (POs), and is measured at the end of the course, through various assessment tools.

PO is available on the respective department webpage of the institute website. Well defined COs and the CO-PO mapping with its strength is included in the syllabus. The syllabus copy is made available to every student and is uploaded on the college website.

Vision-Mission, PEOs, POs, PSOs of the Programme offered by the department are displayed in respective department's classrooms, labs, HoD cabin and staff rooms. The course handouts for every program also includes these details along with COs of core courses of the Curriculum. Institute's central library keeps all the POs, PSOs and COs for easy access to students and faculty through the syllabus books of various programs.

All POs, PSOs and COs of specific lab course are printed on lab manuals and issued to all students at the beginning of every semester. All the faculty members prepare course file for each semester that lists the POs, PSOs and COs.

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

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

The Departments have developed the curriculum taking all the POs and PSOs into consideration and assuring that the curriculum strongly maps to all the POs. The COs are framed as the abilities of the student after completing the course. The framed COs are then mapped with POs and PSOs. The framed COs for a course are measured by tools: The Direct Assessment Tools given by performance in Continuous Internal Evaluation and Semester End Examination and Indirect Assessment Tool given by the Course End Survey.

At the end of the course, COs of all the courses in that semester are computed. A qualitative analysis is done on the attainment of the COs by the course instructor. The observations, actions taken and to be taken and recommendations are reported as part of the CO analysis.

For a graduating batch, POs/PSOs are calculated using the CO computations of all the COs that are mapped to a PO/PSO and through Exit Survey. A thorough analysis on these attainment levels is done by the department. This analysis includes finding the weak areas towards the attainment of POs/PSOs and a detailed plan of action of events which would help in the further attainment of the POs/PSOs.

| 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****1376**

| File Description                                                                                      | Documents                                                                                                                                                                                                   |
|-------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Upload list of Programmes and number of students appear for and passed in the final year examinations | <a href="#">View File</a>                                                                                                                                                                                   |
| Upload any additional information                                                                     | <b>No File Uploaded</b>                                                                                                                                                                                     |
| Paste link for the annual report                                                                      | <a href="https://www.bmsce.ac.in/assets/files/aqar/documents/2020-21/2.6.3-PassPercentageofStudents.pdf">https://www.bmsce.ac.in/assets/files/aqar/documents/2020-21/2.6.3-PassPercentageofStudents.pdf</a> |

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

<https://bmsce.ac.in/assets/files/aqar/documents/2020-21/2.7.1-Student%20feedback%20on%20TLP.pdf>

**RESEARCH, INNOVATIONS AND EXTENSION****3.1 - Promotion of Research and Facilities**

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

The institute promotes research and development activities within the college and has a well-defined policy in place to encourage faculty members to take R&D activities to higher level. There is a dedicated centralized center for R&D activities consisting of faculty experts across all research domain led by the Principal. The center facilitates the R&D activities to both faculties and students across Undergraduate, Graduate and Ph.D. levels. It includes

- dissemination of available call for proposals/grants,
- processing grant applications,
- identifying the right journals to publish,
- organising workshops/training related to research

- **IPR filing and processing**
- **Liaison between Ph.D. scholars and the university**
- **dissemination of research achievements of faculty and students**

| File Description                                                                                                         | Documents                                                                                                                                   |
|--------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Upload the Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption | <a href="#">View File</a>                                                                                                                   |
| Provide URL of policy document on promotion of research uploaded on the website                                          | <a href="https://bmsce.ac.in/RulesAndRegulations/Management%20Norms.pdf">https://bmsce.ac.in/RulesAndRegulations/Management%20Norms.pdf</a> |
| Any additional information                                                                                               | <b>No File Uploaded</b>                                                                                                                     |

### 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)

**73.45**

| File Description                                                                                            | Documents                 |
|-------------------------------------------------------------------------------------------------------------|---------------------------|
| Minutes of the relevant bodies of the institution regarding seed money                                      | <a href="#">View File</a> |
| Budget and expenditure statements signed by the Finance Officer indicating seed money provided and utilized | <a href="#">View File</a> |
| List of teachers receiving grant and details of grant received                                              | <a href="#">View File</a> |
| Any additional information                                                                                  | <b>No File Uploaded</b>   |

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

**3**

| File Description                                                  | Documents                 |
|-------------------------------------------------------------------|---------------------------|
| e-copies of the award letters of the teachers                     | <a href="#">View File</a> |
| List of teachers and details of their international fellowship(s) | <a href="#">View File</a> |
| Any additional information                                        | <b>No File Uploaded</b>   |

### 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)

**370.19**

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

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

**72**

| File Description                          | Documents                 |
|-------------------------------------------|---------------------------|
| Upload any additional information         | <b>No File Uploaded</b>   |
| Paste link for additional Information     | <b>Nil</b>                |
| List of research projects during the year | <a href="#">View File</a> |

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

**150**

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

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

**19**

| File Description                          | Documents                                             |
|-------------------------------------------|-------------------------------------------------------|
| Supporting document from Funding Agencies | <a href="#">View File</a>                             |
| Paste link to funding agencies' website   | <a href="https://dst.gov.in/">https://dst.gov.in/</a> |
| Any additional information                | <b>No File Uploaded</b>                               |

### 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.

**R&D department at the institution level is established to promote research & innovation among the faculty and students. The center helps in developing co-operative and complimentary research across departments under BMSCE. The centre holds periodical review meetings and guides in writing project proposals, scientific papers leading to publication and identifying results of research for filing patents.**

**Propel labs related to Robotics, 3D printing, Aerospace, Bullz racing are established. Student groups (multidisciplinary) work on engineering projects in these labs - concept to designing the prototype. Each lab is headed by a faculty and supported by competent technical staffs who ensure that students conduct the research. Currently about 300 students are working in these labs.**

**Institution Innovation Council of BMSCE helps in building an ecosystem of innovation and entrepreneurship. The cell conducts start up awareness activities such as workshops, idea competition, innovation center labs visits round the year.**

Students are encouraged to participate in events and competitions from SIH, IIDC. Startup week – an annual workshop is organized to create awareness about design thinking, patent filing, ideation to productization and enable students to pitch in their proposal. The selected ideas are awarded seed money by BMSCE Management to take their proposals forward.

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

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

84

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

### 3.4 - Research Publications and Awards

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

**A. All of the above**

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

**3.4.2 - Number of PhD candidates registered per teacher (as per the data given with regard to recognized PhD guides/ supervisors provided in Metric No. 3.2.3) during the year****3.4.2.1 - Number of PhD students registered during the year****298**

| File Description                                                                                   | Documents                                                                                   |
|----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| URL to the research page on HEI website                                                            | <a href="https://bmsce.ac.in/home/About-R-and-D">https://bmsce.ac.in/home/About-R-and-D</a> |
| List of PhD scholars and details like name of the guide, title of thesis, and year of registration | <a href="#">View File</a>                                                                   |
| Any additional information                                                                         | <b>No File Uploaded</b>                                                                     |

**3.4.3 - Number of research papers per teacher in CARE Journals notified on UGC website during the year****0.39**

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

**3.4.4 - Number of books and chapters in edited volumes / books published per teacher during the year****0.12**

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

**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****253**

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

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

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

**43**

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

### 3.5 - Consultancy

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

**106.63**

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

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

**6.95**

| File Description                                                                                                                                        | Documents                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| Audited statements of accounts indicating the expenditure incurred on developing facilities and training teachers and staff for undertaking consultancy | <a href="#">View File</a> |
| List of training programmes, teachers and staff trained for undertaking consultancy                                                                     | No File Uploaded          |
| List of facilities and staff available for undertaking consultancy                                                                                      | <a href="#">View File</a> |
| 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

Orientation programs are conducted for first-year students where they are sensitized and motivated to enroll for the National Service Scheme (NSS) Cell, National Cadet Corps (NCC), Women Cell, Rotaract Club, Student Forums/Clubs etc. Participation of students in programs organized by these various cells and bodies ensure their involvement in extension and outreach programs.

The NSS Unit of BMSCE has actively conducted various plantation and cleanliness drives, plogruns and volunteering activities in NGOs. The students actively volunteered for all the events and made sure to perform their duties with utmost precision, keeping all the Covid SOPs in mind. As responsible citizens, the students turning up for the plogruns conducted by the college has fulfilled their duties of keeping their nation clean. Various volunteering activities were also conducted where students from college volunteered to dedicate their time on weekends for teaching and community building activities among children through i-teach program.

The institution has received four awards at the Rotaract Elite Awards in recognition of its contribution towards social responsibility and community development activities. All extension activities taking place under BMSCE had a deep-rooted connection with the moral duties of an ideal citizen and sets an example for its students.

| File Description                      | Documents               |
|---------------------------------------|-------------------------|
| Upload any additional information     | <b>No File Uploaded</b> |
| Paste link for additional information | <b>Nil</b>              |

### 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

**9**

| File Description                                             | Documents                 |
|--------------------------------------------------------------|---------------------------|
| Number of awards for extension activities in during the year | <a href="#">View File</a> |
| e-copy of the award letters                                  | <a href="#">View File</a> |
| Any additional information                                   | <b>No File Uploaded</b>   |

### 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)

**69**

| File Description                | Documents                 |
|---------------------------------|---------------------------|
| Reports of the events organized | <a href="#">View File</a> |
| Any additional information      | <a href="#">View File</a> |

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

**6349**

| File Description           | Documents                 |
|----------------------------|---------------------------|
| Reports of the events      | <a href="#">View File</a> |
| Any additional information | <a href="#">View File</a> |

## 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

559

| File Description                               | Documents                 |
|------------------------------------------------|---------------------------|
| Copies of documents highlighting collaboration | <a href="#">View File</a> |
| Any additional information                     | <b>No File Uploaded</b>   |

### 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)

26

| File Description                                                                                                            | Documents                 |
|-----------------------------------------------------------------------------------------------------------------------------|---------------------------|
| e-copies of the MoUs with institution/ industry/ corporate house                                                            | <a href="#">View File</a> |
| Details of functional MoUs with institutions of national, international importance, other institutions etc. during the year | <a href="#">View File</a> |
| Any additional information                                                                                                  | <a href="#">View File</a> |

## 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 institution has excellent infrastructural facilities like well-furnished classrooms, state-of the-art laboratories, spacious library, sufficient faculty rooms, conference halls, auditoriums and ubiquitous computing facilities. The infrastructure is beyond the minimum specified requirement by affiliating University. The facilities are integrated for the students to learn effectively.

There is a total of over 120 classrooms, out of which 92 are for UG programs and remaining for PG programs. Most of the classrooms are ICT enabled with projectors, desktops, screen and LAN connection. There are 14 interactive digital boards set up for increased student engagement. In addition to classrooms, there are smaller rooms for group discussion and tutorial sessions.

Laboratory facilities enable hands-on-training for UG and PG students, as well as PhD scholars. There are over 50 laboratories in the campus, with most of them being Industry sponsored laboratories.

The campus has complete Wi-Fi Connectivity, Internet & Intranet facility available in academic blocks, laboratories and hostels. The total internet bandwidth available is 700 Mbps. The IT infrastructure is maintained by the Data Centre. Other infrastructure facilities in the campus are training and placement center, on campus Health Care Centre, Office of COE, Student Counseling Cell, Centers of Excellence, Incubation Centers and Innovative Labs.

| 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 institution offers multiple facilities on campus to cater to the physical development of students. The college has amenities for both indoor and outdoor games. The Indoor Sports Complex houses six Badminton courts, Volleyball and a Basketball court with gallery. The Outdoor stadium has facilities for Volleyball, Throw ball, Kho-Kho, Kabaddi and Handball. Dedicated gymnasiums are established for boys and girls in college and hostels.

The Cultural forum fosters talents of students in Dance, Music, Fine arts, Literary and theatre, etc. There are specialized student art clubs to bring like-minded people together to network, learn and progress. There are two state-of-the-art auditoriums with 250 and 150 seating capacity. In addition, for a bigger audience, indoor stadium is transformed into an event venue.

Utilization of these facilities during 2020-21 had taken a back seat due to pandemic, but students were educated through online sessions to maintain physical and mental health during this stressful time.

Health and Fitness Classes (Yoga and Meditation, Recreational

Games) were conducted for all 1st year students. Students are always encouraged to participate in sports and cultural activities, which in turn leads to their overall well-being. Cash incentives are given to outstanding Sports and Cultural achievers every year.

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

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

**109**

| File Description                                                                          | Documents                 |
|-------------------------------------------------------------------------------------------|---------------------------|
| Upload any additional information                                                         | No File Uploaded          |
| Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template) | <a href="#">View File</a> |

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

**2519.24**

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

#### 4.2 - Library as a Learning Resource

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

**Libraries play a vital role in the development of any society by enhancing the cause of education and academic research. They**

cater to the information needs of thousands of peoples.

The library of the institution is aesthetically located in a central place of the college & is very prominently housed in a big and space of Platinum Jubilee Academic Block with a floor area of 49500 Sq.ft.

The Library resources have been completely Bar Coded and automated using LIBSYS 9 (EJB) Release 1.0. Library Package helps in Transactions, OPAC (Online Public Access of Catalogues) and reservation of Books etc., for the users.

- The college has a voluminous computerized Library, which caters to the needs of students, research scholars and faculty.
- It has a seating capacity for 650 users at a time. The Library has a rich collection of 155650 Volumes of books comprising of 48302 titles.
- The digital library of the college provides online access to e-resources on Science, Technology, Engineering and Management subjects for Study and research.
- The library has access to more than 1887 e-journals & 11113 e-books on various branches of Science, Technology, Engineering & Management.
- In addition it has 125 National and International printed journals.

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

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

**75.36**

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

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

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

**446**

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

#### 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 Data Centre monitors the Campus Wide Networking (CWN) facility of the institution for ubiquitous network connectivity throughout the campus. At present CWN is having three redundant high end carrier class core switches and 100 access switches. The Connectivity between the core switch to access switch is thorough multimode fiber optic backbone. The existing bandwidth of the intranet is 10 GBPS. Currently CWN is supplemented with 1.5 GBPS of redundant internet link to cater to the internet requirement**

of the campus. The college has hosted a private cloud on virtualized environment of blade servers and flex servers with fiber SAN storage to meet the computing requirement of the campus. Campus intranet has paved way to provide seamless access to e-journals, online lecture streaming and application software. The Data Centre also hosts e-mail and web servers of the institution. CWN is supplemented with mobility aware wireless connectivity of wireless network enabled electronic gadgets of students and staff. APNIC, of which BMSCE is a proud member, has allotted three blocks of static IP addresses and ASNs. This facilitated the institution a global presence in the internet domain. In India BMSCE is the first educational institution to obtain APNIC membership and static IP addresses.

| File Description                      | Documents               |
|---------------------------------------|-------------------------|
| Upload any additional information     | <b>No File Uploaded</b> |
| Paste link for additional information | <b>Nil</b>              |

#### 4.3.2 - Student - Computer ratio

|                    |                     |
|--------------------|---------------------|
| Number of Students | Number of Computers |
| <b>6932</b>        | <b>2408</b>         |

| File Description                  | Documents               |
|-----------------------------------|-------------------------|
| Upload any additional information | <b>No File Uploaded</b> |

#### 4.3.3 - Bandwidth of internet connection in the Institution and the number of students on campus

**A. 250 Mbps**

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

#### 4.3.4 - Institution has facilities for e-content development: Facilities available for e-content development Media Centre Audio-Visual Centre Lecture

**A. All four of the above**

### Capturing System (LCS) Mixing equipments and software for editing

| File Description                                             | Documents                 |
|--------------------------------------------------------------|---------------------------|
| Upload any additional information                            | <b>No File Uploaded</b>   |
| Paste link for additional information                        | <b>Nil</b>                |
| List of facilities for e-content development (Data Template) | <a href="#">View File</a> |

### 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)

**1247.43**

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

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.

**Classrooms: Classrooms and seminar/conference halls are maintained cleanly on regular basis. Facilities such as lights and fans, LCD projector and sound system, availability of internet connections are inspected on regular basis.**

**Laboratory: Laboratories are regularly augmented with latest equipment and maintained as per manual/process. Equipments are maintained properly, calibrated and serviced periodically. Software license renewal is done as per the license period. Lab technician checks the working condition of the equipment/systems on daily basis. Do's and Don'ts are displayed and list of experiments are displayed in all the laboratories.**

**ICT tools: The computers are monitored and maintained from time-to-time. The Data Centre monitors the Campus Wide Networking (CWN) facility of the institution for ubiquitous network connectivity throughout the campus.**

**Library: The Library holdings consist of books, journals, Library**

Software (LIBSYS), e-journals, e-books etc. The books and journals are bounded. The library has Online Public Access Catalogue (OPAC) for easy search of books for the benefit of students and staff.

The Building section oversees maintenance of Potable Water Supply, Solid Waste Management, Sewage Disposal, Chemical Waste, e-waste disposal and other facilities.

**Electric Power Backup:** Sufficient back up power supply has been maintained in case of power failure from BESCO.

| 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

**292**

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

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

**314**

| File Description                        | Documents                 |
|-----------------------------------------|---------------------------|
| Upload any additional information       | No File Uploaded          |
| Institutional data in prescribed format | <a href="#">View File</a> |

| <b>5.1.3 - The following Capacity Development and Skill Enhancement activities are organised for improving students' capabilities Soft Skills Language and Communication Skills Life Skills (Yoga, Physical fitness, Health and Hygiene) Awareness of Trends in Technology</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>A. All of the above</b>                                                                                                                                                                                                                                                        |           |                               |                                                                                                                                                                                                                                                                                   |                                                                                                                              |                           |                            |                         |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|---------------------------|----------------------------|-------------------------|--|
| <table> <tr> <th data-bbox="102 483 547 551">File Description</th><th data-bbox="547 483 1441 551">Documents</th></tr> <tr> <td data-bbox="102 551 547 786">Link to Institutional website</td><td data-bbox="547 551 1441 786"> <a href="https://bmsce.ac.in/assets/files/aqar/documents/2020-21/5.1.3-Capacity%20Development%20and%20Skill%20Enhancement%20activities.pdf">https://bmsce.ac.in/assets/files/aqar/documents/2020-21/5.1.3-Capacity%20Development%20and%20Skill%20Enhancement%20activities.pdf</a> </td></tr> <tr> <td data-bbox="102 786 547 887">Details of capability development and schemes</td><td data-bbox="547 786 1441 887"> <a href="#">View File</a> </td></tr> <tr> <td data-bbox="102 887 547 954">Any additional information</td><td data-bbox="547 887 1441 954"> <b>No File Uploaded</b> </td></tr> </table> | File Description                                                                                                                                                                                                                                                                  | Documents | Link to Institutional website | <a href="https://bmsce.ac.in/assets/files/aqar/documents/2020-21/5.1.3-Capacity%20Development%20and%20Skill%20Enhancement%20activities.pdf">https://bmsce.ac.in/assets/files/aqar/documents/2020-21/5.1.3-Capacity%20Development%20and%20Skill%20Enhancement%20activities.pdf</a> | Details of capability development and schemes                                                                                | <a href="#">View File</a> | Any additional information | <b>No File Uploaded</b> |  |
| File Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Documents                                                                                                                                                                                                                                                                         |           |                               |                                                                                                                                                                                                                                                                                   |                                                                                                                              |                           |                            |                         |  |
| Link to Institutional website                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <a href="https://bmsce.ac.in/assets/files/aqar/documents/2020-21/5.1.3-Capacity%20Development%20and%20Skill%20Enhancement%20activities.pdf">https://bmsce.ac.in/assets/files/aqar/documents/2020-21/5.1.3-Capacity%20Development%20and%20Skill%20Enhancement%20activities.pdf</a> |           |                               |                                                                                                                                                                                                                                                                                   |                                                                                                                              |                           |                            |                         |  |
| Details of capability development and schemes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <a href="#">View File</a>                                                                                                                                                                                                                                                         |           |                               |                                                                                                                                                                                                                                                                                   |                                                                                                                              |                           |                            |                         |  |
| Any additional information                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>No File Uploaded</b>                                                                                                                                                                                                                                                           |           |                               |                                                                                                                                                                                                                                                                                   |                                                                                                                              |                           |                            |                         |  |
| <b>5.1.4 - Number of students benefitted from guidance/coaching for competitive examinations and career counselling offered by the institution during the year</b><br><br><b>1200</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                   |           |                               |                                                                                                                                                                                                                                                                                   |                                                                                                                              |                           |                            |                         |  |
| <table> <tr> <th data-bbox="102 1155 547 1223">File Description</th><th data-bbox="547 1155 1441 1223">Documents</th></tr> <tr> <td data-bbox="102 1223 547 1290">Any additional information</td><td data-bbox="547 1223 1441 1290"> <b>No File Uploaded</b> </td></tr> <tr> <td data-bbox="102 1290 547 1503">Number of students benefitted by guidance for competitive examinations and career counseling during the year (Data Template)</td><td data-bbox="547 1290 1441 1503"> <a href="#">View File</a> </td></tr> </table>                                                                                                                                                                                                                                                                                                            | File Description                                                                                                                                                                                                                                                                  | Documents | Any additional information    | <b>No File Uploaded</b>                                                                                                                                                                                                                                                           | Number of students benefitted by guidance for competitive examinations and career counseling during the year (Data Template) | <a href="#">View File</a> |                            |                         |  |
| File Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Documents                                                                                                                                                                                                                                                                         |           |                               |                                                                                                                                                                                                                                                                                   |                                                                                                                              |                           |                            |                         |  |
| Any additional information                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>No File Uploaded</b>                                                                                                                                                                                                                                                           |           |                               |                                                                                                                                                                                                                                                                                   |                                                                                                                              |                           |                            |                         |  |
| Number of students benefitted by guidance for competitive examinations and career counseling during the year (Data Template)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <a href="#">View File</a>                                                                                                                                                                                                                                                         |           |                               |                                                                                                                                                                                                                                                                                   |                                                                                                                              |                           |                            |                         |  |
| <b>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</b>                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>A. All of the above</b>                                                                                                                                                                                                                                                        |           |                               |                                                                                                                                                                                                                                                                                   |                                                                                                                              |                           |                            |                         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                   |           |                               |                                                                                                                                                                                                                                                                                   |                                                                                                                              |                           |                            |                         |  |

| File Description                                                                                                                         | Documents                 |
|------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| Minutes of the meetings of students' grievance redressal committee, prevention of sexual harassment committee and Anti-ragging committee | <a href="#">View File</a> |
| Details of student grievances including sexual harassment and ragging cases                                                              | <a href="#">View File</a> |
| Upload any additional information                                                                                                        | <b>No File Uploaded</b>   |

## 5.2 - Student Progression

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

**773**

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

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

**56**

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

### 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**

**67**

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

### 5.3 - Student Participation and Activities

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

**14**

| File Description                           | Documents                 |
|--------------------------------------------|---------------------------|
| e-copies of award letters and certificates | <a href="#">View File</a> |
| Any additional information                 | <a href="#">View File</a> |

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

**BMSCE offers students the opportunity to participate in various types of academic and campus activities. The student representatives are regularly invited to the BOG Meetings. Inputs from them towards betterment of the institution are valued. The Board of Studies of the all programmes have student representatives and their views are considered while initiating new courses, curriculum framing, teaching methodology etc. The College offers numerous Student Forums/Clubs to provide opportunity to students to participate in wide range of Co-Curricular, Extra-Curricular, Social and Community Development Activities. Throughout the year numerous events are organized for the students to pursue their hobbies. Students participate in the feedback system. Students provide feedback on faculty (4 times in a year), HODs & Principal (once in a year) and Institution (2 times in a year). Few Student Representatives from various branches are invited to Academic Council Meetings. The students are part of service and extension activities through NSS, NCC, Rotaract, Women Cell units. Student representatives are also part of IQAC, Anti ragging committee, Grievance Redressal Cell and other committees.**

| File Description                      | Documents               |
|---------------------------------------|-------------------------|
| Upload any additional information     | <b>No File Uploaded</b> |
| Paste link for additional information | <b>Nil</b>              |

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

**1**

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

### 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 BMSCE Alumni Network(BMSCEAN) established and registered under the Societies Registration Act 21 of 1860 is now 25000 members strong.**

**The Alumni Contribute in the Curriculum Design process. The Department Advisory Board has representation from alumni. BoS includes alumni representatives. Alumni actively participate in the Institutional initiatives like PhaseShift, Conferences, Workshops and department level technical symposia etc. The guest lectures by alumni pave the way for interaction to improve TLP. Alumni are mentoring students for national and international programmes like SAE Baja events, SAE Aerospace and general activities like the career counseling. Alumni are part of IQAC, Departmental Advisory Board, Alumni Executive Committee etc. Alumni provide feedback once in a year about the institution. Alumni Survey and their feedback help effective implementation of the OBE Process.**

**BMSCE Alumni Interest Free Education loans were rolled out in 2013 for the needy students of BMSCE. As on 31.06.2021, 80 students have benefited so far. A total loan amount of Rs.295.00**

Lakhs has been disbursed. The BMSCE Alumni Network recognizes meritorious students by giving BMSCEAN Merit Scholarships at the end of every semester. The toppers are recognized during the Annual Alumni Day with a cash prize of Rs.10000/- each and a merit certificate

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

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

**A. ? 15 Lakhs**

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

## **GOVERNANCE, LEADERSHIP AND MANAGEMENT**

### **6.1 - Institutional Vision and Leadership**

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

The founders have envisaged the vision of providing skilled and competent workforce to society by imparting quality education and training.

The administration is overseen by the Board of Governors (BOG). The BOG is constituted as per the statutory provisions. Governing body meetings are conducted regularly in an open manner. The members of BOG make active contributions for academic growth and development.

The BOG approves the strategic Plan, Vision & Mission, Short Term and Long Term goals and Budget based on the Strategic Plan. The BOG ensures that all decisions on the matters such as admission, new programmes, infrastructure, TLP and Placements are arrived based on the fundamental concerns of the Institution. The Institution has brought out a Good Governance Document (GGD), adhering to the good governance practice guide of TEQIP. Many senior faculty members occupy pivotal academic and administrative positions. Regular academic and administrative audits are conducted. The faculties are actively involved in decision making

process. Suggestions from all stakeholders are also given prominence for the improvement and the effectiveness of all institutional processes.

Effective and participative decision making process is adopted to achieve the vision, mission and the goals of the institution and also in building effective organizational culture.

| 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

Governing body meets regularly and is conducted in a transparent manner. Faculty members and student representatives are invited to the BOG meetings and their views obtained are duly considered. The minutes of the BOG, Academic Council and Annual Report are published on college website. The relevant information is shared with the employees through various meetings/circulars. The finance committee appraises the BOG pertaining to finances of the college. Budgetary provisions for the departments are made based on the requirements/inputs provided by the HOD.

The principal provides leadership for the academic administration and creates an effective conducive environment. Several committees comprising of key stakeholders including faculty, staff, industry, employer, alumni, parent and students continuously monitor/guide the academic and administrative activities.

All HoDs are members of the Academic Council, College Council and vested with academic power. Senior faculty members occupy pivotal administrative positions like the Vice-Principal, Deans, Placement Officer, IQAC Chief Coordinator, Hostel Secretaries, Wardens, Controller of Examination etc. The management has devised the policy of rotation of these key roles with an aim to groom the next in line leaders.

At the department level, as part of the Departmental Academic Committee [DAC], the faculty provide their inputs on all academic related matters.

| File Description                                              | Documents                 |
|---------------------------------------------------------------|---------------------------|
| Upload strategic plan and deployment documents on the website | <a href="#">View File</a> |
| Upload any additional information                             | <b>No File Uploaded</b>   |
| Paste link for additional Information                         | <b>Nil</b>                |

## 6.2 - Strategy Development and Deployment

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

### To Establish Collaborative Laboratory in support of industry

1. To set up laboratories to pursue research with some of the reputed companies.
2. Create Experiential learning opportunities by providing live industry projects.

industry supported laboratories were created during the assessment period (2013-2020)

SNo

Dept

Industry/

Organization

Lab

Date of

Establishment

1

ME

3D PLM Systems, Dassault Sys

Product Innovation Lab

**06.09.2016**

**2**

**ME**

**CARL ZEISS INDIA PVT. LTD**

**Pre Consultancy Preparedness**

**18.01.2016**

**3**

**EE**

**Texas Instruments India**

**TI Innovation Lab**

**18.12.2014**

**4**

**EE**

**Cares Renewable Private Limited**

**BMSCE-CARES-CoE in Solar**

**18.12.2017**

**5**

**EE**

**Dassault Systems La Foundation**

**BMSCE-La Foundation-Virtual Reality Lab**

**10.12.2018**

**6**

**EC**

**NOVOTON. B.lore**

**Embedded Systems Lab**

**21.05.2014**

**7**

**EC**

**ARM, B,lore**

**Embedded System Design**

**06.12.2013**

**8**

**EC**

**Keysight Technologies, B.lore**

**Advanced communication lab/RF and wireless Lab**

**06.12.2016**

**9**

**EC**

**ESSCI, New Delhi**

**Skill sector Lab**

**12.03.2015**

**10**

**EC**

**Robert Bosch, B.lore**

**R&D Lab**

**02.04.2015**

**11**

**IS**

**HPE-HEWLETT Packard Enterprise**

**HPE-Incubation Center for Virtualization and Security**

**12.02.2020**

**12**

**CS**

**Intel**

**Sensors and Big Data lab**

**14.10.2015**

**13**

**MCA**

**Altrimetrik**

**Innovation Cluster Lab (ICL)**

**03.12.2014**

**14**

**Intn**

**Mitsubishi Electric India**

**PLC and Scada Lab**

**15.02.2020**

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

**B.M.S. College of Engineering has many statutory and non-statutory bodies carrying out functions and responsibilities in pursuit of institutional mission and core values.**

**The administration is overseen by the Board of Governors (BOG). The BOG approves the strategic Plan, Vision & Mission and the Budget based on the Strategic Plan. The institution is well known for its good administrative practices and work culture.**

**The Academic Council (AC) is the highest academic body which decides and advices on all academic matters. Academic proposals of BoS from each department are scrutinized and approved with or without modifications by the AC. The recruitment of faculty / staff is a crucial activity. The Board of Appointment (BOA) is constituted specifically for governing the recruitment procedure.**

**The faculty are extended with the revised AICTE scales (Sixth Pay Commission 2006 with DA). Eligible faculty members are given promotion under Career Advancement Scheme [CAS] as recommended by the Screening Committee. The staff welfare measures include monetary benefits. Additional increments, reimbursement of fees for pursuing higher studies, deputations with financial assistance, Rewards system for research projects etc. The Non-Teaching staff members are extended with state scales of pay and eligible for earned leave benefits as per norms.**

| File Description                                    | Documents                                                                                                                                                               |
|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Paste link to Organogram on the institution webpage | <a href="https://bmsce.ac.in/assets/files/aqar/documents/2020-21/6.2.2-Organogram.pdf">https://bmsce.ac.in/assets/files/aqar/documents/2020-21/6.2.2-Organogram.pdf</a> |
| Upload any additional information                   | <b>No File Uploaded</b>                                                                                                                                                 |
| Paste link for additional Information               | <b>Nil</b>                                                                                                                                                              |

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

**A. All of the above**

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

### 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

**Teaching Staff: CAS, Earned leave, Cash Incentive for writing Technical & Literature books, reimbursement of book purchased: Upto a limit of Rs. 15000/- . Encashment of EL as per norms, Maternity/Paternity Leave, Retirement benefits, VRS scheme, Medical Insurance coverage upto a limit of Rs.2,00,000/- for employee, spouse and two children, Employees Welfare Fund, Festival & Medical Advance, Laptop Loan, Car Loan, Providing Management Quota Seats to wards of teaching faculty with fee reduction, BMSET Employees Credit Co-operative society, Providing cash incentives for research publications in the referred international/national journals, Incentive of 5% from management funds (of the total grant amount) is provided to faculty who fetch grants from external agencies, CII TDB T NET Centre to facilitate consultancy activities. Incentives to enthuse faculty to take up research endeavors like Annual book allowance, 100%**

and 75% Annual Membership Fee reimbursements with respect to any Indian & Foreign Professional Body respectively, National Pension Scheme (NPS).

**Non-Teaching:** Time Bound Increment, Earned Leave, Maternity Leave, Retirement benefits, Family welfare Fund, VRS Scheme, Medical Insurance (Spouse & Children), Festival and Medical Advance. Educational Aid: Rs. 10000/- p.a. for one child, Two Wheeler Loan, Management Quota seats to wards, Loan facility through BMSET Employees Credit Co-operative society

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

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

**25**

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

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

**22**

| File Description                                                                           | Documents                 |
|--------------------------------------------------------------------------------------------|---------------------------|
| Reports of the Human Resource Development Centres (UGC HRDC/ASC or other relevant centres) | <a href="#">View File</a> |
| Upload any additional information                                                          | <a href="#">View File</a> |

**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.)****218**

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

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

The Institute has a mechanism for internal and external audit to ensure financial compliance. The observation of the auditors if any are immediately corrected / rectified.

**Internal Audit:** Qualified Internal Auditors from external resources have been permanently appointed and a team of staff under them do a thorough quarterly basis check and verification of all payments, receipts & journals vouchers of the transactions cash books, ledger account review that are carried out in each financial year on an accrual basis system.

**External Audit:** The external auditor appointed by the college performs audit of the financial statements of the college. The financial records are audited by qualified chartered accountants after the end of each fiscal year. Audit Report, statement of income and expenditure, balance sheet and supporting annexure, notes on accounts are certified.

Statutory financial audit of Institute is conducted in two sessions, first during November/December for period of six months starting from April to September and second during May/June for the period from October to March. Finalization of account is completed and audited in July. The audited statement is duly signed by Principal, Chairman and Chartered Accountant.

The Institution publishes audited financial statements on the institutions website.

| File Description                      | Documents               |
|---------------------------------------|-------------------------|
| Upload any additional information     | <b>No File Uploaded</b> |
| Paste link for additional information | <b>Nil</b>              |

#### 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)

**57.06**

| File Description                                                                                            | Documents                 |
|-------------------------------------------------------------------------------------------------------------|---------------------------|
| Annual statements of accounts                                                                               | <a href="#">View File</a> |
| Details of funds / grants received from non-government bodies, individuals, philanthropists during the year | <a href="#">View File</a> |
| Any additional information                                                                                  | <b>No File Uploaded</b>   |

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

**Mobilization of funds in the institute is through several ways. The primary source is through collection of tuition fees and salary grants received from various bodies. The institute is a beneficiary of TEQIP, a world bank assisted funding from the last five years. In addition, financial assistance is obtained through external research projects and extensive consultancy works. The institute is part of the Global Initiative Academic Network approved by Government of India and is receiving funding through this segment also.**

**The Maximum resource mobilization is through tuition and miscellaneous fees collected from the students.**

**The details of fund mobilization under various heads is as shown below:**

**Head**

**2020-21**

**Students' Fees**

**507464369**

**Salary Grants****16721520****Bank Interest****3779392****Misc Income****5067873****Funds from BMSET****434927032****TEQIP****16572878****External Grants****95046668****Consultancy Projects****10662851****Total****1090242583**

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

**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)

The Strategic plan (2013-2020) with long term and short term perspectives was in vogue. The implementation of the strategic plan was executed with the support and involvement of all the stake holders. The BOG periodically reviewed the implementation of strategic plan. The extent of compliance was presented to the Board of Governors from time to time. The college has been able to accomplish almost all the goals with the co-operation and support of all stakeholders.

The Strategic Plan (draft) 2021-2025 was prepared. The efforts were led by the committee comprising of Director, IQAC, Dr.S.Manoharan,- MBA and Dr.Chetan Nayak- CH. The IQAC Core in its meeting held on 21.09.2019 approved the Draft version of the plan. The Plan is now under the consideration of the AC & BoG.

The following basis was considered for formulating the strategic plan.

- SWOC Analysis conducted through external expert
- Observations of various assessing agencies
- Good Governance practices
- Improve standing under NIRF through focused improvement in all prescribed Parameters
- Support student success
- Improve Institutional outreach
- Focus on future challenges

Strategic Plan Steering Committee has been constituted to monitor its implementation of properly planning activities. IQAC is also in the process of revising the institute's quality related policies.

| 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

**IQAC significantly contributes towards improving Academic Environment, TLP, Curriculum and Evaluation Methods.**

The academic audit aids enhance the quality of TLP and OBE practice. It is conducted for all UG and PG programmes. The audit is conducted at faculty, department and institute level. Self-analysis by faculty is initially done. This comprises of parameters: COs defined for each course, CO-PO mapping, assessment tools adopted, CIE & SEE comparison, CO attainment and best practices achieved through the course. Department audit includes listing of best academic practices of the department, courses which need CO revision, courses where the CIE distribution is of concern, PO attainment etc. The final audit is conducted by IQAC at the institute level where a team of senior professors audit the departmental academic activities. This audit comprises of observations towards best academic practices of the institution and suggests areas for improvement. Finally, an audit summary is prepared and an action plan to improve the quality of academic activities is outlined.

In order to maintain quality assessment, question papers of internal tests are audited at the respective department and SEE question papers are audited by experts who are invited from other institutions. Corrective actions are taken based on audit.

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

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

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

| File Description                                                   | Documents                                                                                                         |
|--------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| Paste the web link of annual reports of the Institution            | <a href="https://bmsce.ac.in/home/BMSCE-Monthly-Activities">https://bmsce.ac.in/home/BMSCE-Monthly-Activities</a> |
| Upload e-copies of accreditations and certification                | <a href="#">View File</a>                                                                                         |
| Upload details of quality assurance initiatives of the institution | <a href="#">View File</a>                                                                                         |
| Upload any additional information                                  | <a href="#">View File</a>                                                                                         |

## INSTITUTIONAL VALUES AND BEST PRACTICES

### 7.1 - Institutional Values and Social Responsibilities

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

The institution makes sincere efforts to empower the women faculty and students. Members of Women Cell are constantly putting effort towards organizing events which largely benefit the society and ladies in particular. The Women Cell celebrates international women's day every year. There were webinars conducted on Gender Equality and Rights of Women, health awareness, Yoga and stress management. The College Internal Complaint Committee (CICC) holds interactions with the students and faculty during activities of the college. A student counsellor has been working since April 2016 in BMSCE.

The college has in place all necessary measures to ensure girl student safety. The Hostels are installed with CCTV surrounding the building to monitor the movements. The hostels are fenced and gated properly. Further, the inward and outward movements of outsiders are recorded and monitored by professional Security personnel. The Anti-ragging committee and squads monitor and ensure that the campus and hostels are ragging-free. The Women Hostel is under the constant vigil of Women Warden and staff. The entry register is maintained in all hostel blocks to monitor the movement of the students. The sanitary napkin incinerators and sanitary napkin vending machines are installed for the health and hygiene maintenance for the girls.

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

**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**

**B. Any 3 of the above**

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

**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)**

**For sustainable solid waste management, dry and wet solid wastes are collected separately in the colour coded bins provided at different locations in the campus and are transported to a dedicated collection yard. Subsequently, the wastes are collected and disposed as per the KSPCB norms by the BBMP approved contractor on daily basis. Meanwhile, for liquid waste management, an advanced wastewater treatment plant of 350 KLD capacity is provided involving membrane bioreactor (MBR) technology for treating the wastewater generated from hostels and different buildings in the institute. Meanwhile, in order to achieve zero liquid discharge, the treated effluent from wastewater treatment plant is being recycled through toilet flushing and gardening. On the other hand, for efficient handling and management of biomedical wastes generated in the campus premises are collected in the dedicated colour coded bins and are calcined through incinerator. Furthermore, e-waste generated from different departments are collected and outsourced to KSPCB authorized e-waste recyclers (M/s. Coral Communications and Networks Pvt. Ltd.). Besides, the institute does not generate any kind of radioactive wastes. However, the hazardous chemicals generated in the laboratories and other sources are neutralized and diluted at the source. Subsequently, they are sent to the wastewater treatment plant.**

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

  

|                                                                                                                                                                                                                                                                |                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| <b>7.1.4 - Water conservation facilities available in the Institution: Rain water harvesting<br/>Bore well /Open well recharge Construction of tanks and bunds Waste water recycling<br/>Maintenance of water bodies and distribution system in the campus</b> | <b>A. Any 4 or all of the above</b> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|

  

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

  

|                                                                                                                                                                                                                                                                                                                                 |                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| <b>7.1.5 - Green campus initiatives include</b>                                                                                                                                                                                                                                                                                 |                                     |
| <b>7.1.5.1 - The institutional initiatives for greening the campus are as follows:</b> <ol style="list-style-type: none"> <li>1.Restricted entry of automobiles</li> <li>2.Use of bicycles/ Battery-powered vehicles</li> <li>3.Pedestrian-friendly pathways</li> <li>4.Ban on use of plastic</li> <li>5.Landscaping</li> </ol> | <b>A. Any 4 or All of the above</b> |

  

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

  

|                                                                                       |  |
|---------------------------------------------------------------------------------------|--|
| <b>7.1.6 - Quality audits on environment and energy undertaken by the institution</b> |  |
|---------------------------------------------------------------------------------------|--|

| <p><b>7.1.6.1 - The institution's initiatives to preserve and improve the environment and harness energy are confirmed through the following:</b></p> <ol style="list-style-type: none"> <li><b>1. Green audit</b></li> <li><b>2. Energy audit</b></li> <li><b>3.Environment audit</b></li> <li><b>4.Clean and green campus recognitions/awards</b></li> <li><b>5.Beyond the campus environmental promotional activities</b></li> </ol>                                                                                                                                                                                                                                                                                                                                           | <p><b>B. Any 3 of the above</b></p> |           |                                                                           |                           |                                      |                           |                                     |                         |                                |                           |                                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-----------|---------------------------------------------------------------------------|---------------------------|--------------------------------------|---------------------------|-------------------------------------|-------------------------|--------------------------------|---------------------------|--------------------------------------------|
| <table> <tr> <th data-bbox="100 692 547 757">File Description</th><th data-bbox="547 692 1437 757">Documents</th></tr> <tr> <td data-bbox="100 757 547 898">Reports on environment and energy audits submitted by the auditing agency</td><td data-bbox="547 757 1437 898"><a href="#">View File</a></td></tr> <tr> <td data-bbox="100 898 547 1003">Certification by the auditing agency</td><td data-bbox="547 898 1437 1003"><a href="#">View File</a></td></tr> <tr> <td data-bbox="100 1003 547 1108">Certificates of the awards received</td><td data-bbox="547 1003 1437 1108"><b>No File Uploaded</b></td></tr> <tr> <td data-bbox="100 1108 547 1173">Any other relevant information</td><td data-bbox="547 1108 1437 1173"><a href="#">View File</a></td></tr> </table> | File Description                    | Documents | Reports on environment and energy audits submitted by the auditing agency | <a href="#">View File</a> | Certification by the auditing agency | <a href="#">View File</a> | Certificates of the awards received | <b>No File Uploaded</b> | Any other relevant information | <a href="#">View File</a> | <p><b>A. Any 4 or all of the above</b></p> |
| File Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Documents                           |           |                                                                           |                           |                                      |                           |                                     |                         |                                |                           |                                            |
| Reports on environment and energy audits submitted by the auditing agency                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <a href="#">View File</a>           |           |                                                                           |                           |                                      |                           |                                     |                         |                                |                           |                                            |
| Certification by the auditing agency                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <a href="#">View File</a>           |           |                                                                           |                           |                                      |                           |                                     |                         |                                |                           |                                            |
| Certificates of the awards received                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>No File Uploaded</b>             |           |                                                                           |                           |                                      |                           |                                     |                         |                                |                           |                                            |
| Any other relevant information                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <a href="#">View File</a>           |           |                                                                           |                           |                                      |                           |                                     |                         |                                |                           |                                            |
| <p><b>7.1.7 - The Institution has a disabled-friendly and barrier-free environment: Ramps/lifts for easy access to classrooms and centres Disabled-friendly washrooms Signage including tactile path lights, display boards and signposts Assistive technology and facilities for persons with 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.</b></p>                                                                                                                                                                                                                                                      |                                     |           |                                                                           |                           |                                      |                           |                                     |                         |                                |                           |                                            |

| File Description                                             | Documents                 |
|--------------------------------------------------------------|---------------------------|
| Geotagged photographs / videos of facilities                 | <a href="#">View File</a> |
| Policy documents and brochures on the support to be provided | <a href="#">View File</a> |
| Details of the software procured for providing assistance    | <a href="#">View File</a> |
| Any other relevant information                               | <a href="#">View File</a> |

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).

**Under BMSCE Unnat Bharat Abhiyaan adopted 5 villages in Kolar district were adopted and various activities related to their socio-economic development are being regularly conducted. In coordination with the UBA and NSS unit of the institute has conducted many activities like,**

- 1. Conducting Lectures in these villages for increasing their environmental and ethical awareness.**
- 2. Conducting Programmes to create awareness about contagious diseases, like COVID, precautions to be taken and social responsibility, vaccination and its importance.**

**The institution regularly conducted number of vaccination drives during the year 2020-21. Details of the activities are noted hereunder:**

- 1. Free Covid-19 Vaccination Camp in association with BBMP, 250 members participated on 13.11.2020**
- 2. Free Covid-19 Vaccination Camp in association with BBMP, 250 members participated on 08.07.2021**
- 3. Free Covid-19 Vaccination Camp in association with BBMP, 300 members participated on 08.07.2021**
- 4. Free RT PCR Test in association with BBMP, 250 members were participated on 16.03.2021**
- 5. Free RT PCR Test in association with BBMP, 270 members were participated on 17.03.2021**

**About 20 faculty and staff members have been working as COVID Warriors and serving the society. They have been doing the assigned jobs of facilitating testing, vaccination drive, contact**

tracing, quarantine watch and other related activities.

| File Description                                                                                                                 | Documents                 |
|----------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution) | <a href="#">View File</a> |

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

**B.M.S.College of Engineering sensitises its students and employees to constitutional obligations through various initiatives to enable them to responsible citizens.**

Mandatory courses on Constitution of India and Professional Ethics is included in the curriculum. In these courses students are educated about the Supreme Law of the Land and an awareness about Civil Liberties is created. A new course on Universal Human Values was introduced with an aim to help students identify the importance of human values and skills for sustained happiness. The Activity point program of AICTE is effectively implemented in the institution with students being encouraged to participate in activities having social impact. The NSS Unit of BMSCE has actively conducted various plantation and cleanliness drives, plog runs and volunteering activities in NGOs. The students actively volunteered for all the events and made sure to perform their duties with utmost precision, keeping all the Covid SOPs in mind.

On 25th January 2021, 11th National Voters Day was celebrated with all faculty and staff members taking the 'Voter's pledge'. National festivals are celebrated in the campus emphasising the importance freedom struggle and constitution of India.

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

**7.1.10 - The institution has a prescribed code of conduct for students, teachers,**

**A. All of the above**

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

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

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

The institution celebrates National and international commemorative days, events and festivals to commemorate the ideology of nationalism and cultural diversity. Due to the COVID-19 lockdown and SOP adherence most events of year 2020-21 were conducted online or in blended mode.

International yoga day was celebrated through lecture demonstration by Dr. Omkar S N. Sadhbhavana Diwas was celebrated online with more than 100 student and staff participants. Teacher's Day and Engineer's Day was celebrated on 16th Sept 2020 in blended mode. Rashtriya Ekta Diwas was celebrated to reaffirm the inherent strength and resilience of our nation. The virtual Run for Unity allowed participants to run a certain distance while keeping track of their metrics on a fitness app. An informative webinar on National Cancer Awareness Day was conducted. Essay writing competition was organised on National Youth Day marking the birth anniversary of Swami Vivekananda. Webinars, poster making and essay writing events were arranged as part of "Azadi ka Amrut Mahotsav" celebrating India's glorious independence. National Science Day was celebrated on 1st March

**2021. A week-long celebration of International Women's Day included walkathon and webinars on health, healthy diet, chair yoga. Ambedkar Jayanthi was observed as a symbolic event due to restrictions.**

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

## **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 1:**

#### **1. Title of the Practice**

**Digitization of Examination Process**

#### **2. Objectives of the Practice**

- 1. Examination Process Automation-will lead to considerable reduction in the time and human resource requirement in the process of error free gathering and verification of the related data**
- 2. Data Security and Accessibility-the process of digitization will ensure the highest data security and easy accessibility**
- 3. Real time data and generation of reports-will lead to dynamic generation of results and subsequent issue of credentials**

### **BEST PRACTICE 2:**

#### **1. Title of the Practice**

**BMSCE Hackathon: Beat the Pandemic**

## 2. Objectives of the Practice

The objective was to motivate student teams along with faculty mentors to build effective solutions to win battle against COVID19.

More details about the two best practices is available here: <http://bmsce.ac.in/assets/files/aqar/documents/2020-21/7.2.1-%20BestPractice-I%20&%20II.pdf>

| File Description                            | Documents                                                                                                                                                                                                       |
|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Best practices in the Institutional website | <a href="https://bmsce.ac.in/assets/files/aqar/documents/2020-21/7.2.1-%20BestPractice-I%20&amp;%20II.pdf">https://bmsce.ac.in/assets/files/aqar/documents/2020-21/7.2.1-%20BestPractice-I%20&amp;%20II.pdf</a> |
| Any other relevant information              | Nil                                                                                                                                                                                                             |

### 7.3 - Institutional Distinctiveness

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

During the Pandemic, the institute was facing the challenge of keeping the students engaged with theoretical and skill-based learning. As a measure to mitigate this issue, BMSCE devised multiple Digital Intervention initiatives. All faculty geared up for the paradigm shift and switched to Online TLP. Online classes were conducted on platforms like WebEx, Google Meet, Edmodo, Zoom, Skype. Google Classroom was the LMS used for conduction of online evaluations. Library resources were made available on the institute website. The institute partnered with Coursera (5000 licenses) and edx (5000 coupons) to complement the TLP. Webinars, Events, Workshops, FDPs & Placement training were conducted online. Laboratory sessions were recorded and shared on public domain. In collaboration with Dassault Systems the Institute developed virtual laboratory exercises on topics involving electrical machines, power systems, Kinematics of machines which allowed students to creatively showcase the experiment. BMSCE created 7 virtual labs for Electrical Engineering and 8 more virtual labs on Mechanical Engineering are in progress. Students remotely accessed the high-end computing facility in college using open-source screen sharing and were able to test the developed experiments. Thus, students and faculty community in the campus were nurtured to collaborate and develop new methods

for learning.

| File Description                              | Documents                                                                                                                                                                                                         |
|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Appropriate link in the institutional website | <a href="https://bmsce.ac.in/assets/files/aqar/documents/2020-21/7.3.1-Institutional%20Distinctiveness.pdf">https://bmsce.ac.in/assets/files/aqar/documents/2020-21/7.3.1-Institutional%20Distinctiveness.pdf</a> |
| Any other relevant information                | No File Uploaded                                                                                                                                                                                                  |

### 7.3.2 - Plan of action for the next academic year

B.M.S. College of Engineering aims to be in the forefront with regard to the implementation of the National Education Policy 2020. The college being autonomous for more than a decade is planning to open up with the NEP for its undergraduate programmes. The guided autonomy gives the freedom to frame its own syllabus and thus this advantage makes it easy to adopt the NEP. First year syllabus is being planned to be as per NEP and scheme for higher semesters would be rolled out accordingly. Institute plans to establish facilities for Skill Labs to foster skill-based training in interdisciplinary domains. Webinars and workshops on NEP are being planned for administrators and faculties for its effective implementation.

E-governance cell of the institute plans to integrate departmental activities and administrative sections through an ERP solution. Institution plans to incrementally upgrade the facilities in campus for alternate energy sources like solar energy and biogas. Green audit and Energy audit of 2020-21 have hinted towards environment conscious and sustainable solutions. The institutions commitment to enhance social responsibility through community services would be further strengthened.