

YEARLY STATUS REPORT - 2021-2022

Part A		
Data of the Institution		
1.Name of the Institution	B.M.S. COLLEGE OF ENGINEERING	
Name of the Head of the institution	Dr. S.Muralidhara	
• Designation	PRINCIPAL	
• Does the institution function from its own campus?	Yes	
Phone No. of the Principal	08026622130	
Alternate phone No.	08026614356	
Mobile No. (Principal)	9845942068	
Registered e-mail ID (Principal)	principal@bmsce.ac.in	
• Address	P.O.Box. No.1908, Bull Temple Road, Bengaluru	
• City/Town	Bengaluru	
• State/UT	Karnataka	
• Pin Code	560019	
2.Institutional status		
 Autonomous Status (Provide the date of conferment of Autonomy) 	01/07/2018	
• Type of Institution	Co-education	
• Location	Urban	

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Financial Status	Self-financing
Name of the IQAC Co-ordinator/Director	Dr. Shambhavi B R
• Phone No.	08026614356
Mobile No:	9886784959
• IQAC e-mail ID	iqac@bmsce.ac.in
3.Website address (Web link of the AQAR (Previous Academic Year)	https://bmsce.ac.in/assets/files/agar/agar 2020-21.pdf
4. Was the Academic Calendar prepared for that year?	Yes
• if yes, whether it is uploaded in the Institutional website Web link:	https://bmsce.ac.in/CalendarEvent s/Calendar%20of%20Events%20for%20 UG%20Higher%20Semesters%20for%20t he%20academic%20year%202021-22.pd f

5.Accreditation Details

Cycle	Grade	CGPA	Year of Accreditation	Validity from	Validity to
Cycle 1	A	3.41	2013	05/01/2013	04/01/2018
Cycle 2	A++	3.83	2019	28/03/2019	27/03/2024

6.Date of Establishment of IQAC

01/03/2014

7.Provide the list of Special Status conferred by Central and/or State Government on the Institution/Department/Faculty/School (UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC, etc.)?

Institution/ Depart ment/Faculty/Sch ool	Scheme	Funding Agency	Year of Award with Duration	Amount
All Departments	Global Initiative of Academic Networks (GIAN)	Ministry of Education	02/05/2017	1360000

8. Provide details regarding the composition of the IQAC:

Upload the latest notification regarding the composition of the IQAC by the HEI	View File	
9.No. of IQAC meetings held during the year	3	
Were the minutes of IQAC meeting(s) and compliance to the decisions taken uploaded on the institutional website?	Yes	
If No, please upload the minutes of the meeting(s) and Action Taken Report	No File Uploaded	
10.Did IQAC receive funding from any funding agency to support its activities during the year?	Yes	
• If yes, mention the amount	Rs.25500.00/-	
11.Significant contributions made by IQAC dur	ing the current year (maximum five bullets)	
1. Proposed to start 1 new UG-BE Pand Business Systems from Academic		
2. Participated in online filling of institution data in DCS of NIRF Ranking 2023 and Self Study Report of NBA		
3. IQAC prepared the Strategic Plan (2021-2025) (which included Short Term and Long Term Institutional goals), Good Governance Document, Research Promotion Policy which was later approved by the BOG.		
4. Conducted Academic Audit, Green Institution. Constant encouragement policies, research ethics among fa		
5.Upgradation and renovation of La	dies Lounge, Multi-Gymnasium and E-	

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:

Studio

Plan of Action	Achievements/Outcomes
To Get all the eligible (UG & PG) Programmes accredited by National Board of Accreditation, New Delhi	The Institution submitted Self- Assessment Report for 11 Undergraduate BE Programmes in Civil, Telecommunication, Mechanical, IEM, Chemical, Computer Science, Electrical, Information Science, Bio- Technology, Instrumentation and Medical Electronics. The visit of the NBA Expert Team is awaited.
To Introduce new UG Programmes in Cutting Edge Technology	The Institution is proposing to introduce the following cutting-edge programmes from the year 2022-23 1. Artificial Intelligence (AI) and Data Science 2. Computer Science & Engineering (Data Science) 3. Computer Science & Engineering (Internet of Things and Cyber Security including Block Chain Technology)
To Enhance Research outcomes through promotion measures and strategic allocation in the form of seed money to young faculty	? The Management has introduced Faculty Research Promotion Scheme (FRPS) commencing from the year 2022-23. ? Cash incentives for publications in refereed journals is enhanced. ? Financial support for presenting papers in National and International conference enhanced ? B.M.S. Engineering Consultancy Centre (BMSECC) established to facilitate consultancy activities
To Conduct external Green and Energy Audit of the Campus as per NAAC Advisory dated 26.05.2022	With an aim to confirm and analyse the institutional efforts, infrastructure support and environment friendly practices within the campus, the institution has taken up the activity of external green audit

as per NAAC Advisory (Annexure
13). The auditors have been
identified and the gap analysis
is being conducted as part of
the process.

13. Was the AQAR placed before the statutory body?

Yes

• Name of the statutory body

Name of the statutory body	Date of meeting(s)
IQAC	27/09/2022
14 Was the institutional data submitted to	Ves

14. Was the institutional data submitted to AISHE?

Yes

Year

Year	Date of Submission
2022	27/02/2023

15. Multidisciplinary / interdisciplinary

Multidisciplinary projects in engineering are vital for addressing complex real-world challenges, fostering creativity, improving efficiency, and enhancing interdisciplinary skills. Provision has been made to carryout Final Year UG Projects with student groups from different departments with mutual consensus between the guides and departments. Common guidelines for assessment have been derived for the said purpose. Ex: Joint projects from Department of Bio-Technology and Information science are being carried out during academic year 2022-23.

16.Academic bank of credits (ABC):

One of the essential steps of enabling ABC is registration of the Institution on the NAD portal. BMSCE has registered with National Academic Depository (NAD) and Academic Bank of Credits (ABC). The process of registration of students (NEP 2021-22 batch onwards) have already been completed. The list of student ABC IDs have also been shared with the affiliated University. The College is in the process of uploading of results to the NAD portal.

17.Skill development:

Currently 11 Skill Labs on cutting edge technologies are setup. They offer platform for students to apply theoretical concepts, develop technical proficiency, foster creativity, and gain practical experience, making students acquainted with latest skills and technology to enable them to be industry ready. The institution is also exploring the possibility of granting Diploma degree to students (completed 4 semesters) after 2 years on completion of a certification course through the Skill Labs offered by the college.

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

The curriculum lays emphasis on Indian Languages. During the first year two courses are designed specifically to teach all students the local language of Kannada. Students from out of the state and have not studied Kannada during their matriculation, register for the course of "Balake Kannada" to create the awareness regarding the necessity of learning local language. Remaining students register for "Samskruthika Kannada" to gain higher proficiency in Kannada Language.

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

Outcome-Based Education (OBE) is an educational approach that focuses on defining specific learning outcomes or goals for students and aligning all aspects of the educational process to achieve those outcomes. The emphasis is on what students should be able to do at the end of their learning experience, rather than solely on what content is taught or how it is taught.

BMSE has been one of the pioneers in the adoption of OBE. We were the first private institution to be accredited by NBA under TIER-I (Washington Accord). The institution has been effectively practicing Outcomes-based Education. All eligible 12 UG programs and 14 PG programs are accredited by NBA

20.Distance education/online education:

High-quality ODL and online courses provide students the opportunity for life-long learning. Efforts towards offering such courses in collaboration with the industry have already been initiated. The estudio facility has been established to facilitate creating econtent and provide access to lecture material to facilitate offering of online and certificate courses.

Extended Profile

1.Programme		
1.1	29	
Number of programmes offered during the year:		
File Description	Documents	
Institutional Data in Prescribed Format	<u>View File</u>	
2.Student		
2.1	7266	
Total number of students during the year:		
File Description	Documents	
Institutional data in Prescribed format	<u>View File</u>	
2.2	1816	
Number of outgoing / final year students during the	e year:	
File Description	Documents	
Institutional Data in Prescribed Format	<u>View File</u>	
2.3	14675	
Number of students who appeared for the examinations conducted by the institution during the year:		
File Description	Documents	
Institutional Data in Prescribed Format	<u>View File</u>	
3.Academic		
3.1	1145	
Number of courses in all programmes during the year:		
File Description	Documents	
Institutional Data in Prescribed Format	<u>View File</u>	
3.2	391	
Number of full-time teachers during the year:		

File Description	Documents
Institutional Data in Prescribed Format	<u>View File</u>
3.3	391
Number of sanctioned posts for the year:	
4.Institution	<u>'</u>
4.1	560
Number of seats earmarked for reserved categories GOI/State Government during the year:	as per
4.2	138
Total number of Classrooms and Seminar halls	
4.3	2750
Total number of computers on campus for academi	c purposes
4.4	2920.00
Total expenditure, excluding salary, during the year Lakhs):	r (INR in

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 academic autonomy of the Institution enables timely revision of the curriculum based on needs and suggestions of various stake holders. The Curriculum is designed to ensure that students acquire the required domain knowledge, skills and aptitude. 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

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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 of the Academic Council.

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

29

File Description	Documents
Minutes of relevant Academic Council/BOS meeting	<u>View File</u>
Details of syllabus revision during the year	<u>View File</u>
Any additional information	<u>View File</u>

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

505

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

1.2 - Academic Flexibility

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

110

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

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	<u>View File</u>
Any additional information	No File Uploaded
List of Add on /Certificate programs (Data Template)	<u>View File</u>

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

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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	<u>View File</u>
Any additional information	No File Uploaded

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

21

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

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

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1103

File Description	Documents
List of students enrolled	<u>View File</u>
Any additional information	No File Uploaded

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

2517

File Description	Documents
List of programmes and number of students undertaking field projects / internships / student projects	<u>View File</u>
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

C. Any 2 of the above

File Description	Documents
Provide the URL for stakeholders' feedback report	https://bmsce.ac.in/assets/files/agar/docume nts/2021-22/1.4.1%20-%20Structured%20feedbac k.pdf
Upload the Action Taken Report of the feedback as recorded by the Governing Council / Syndicate / Board of Management	<u>View File</u>
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	https://bmsce.ac.in/assets/files/agar/docume nts/2021-22/1.4.1%20-%20Structured%20feedbac k.pdf
Any additional information	No File Uploaded

TEACHING-LEARNING AND EVALUATION

2.1 - Student Enrollment and Profile

2.1.1 - Enrolment of Students

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

1667

File Description	Documents
Any additional information	No File Uploaded
Institutional data in prescribed format	<u>View File</u>

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)

440

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

2.2 - Catering to Student Diversity

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

Learning levels of the students are evaluated based on a combination of summative and formative assessments. These assessments help teachers identify 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 and bridge programmes. The results of pedagogical experiments with Peer learning sessions on C programming have shown progressive results and has greatly helped the slow learners.

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. 20000/- 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
01/12/2021	7266	391

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:

Students are supported to explore new horizons of learning and research. Google Classroom is widely used as the Learning Management System (LMS). Google Meet, GoToMeeting, WebEx were used for the conduction of online classes, if required. Digital writing pad and digital interactive boards have replaced most of the black boards in classrooms. PowerPoint presentations and videos were used to provide audio visual experience to the students. To augment the learning, educational videos are also posted on the Education YouTube channel

of the Institute. Students are trained in virtual labs and modern simulation tools. Online quizzes are conducted regularly.

MOOC courses imbibed into the curriculum foster the learnability coefficient of the graduates. All departments have evolved best practices with student centric methods. Series of online workshops, webinars and training programs were conducted. Experiential learning often includes hands-on activities, field trips, simulations, and real-world applications of concepts. Problem based learning, Project based learning, group discussions, peer teaching and collaborative projects encourages students to take an active role in their education.

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

Online learning has become inevitable for the students and BMSCE faculty have utilised this opportunity to explore new horizons of online teaching.

All teachers use LMS like Google Classroom for sharing of study material, posting of assignments and quick communications. Our faculty have explored Google meet, zoom, Webex, GoToMeeting and other video conferencing tools for online classes during the pandemic.

Digital writing pads and digital boards (TEQIP III sponsored) replaced the black boards. Interactive boards are installed in most of the departments. 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 n the education YouTube channel of the institute. Virtual labs and modern simulation tools are 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.

The institute sponsors MOOC courses for faculty on NPTEL to foster

the learnability coefficient. E-Studio facility has been used for e-content generation by many faculty.

File Description	Documents
Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process	https://bmsce.ac.in/assets/files/agar/docume nts/2021-22/2.3.2-ICT%20enabled%20tools.pdf
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

391

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

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

The institute made efforts to bring uniformity in the functioning of the Semester Scheme for all academic programmes across the College during AY 2021-22. 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. The first batch of NEP were admitted for AY 2021-22. Induction program for the first-year students was conducted during Jan 2022 and May 2022. Course registrations were done online at the beginning of the semester.

Adherence to the academic calendar and its implementation at the departments is ensured through annual academic audit conducted by IQAC and Office of Dean Academics.

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	<u>View File</u>

2.4 - Teacher Profile and Quality

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

391

File Description	Documents
Year-wise full-time teachers and sanctioned posts for the year	<u>View File</u>
List of the faculty members authenticated by the Head of HEI	<u>View File</u>
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

170

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	<u>View File</u>
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	<u>View File</u>
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

11

File Description	Documents
List of Programmes and the date of last semester-end / year-end examinations and the date of declaration of result	<u>View File</u>
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

75

File Description	Documents
Upload the number of complaints and total number of students who appeared for exams during the year	<u>View File</u>
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

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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.

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 demonstrates the OBE process followed and the attainment of POs and PSOs.

File Description	Documents
Upload COs for all courses (exemplars from the Glossary)	<u>View File</u>
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 in terms of student abilities gained after completing the course. The framed COs are then mapped with POs and PSOs. The framed COs for a course are measured by two tools: The Direct Assessment Tools which involves Continuous Internal Evaluation(CIE) and Semester End Examination(SEE) 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 recommendations are reported as part of the CO analysis.

For a graduating batch, POs/PSOs are calculated using the CO computations of all the courses 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 better 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

1680

File Description	Documents
Upload list of Programmes and number of students appear for and passed in the final year examinations	<u>View File</u>
Upload any additional information	No File Uploaded
Paste link for the annual report	https://bmsce.ac.in/assets/files/agar/docume nts/2021-22/2.6.3-COE%20Report.pdf

2.7 - Student Satisfaction Survey

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

https://bmsce.ac.in/assets/files/agar/documents/2021-22/2.7.1%20-%20 Student%20Satisfaction%20Survey%20(SSS).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

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 center 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, AI & ML have been 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.

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 the Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption	No File Uploaded
Provide URL of policy document on promotion of research uploaded on the website	https://bmsce.ac.in/assets/files/Governance_ Documents/BMSCE%20Research%20&%20IPR%20Polic y%202023.pdf
Any additional information	No File Uploaded

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

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

34.75

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

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

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

3.2 - Resource Mobilization for Research

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

120.36

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

3.2.2 - Number of teachers having research projects during the year

32

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

3.2.3 - Number of teachers recognised as research guides

163

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

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

13

File Description	Documents
Supporting document from Funding Agencies	<u>View File</u>
Paste link to funding agencies' website	https://dst.gov.in
Any additional information	No File Uploaded

3.3 - Innovation Ecosystem

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

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 center 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, AI & ML have been 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.

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

25

File Description	Documents
Report of the events	<u>View File</u>
List of workshops/seminars conducted during the year	<u>View File</u>
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

Α.	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	<u>View File</u>
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

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3.4.2.1 - Number of PhD students registered during the year

320

File Description	Documents
URL to the research page on HEI website	https://bmsce.ac.in/home/About-R-and-D
List of PhD scholars and details like name of the guide, title of thesis, and year of registration	<u>View File</u>
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

0.4

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

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

0.23

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

530

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File Description	Documents
Any additional information	No File Uploaded
Bibliometrics of the publications during the year	<u>View File</u>

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

48

File Description	Documents
Bibiliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	<u>View File</u>
Any additional information	No File Uploaded

3.5 - Consultancy

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

86.9

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

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

6.95

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

3.6 - Extension Activities

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

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), Institute Social Responsibility Cell (ISRC), 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 institute signed an MoU during June 2022 with "Adamya Chetana Foundation", a registered NGO headed by Tejaswini Anathkumar.

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. 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 volunteered to dedicate their time on weekends for teaching and community building activities among children through Rotaract's iteach program. ISRC club works towards finding solutions for social issues.

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	No File Uploaded
Paste link for additional information	Nil

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

4

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

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

92

File Description	Documents
Reports of the events organized	<u>View File</u>
Any additional information	<u>View File</u>

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

7869

File Description	Documents
Reports of the events	<u>View File</u>
Any additional information	<u>View File</u>

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

680

File Description	Documents
Copies of documents highlighting collaboration	<u>View File</u>
Any additional information	No File Uploaded

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

27

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

INFRASTRUCTURE AND LEARNING RESOURCES

4.1 - Physical Facilities

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

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.

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Library: The Library Committee with two senior faculties address all issues related to smooth and efficient functioning of the 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.

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 26 cocurricular and 20 extra-curricular student clubs to bring likeminded 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.

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. Other student support facilities include campus book mart, medical insurance, in-campus bank, Cafeteria and Coffee Vending Outlets

File Description	Documents
Geotagged pictures	<u>View File</u>
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

138

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

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

2318.07

File Description	Documents
Upload audited utilization statements	<u>View File</u>
Details of Expenditure, excluding salary, during the years	<u>View File</u>
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.

LOCATION

The library 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.

AUTOMATED SERVICES

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 also 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 eresources 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 to 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	<u>View File</u>
Upload any additional information	<u>View File</u>

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

78.99

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

4.2.4 - 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

4181

File Description	Documents
Upload details of library usage by teachers and students	<u>View File</u>
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 one hundred access switches. The Connectivity between the core switch to the access switch is though multimode fiber optic backbone. The existing bandwidth of the intranet is 10 GBPS. Currently the CWN is supplemented with 1.5 GPBS 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 email and webservers of the institution. Additionally the 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. In India BMSCE is the first educational institution to obtain APNIC membership and static IP addresses.

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

4.3.2 - Student - Computer ratio

Number of Students	Number of Computers
7266	2750

File Description	Documents
Upload any additional information	No File Uploaded

4.3.3 - Bandwidth of internet connection in the A. ?50 Mbps Institution and the number of students on campus

File Description	Documents
Details of bandwidth available in the Institution	<u>View File</u>
Upload any additional information	No File Uploaded

4.3.4 - Institution has facilities for e-content development: Facilities available for e-content development Media Centre Audio-Visual Centre Lecture Capturing System (LCS) Mixing equipments and software for editing

A. All four of the above

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

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)

1702.07

File Description	Documents
Audited statements of accounts	<u>View File</u>
Upload any additional information	No File Uploaded

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

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.

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.

The Data Centre monitors the Campus Wide Networking (CWN) facility of the institution for ubiquitous network connectivity throughout the campus.

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.

Sufficient back up power supply has been maintained in case of power failure from BESCOM

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

324

File Description	Documents
Upload self-attested letters with the list of students receiving scholarships	<u>View File</u>
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

328

File Description	Documents
Upload any additional information	No File Uploaded
Institutional data in prescribed format	<u>View File</u>

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

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File Description	Documents
Link to Institutional website	
	https://bmsce.ac.in/assets/files/agar/docume
	nts/2021-22/5.1.3-Reports.pdf
Details of capability development and schemes	<u>View File</u>
Any additional information	No File Uploaded

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

1790

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

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	<u>View File</u>
Details of student grievances including sexual harassment and ragging cases	<u>View File</u>
Upload any additional information	No File Uploaded

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5.2 - Student Progression

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

835

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

5.2.2 - Number of outgoing students progressing to higher education

82

File Description	Documents
Upload supporting data for students/alumni	<u>View File</u>
Details of students who went for higher education	<u>View File</u>
Any additional information	<u>View File</u>

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

103

File Description	Documents
Upload supporting data for students/alumni	<u>View File</u>
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

8

File Description	Documents
e-copies of award letters and certificates	<u>View File</u>
Any additional information	<u>View File</u>

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	No File Uploaded
Paste link for additional information	Nil

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

23

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

5.4 - Alumni Engagement

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

The BMSCE Alumni Network(BMSCEAN) established and registered under the Societies Registration Act 21 of 1860. A vibrant alumni network with 29000 active members.

The Alumni Contribute in the Curriculum Design process. The Department Advisory Board has representation from alumni. 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 programmesand general activities like 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 31.06.2022, 80 students have benefited and an mount of 329.76 Lakhs have 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.20000/- each and a merit certificate. So far awarded 1131 scholarships since 2012-13 amounting to 139.28 Lakhs.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://alumni.bmsce.in/

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

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the year

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

GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 - Institutional Vision and Leadership

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

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. Two faculty members (on rotation basis) are members of the BoG.

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 Good Governance Document (GGD) provide a framework of rules and regulations by which the BOG can ensure accountability, fairness and transparency in the institute's relationship with its stakeholders. Regular academic and administrative audits are conducted. The faculties are actively involved in decision making process. The Management has introduced rotation policy of HODs and senior academic and administrative functionaries.

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

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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	<u>View File</u>
Upload any additional information	No File Uploaded
Paste link for additional Information	Nil

6.2 - Strategy Development and Deployment

6.2.1 - The institutional Strategic/ Perspective plan has been clearly articulated and implemented Strategic Plan 2021-2025

Starting New Programmes in Emerging Areas & Seeking NBA Accreditation (All Eligible UG Programmes under tier I format)

Starting of New Programmes in Emerging Areas

Owing to the sharp rise in demand for undergraduate technical courses in emerging areas, the management has approved starting of the following new UG programmes commencing from 2022-23

SNO

Name of the Programme

Annual Intake

1

Artificial Intelligence & Data Science

60

2

Computer Science & Engineering (Data Science)

60

3

Computer Science and Engineering

(Internet of Things & Cyber Security including Blockchain Technology)

60

Seeking NBA Accreditation for UG Programmes under Tier I format.

The Institution submitted SAR seeking NBA Accreditation of the UG Programmes of Civil Engineering, Electrical Engineering, Electronics & Instrumentation Engineering, Information Science, Computer Science, Biotechnology, Medical Electronics, Mechanical Engineering, IEM, Chemical Engineering and Telecommunication Engineering. The Institution has implemented all measures to successfully facilitate the visit of the expert team.

File Description	Documents
Strategic Plan and deployment documents on the website	<u>View File</u>
Paste link for additional information	https://bmsce.ac.in/assets/files/Governance_ Documents/BMSCE%20Good%20Governance%20Docume nt%207Mar2023.pdf
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	https://bmsce.ac.in/assets/files/agar/docume nts/2020-21/6.2.2-Organogram.pdf
Upload any additional information	No File Uploaded
Paste link for additional Information	Nil

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

A. All of the above

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

6.3 - Faculty Empowerment Strategies

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

Teaching Staff: AICTE Scales with up to date DA, Career Advancement Scheme (CAS) Benefit, Faculty Research Promotion Scheme (FRPS) benefit, Study Leave with Full salary for pursuing PhD under QIP, Deputation to participate in Workshop/Seminar/Conference in India and Abroad. Cash incentive for publication in Refereed Journals, Incentive for fetching External Grants, Financial Support for Patent Advice and Filing, Financial support for presenting papers in National and International Conference, BMS Engineering Consultancy Centre to facilitate consultancy activities., Annual Allowance of 15,000 Per faculty for professional requirements (Professional Body Membership fees, Course fee for MOOC), Medical and Accidental Insurance to employees (Spouse and Children), Voluntary Provident Fund (VPF), Vehicle Loan (Car Loan), Terminal benefits, Maternity Leave, Management Quota Seats for wards,, Employees Credit Cooperative society are some of the faculty centric policies and benefits extended.

Nn-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. 15000/- 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

58

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)	<u>View File</u>

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

1574

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

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

200

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

6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly

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	No File Uploaded
Paste link for additional information	Nil

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

57.96

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

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. In addition, financial assistance is obtained through external research projects, consultancy grants, Bank Interest sponsorships, Alumni Contribution and other sources.

The details of fund mobilization under various heads for the year 2021-22 is as shown below:

Head

Amt. in Lakhs

Student's Fees

12056

Salary Grants

1583

Bank Interest

37

External Grants

169

Consultancy Projects

87

Sponsorship

22

Alumni Contribution

69

Miscellaneous

52

Total

14075

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

6.5 - Internal Quality Assurance System

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

Owing to increased demand for programmes is cutting edge technology, new undergraduate programmes were introduced and increase in intake

was proposed for few programmes. establishment of e-studio, Girls Common Room, upgradation of multi-gym was carried out as part of infrastructure augmentation. The UGC granted extension of autonomous status to BMSCE a period of ten years from 2022-2023 to 2031-2032. The institution submitted data for AISHE, application seeking Affiliation from VTU for UG/PG programmes and new research centre and to AICTE seeking extension of approval for the AY 2022-23. The IQAC conducted academic audit for the period 2021-22. As part of the process, internal audit teams were constituted. The audit teams conducted quality check on different activities undertaken by the departments. The audit recommendations were shared with the respective departments for needful action. The intuitional strategic plan, Research and IPR Policy, Good governance Document and Management norm documents were updated along with other institutional policy documents. The IQAC entered into MOU with Adamya Chetana Foundation during June 2022. Numerous Green lifestyle, environmental and social awareness programmes were conducted. Being part of various academic and administrative committees, the IQAC actively contributed in improving the academic and administrative performance of the institution.

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	https://bmsce.ac.in/home/BMSCE-Monthly- Activities
Upload e-copies of accreditations and certification	<u>View File</u>
Upload details of quality assurance initiatives of the institution	<u>View File</u>
Upload any additional information	<u>View File</u>

INSTITUTIONAL VALUES AND BEST PRACTICES

7.1 - Institutional Values and Social Responsibilities

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

The institution makes sincere efforts to empower women faculty and

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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 Antiragging 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	No File Uploaded
Paste link for additional Information	Nil

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

B. An	у 3	of	: t]	he a	bove

File Description	Documents
Geotagged Photographs	<u>View File</u>
Any other relevant information	No File Uploaded

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

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 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	<u>View File</u>
Any other relevant information	No File Uploaded

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

A. Any 4 or all of the above

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

7.1.5 - Green campus initiatives include

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

- 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	<u>View File</u>
Various policy documents / decisions circulated for implementation	<u>View File</u>
Any other relevant documents	No File Uploaded

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

7.1.6.1 - The institution's initiatives to preserve and improve the environment and harness energy are confirmed through the following:

A. Any 4 or all 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	<u>View File</u>
Certification by the auditing agency	<u>View File</u>
Certificates of the awards received	No File Uploaded
Any other relevant information	<u>View File</u>

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	<u>View File</u>
Policy documents and brochures on the support to be provided	<u>View File</u>
Details of the software procured for providing assistance	<u>View File</u>
Any other relevant information	No File Uploaded

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

The Institution conduct national festivals like Independence Day, Republic Day, Gandhi Jayanthi, Ambedkar Jayanthi and other festivals with an aim to imbibe the spirit of Harmony and patriotism. The Institution regularly organises extension activities through NSS, NCC, Rotaract, YRC like Plantation drives, Blood Donation Camps, Yoga, Environment Awareness, Swatch Bharat Program etc. Under BMSCE Unnat Bharat Abhiyaan, institution adopted 5 villages in Kolar district. The NSS Unit of BMSCE received appreciation letter from State Govt. on 26.06.2022 for co-ordinating Drugs Awareness event (more than 600 BMSCE students participated). The Institution entered into MOU with Adamya Chetana Foundation with an aim to achieve Green lifestyle, Environmental and other initiatives. The Differently abled Service Cell conducted Mega Job Fare for Engineering Graduates with Disability on 30.04.2022. More than 92 graduates from across the State participated. The Institutional Social Responsibility Cell distributed more than 3000 books to government PU College students during June 2022. Under Ek Bharat Shreshtha Bharat programme -a GoI initiative, 50 students from Gurukul Kangri, Haridwar, visited BMSCE towards student cultural exchange programme. BMSCE hosted the IEEE

SPS K12 training program for school teachers and students, where 120 participants were given electronic kits and they learnt basics of signal processing.

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

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

7th July to 7th August 2021, 27th August 2021, and 22nd October 2021 vaccine efforts: The NSS took active vaccination programmes to prevent the COVID-19 pandemic.

Youth Camp (2nd January 2021): The NSS organised a Youth Camp to provide young volunteers a chance to participate in interactive seminars, leadership development activities, and team-building activities. Women's Day Walkathon (8 March 2022): The NSS hosted a walkathon to promote gender equality and women's empowerment in honour of International Women's Day. Volunteers carried signs promoting gender equality and emphasising the value of women's contributions to society as they marched through the streets.

Abhaya Breath India Mission (May 23 and 24): The NSS worked with the Abhaya Breath India Mission to organise training sessions and seminars targeted at enhancing mental health and wellbeing. RD Camp: The NSS held an RD (Regular Deputation) Camp to provide NSS volunteers an opportunity to growth as individuals and develop social responsibility. BMSCE NSS volunteers took part in Green Sundays, a weekly event that aims to boost Bengaluru's tree population.Numerous other events were also planned, including: packing grocery kits, T-shirt painting, essay contests, plogruns, plastic fischer, beautifying government schools, job fairs for the disabled, exhibitions, cultural programmes, etc.

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

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

A. All of the above

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

Independence Day Parade Training was conducted from 7t to 14th Aug 2021. Independence Day was celebrated with great enthusiasm and respect. Rashtriya Ekta Diwas was celebrated to reaffirm the inherent strength and resilience of our nation. 152nd Gandhi Jayanti was celebrated on 2nd Oct 2021. 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. Bharata Ratna Ambedkar Jayanthi was celebrated on 14th April 2022.

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

7.2 - Best Practices

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

Teaching Learning Center @ BMS College of Engineering

Objectives and Practice

The institution constituted a Teaching Learning Center (TLC) with an aim to support newly recruited faculty in enhancing their teaching skills, promoting student learning and fostering a culture of continuous professional development. The five-member core committee is entrusted with the responsibility to organize activities/programmes to upskill the young faculty members and achieve the following aims and objectives of the TLC:

- To groom young teachers into digitally proficient educators through training by leading academicians and professionals
- To collaborate with national and international institutes of technical education
- To organize programs for capacity enhancement, knowledge upgradation and exposure to emerging technological developments for the faculty
- To facilitate the sharing of best pedagogical practices among teachers across disciplines

Under the aegis of TLC, the following events/activities were also conducted

- 1. Hands-on session on "Use of Canvas LMS for Course Management"
- 2. IPR Session on "Indian Patent: Filing and Grant Procedure"
- 3. OBE Workshops
- 4. Seminar on Robot Yantra
- 5. Training programme on Pedagogical innovations
- 6. Hands-on Workshop on Adobe Express

The TLC is providing platform to young faculty to upskill themselves through relevant and structured programmes/activities.

File Description	Documents
Best practices in the Institutional website	https://bmsce.ac.in/assets/files/agar/docume nts/2021-22/Best%20Practice- Teaching%20Learning%20Center.pdf
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)

Imparting high quality technical education continues to be the hallmark of its distinctiveness. From curriculum, state of the art infrastructure, best placement record and effective teaching learning activities blended with latest pedagogical approach sets BMSCE apart from other institutes. The institute proactively identifies the needs with current trend of marketwhile proposing new programmes of study. The Curriculum is updated regularly to keep pace with the fast-growing technological advances. In addition to academics, the institute focuses on holistic development of students through wide range of add-on facilities that go beyond the traditional classroom experience. The institute also organizes various programs for providing hands-on training for students on latest technology adopted by the industry. The Institution has MOUs with various organizations across the globe. It has developed many Centres of Excellence, cutting edge laboratories and incubation centres in collaboration with industries with an aim to enrich the learning experiences of the graduating students and to comply with the programme outcomes. The learning experiences and quality educational practices created at the institute supplemented with academic ambience, state of the art infrastructure, pedagogy, research, training provided to diverse student population is enabling the institute to produce graduates who are industry ready

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 academic autonomy of the Institution enables timely revision of the curriculum based on needs and suggestions of various stake holders. The Curriculum is designed to ensure that students acquire the required domain knowledge, skills and aptitude. 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 of the Academic Council.

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

29

File Description	Documents
Minutes of relevant Academic Council/BOS meeting	<u>View File</u>
Details of syllabus revision during the year	<u>View File</u>
Any additional information	<u>View File</u>

${\bf 1.1.3 - Number\ of\ courses\ focusing\ on\ employability/entrepreneurship/\ skill\ development\ offered\ by\ the\ Institution\ during\ the\ year}$

505

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

1.2 - Academic Flexibility

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

110

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

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

29

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

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	<u>View File</u>
Any additional information	No File Uploaded

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

21

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

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

1103

File Description	Documents	
List of students enrolled	<u>View File</u>	
Any additional information	No File Uploaded	

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

2517

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

1.4 - Feedback System

1.4.1 - Structured feedback and review of the C. Any 2 of the above

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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	https://bmsce.ac.in/assets/files/agar/documents/2021-22/1.4.1%20-%20Structured%20feedback.pdf
Upload the Action Taken Report of the feedback as recorded by the Governing Council / Syndicate / Board of Management	<u>View File</u>
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	https://bmsce.ac.in/assets/files/agar/documents/2021-22/1.4.1%20-%20Structured%20feedback.pdf
Any additional information	No File Uploaded

TEACHING-LEARNING AND EVALUATION

2.1 - Student Enrollment and Profile

2.1.1 - Enrolment of Students

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

1667

File Description	Documents
Any additional information	No File Uploaded
Institutional data in prescribed format	<u>View File</u>

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)

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440

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

2.2 - Catering to Student Diversity

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

Learning levels of the students are evaluated based on a combination of summative and formative assessments. These assessments help teachers identify 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 and bridge programmes. The results of pedagogical experiments with Peer learning sessions on C programming have shown progressive results and has greatly helped the slow learners.

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. 20000/- 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
01/12/2021	7266	391

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:

Students are supported to explore new horizons of learning and research. Google Classroom is widely used as the Learning Management System (LMS). Google Meet, GoToMeeting, WebEx were used for the conduction of online classes, if required. Digital writing pad and digital interactive boards have replaced most of the black boards in classrooms. PowerPoint presentations and videos were used to provide audio visual experience to the students. To augment the learning, educational videos are also posted on the Education YouTube channel of the Institute. Students are trained in virtual labs and modern simulation tools. Online quizzes are conducted regularly.

MOOC courses imbibed into the curriculum foster the learnability coefficient of the graduates. All departments have evolved best practices with student centric methods. Series of online workshops, webinars and training programs were conducted. Experiential learning often includes hands-on activities, field trips, simulations, and real-world applications of concepts. Problem based learning, Project based learning, group discussions, peer teaching and collaborative projects encourages students to take an active role in their education.

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

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Online learning has become inevitable for the students and BMSCE faculty have utilised this opportunity to explore new horizons of online teaching.

All teachers use LMS like Google Classroom for sharing of study material, posting of assignments and quick communications. Our faculty have explored Google meet, zoom, Webex, GoToMeeting and other video conferencing tools for online classes during the pandemic.

Digital writing pads and digital boards (TEQIP III sponsored) replaced the black boards. Interactive boards are installed in most of the departments. 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 n the education YouTube channel of the institute. Virtual labs and modern simulation tools are 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.

The institute sponsors MOOC courses for faculty on NPTEL to foster the learnability coefficient. E-Studio facility has been used for e-content generation by many faculty.

File Description	Documents
Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process	https://bmsce.ac.in/assets/files/agar/documents/2021-22/2.3.2-ICT%20enabled%20tools.pdf
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

391

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

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

The institute made efforts to bring uniformity in the functioning of the Semester Scheme for all academic programmes across the College during AY 2021-22. 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. The first batch of NEP were admitted for AY 2021-22. Induction program for the first-year students was conducted during Jan 2022 and May 2022. Course registrations were done online at the beginning of the semester.

Adherence to the academic calendar and its implementation at the departments is ensured through annual academic audit conducted by IQAC and Office of Dean Academics.

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	<u>View File</u>

2.4 - Teacher Profile and Quality

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

391

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File Description	Documents
Year-wise full-time teachers and sanctioned posts for the year	<u>View File</u>
List of the faculty members authenticated by the Head of HEI	<u>View File</u>
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

170

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	<u>View File</u>
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	<u>View File</u>
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

11

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File Description	Documents
List of Programmes and the date of last semester-end / year- end examinations and the date of declaration of result	<u>View File</u>
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

75

File Description	Documents
Upload the number of complaints and total number of students who appeared for exams during the year	<u>View File</u>
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

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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.

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 demonstrates the OBE process followed and the attainment of POs and PSOs.

File Description	Documents
Upload COs for all courses (exemplars from the Glossary)	<u>View File</u>
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 in terms of student abilities gained after completing the course. The framed COs are then mapped with POs and PSOs. The framed COs for a course are measured by two tools: The Direct Assessment Tools which involves Continuous Internal Evaluation(CIE) and Semester End Examination(SEE) 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 recommendations are reported as part of the CO analysis.

For a graduating batch, POs/PSOs are calculated using the CO computations of all the courses 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 better 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

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1680

File Description	Documents
Upload list of Programmes and number of students appear for and passed in the final year examinations	<u>View File</u>
Upload any additional information	No File Uploaded
Paste link for the annual report	https://bmsce.ac.in/assets/files/agar/documents/2021-22/2.6.3-COE%20Report.pdf

2.7 - Student Satisfaction Survey

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

https://bmsce.ac.in/assets/files/agar/documents/2021-22/2.7.1%20-%20Student%20Satisfaction%20Survey%20(SSS).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

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 center 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, AI & ML have been 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.

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 the Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption	No File Uploaded
Provide URL of policy document on promotion of research uploaded on the website	https://bmsce.ac.in/assets/files/Governanc e_Documents/BMSCE%20Research%20&%20IPR%20P olicy%202023.pdf
Any additional information	No File Uploaded

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

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

34.75

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

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

10

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

3.2 - Resource Mobilization for Research

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

120.36

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

3.2.2 - Number of teachers having research projects during the year

32

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

3.2.3 - Number of teachers recognised as research guides

163

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

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

13

File Description	Documents
Supporting document from Funding Agencies	<u>View File</u>
Paste link to funding agencies' website	https://dst.gov.in
Any additional information	No File Uploaded

3.3 - Innovation Ecosystem

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

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 center 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, AI & ML have been 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.

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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

25

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

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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

320

File Description	Documents
URL to the research page on HEI website	https://bmsce.ac.in/home/About-R-and-D
List of PhD scholars and details like name of the guide, title of thesis, and year of registration	<u>View File</u>
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

0.4

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

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

0.23

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

530

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File Description	Documents
Any additional information	No File Uploaded
Bibliometrics of the publications during the year	<u>View File</u>

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

48

File Description	Documents
Bibiliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	<u>View File</u>
Any additional information	No File Uploaded

3.5 - Consultancy

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

86.9

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

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

6.95

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

3.6 - Extension Activities

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

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), Institute Social Responsibility Cell (ISRC), 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 institute signed an MoU during June 2022 with "Adamya Chetana Foundation", a registered NGO headed by Tejaswini Anathkumar.

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. 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 volunteered to dedicate their time on weekends for teaching and community building activities among children through Rotaract's i-teach program. ISRC club works towards finding solutions for social issues.

All extension activities taking place under BMSCE had a deeprooted connection with the moral duties of an ideal citizen and sets an example for its students.

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

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

4

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

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

92

File Description	Documents
Reports of the events organized	<u>View File</u>
Any additional information	<u>View File</u>

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

7869

File Description	Documents
Reports of the events	<u>View File</u>
Any additional information	<u>View File</u>

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

680

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File Description	Documents	
Copies of documents highlighting collaboration	<u>View File</u>	
Any additional information	No File Uploaded	

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

27

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

INFRASTRUCTURE AND LEARNING RESOURCES

4.1 - Physical Facilities

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

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.

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Library: The Library Committee with two senior faculties address all issues related to smooth and efficient functioning of the 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.

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 26 co-curricular and 20 extra-curricular student clubs to bring likeminded 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.

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. Other student support facilities include campus book mart, medical insurance, in-campus bank, Cafeteria and Coffee Vending Outlets

File Description	Documents
Geotagged pictures	<u>View File</u>
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

138

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

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

2318.07

File Description	Documents
Upload audited utilization statements	<u>View File</u>
Details of Expenditure, excluding salary, during the years	<u>View File</u>
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.

LOCATION

The library is aesthetically located in a central place of the

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college & is very prominently housed in a big and space of Platinum Jubilee Academic Block with a floor area of 49500 Sq.ft.

AUTOMATED SERVICES

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 also 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 to 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	<u>View File</u>
Upload any additional information	<u>View File</u>

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

78.99

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

4.2.4 - 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

4181

File Description	Documents
Upload details of library usage by teachers and students	<u>View File</u>
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 one hundred access switches. The Connectivity between the core switch to the access switch is though multimode fiber optic backbone. The existing bandwidth of the intranet is 10 GBPS. Currently the CWN is supplemented with 1.5 GPBS 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 webservers of the institution. Additionally the CWN is supplemented with mobility aware wireless connectivity of

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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.In India BMSCE is the first educational institution to obtain APNIC membership and static IP addresses.

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

4.3.2 - Student - Computer ratio

Number of Students	Number of Computers
7266	2750

File Description	Documents
Upload any additional information	No File Uploaded

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

A. ?50 Mbps

File Description	Documents
Details of bandwidth available in the Institution	<u>View File</u>
Upload any additional information	No File Uploaded

4.3.4 - Institution has facilities for e-content development: Facilities available for e-content development Media Centre Audio-Visual Centre Lecture Capturing System (LCS) Mixing equipments and software for editing

A. All four of the above

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

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)

1702.07

File Description	Documents
Audited statements of accounts	<u>View File</u>
Upload any additional information	No File Uploaded

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

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.

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.

The Data Centre monitors the Campus Wide Networking (CWN) facility of the institution for ubiquitous network connectivity throughout the campus.

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.

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

Sufficient back up power supply has been maintained in case of power failure from BESCOM

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

324

File Description	Documents
Upload self-attested letters with the list of students receiving scholarships	<u>View File</u>
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

328

File Description	Documents
Upload any additional information	No File Uploaded
Institutional data in prescribed format	<u>View File</u>

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,

A. All of the above

Physical fitness, Health and Hygiene) Awareness of Trends in Technology

File Description	Documents
Link to Institutional website	
	https://bmsce.ac.in/assets/files/agar/docu
	ments/2021-22/5.1.3-Reports.pdf
Details of capability	<u>View File</u>
development and schemes	
Any additional information	No File Uploaded

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

1790

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

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	<u>View File</u>
Details of student grievances including sexual harassment and ragging cases	<u>View File</u>
Upload any additional information	No File Uploaded

5.2 - Student Progression

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

835

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

5.2.2 - Number of outgoing students progressing to higher education

82

File Description	Documents
Upload supporting data for students/alumni	<u>View File</u>
Details of students who went for higher education	<u>View File</u>
Any additional information	<u>View File</u>

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

103

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File Description	Documents
Upload supporting data for students/alumni	<u>View File</u>
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

8

File Description	Documents
e-copies of award letters and certificates	<u>View File</u>
Any additional information	<u>View File</u>

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.

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

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

23

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

5.4 - Alumni Engagement

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

The BMSCE Alumni Network(BMSCEAN) established and registered under the Societies Registration Act 21 of 1860. A vibrant alumni network with 29000 active members.

The Alumni Contribute in the Curriculum Design process. The Department Advisory Board has representation from alumni. 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 programmesand general activities like 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 31.06.2022, 80 students have benefited and an mount of 329.76 Lakhs have been disbursed. The BMSCE Alumni Network recognizes meritorious students by giving BMSCEAN Merit Scholarships at the end of every

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semester. The toppers are recognized during the Annual Alumni Day with a cash prize of Rs.20000/- each and a merit certificate. So far awarded 1131 scholarships since 2012-13 amounting to 139.28 Lakhs.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://alumni.bmsce.in/

5.4.2 - Alumni's financial contribution during the year

A.	?	15	Lakhs

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

GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 - Institutional Vision and Leadership

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

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. Two faculty members (on rotation basis) are members of the BoG.

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 Good Governance Document (GGD) provide a framework of rules and regulations by which the BOG can ensure accountability, fairness and transparency in the institute's relationship with its stakeholders. Regular academic and administrative audits are conducted. The faculties are actively involved in decision making process. The Management has introduced rotation policy of HODs and senior academic and administrative functionaries.

Effective and participative decision making process is adopted to

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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	<u>View File</u>
Upload any additional information	No File Uploaded
Paste link for additional Information	Nil

6.2 - Strategy Development and Deployment

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

Strategic Plan 2021-2025

Starting New Programmes in Emerging Areas & Seeking NBA Accreditation (All Eligible UG Programmes under tier I format)

Starting of New Programmes in Emerging Areas

Owing to the sharp rise in demand for undergraduate technical courses in emerging areas, the management has approved starting of the following new UG programmes commencing from 2022-23

SNO

Name of the Programme

Annual Intake

1

Artificial Intelligence & Data Science

60

2

Computer Science & Engineering (Data Science)

60

3

Computer Science and Engineering

(Internet of Things & Cyber Security including Blockchain Technology)

60

Seeking NBA Accreditation for UG Programmes under Tier I format.

The Institution submitted SAR seeking NBA Accreditation of the UG Programmes of Civil Engineering, Electrical Engineering, Electronics & Instrumentation Engineering, Information Science, Computer Science, Biotechnology, Medical Electronics, Mechanical Engineering, IEM, Chemical Engineering and Telecommunication Engineering. The Institution has implemented all measures to successfully facilitate the visit of the expert team.

File Description	Documents
Strategic Plan and deployment documents on the website	<u>View File</u>
Paste link for additional information	https://bmsce.ac.in/assets/files/Governance_Documents/BMSCE%20Good%20Governance%20Document%207Mar2023.pdf
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 nonstatutory 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

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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	https://bmsce.ac.in/assets/files/agar/documents/2020-21/6.2.2-Organogram.pdf
Upload any additional information	No File Uploaded
Paste link for additional Information	Nil

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

A. All of the above

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

6.3 - Faculty Empowerment Strategies

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

Teaching Staff: AICTE Scales with up to date DA, Career Advancement Scheme (CAS) Benefit, Faculty Research Promotion Scheme (FRPS) benefit, Study Leave with Full salary for pursuing PhD under QIP, Deputation to participate in Workshop/Seminar/Conference in India and Abroad. Cash incentive for publication in Refereed Journals, Incentive for fetching

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External Grants, Financial Support for Patent Advice and Filing, Financial support for presenting papers in National and International Conference, BMS Engineering Consultancy Centre to facilitate consultancy activities., Annual Allowance of 15,000 Per faculty for professional requirements (Professional Body Membership fees, Course fee for MOOC), Medical and Accidental Insurance to employees (Spouse and Children), Voluntary Provident Fund (VPF), Vehicle Loan (Car Loan), Terminal benefits, Maternity Leave, Management Quota Seats for wards,, Employees Credit Cooperative society are some of the faculty centric policies and benefits extended.

Nn-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. 15000/- 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

58

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)	<u>View File</u>

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

1574

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

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

200

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

6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly

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	No File Uploaded
Paste link for additional information	Nil

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

57.96

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

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. In addition, financial assistance is obtained through external research projects, consultancy grants, Bank Interest sponsorships, Alumni Contribution and other sources.

The details of fund mobilization under various heads for the year 2021-22 is as shown below:

Head

Amt. in Lakhs
Student's Fees
12056
Salary Grants
1583
Bank Interest
37
External Grants
169
Consultancy Projects
87
Sponsorship
22
Alumni Contribution
69
Miscellaneous
52
Total
14075

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

6.5 - Internal Quality Assurance System

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

Owing to increased demand for programmes is cutting edge technology, new undergraduate programmes were introduced and increase in intake was proposed for few programmes. establishment of e-studio, Girls Common Room, upgradation of multi-gym was carried out as part of infrastructure augmentation. The UGC granted extension of autonomous status to BMSCE a period of ten years from 2022-2023 to 2031-2032. The institution submitted data for AISHE, application seeking Affiliation from VTU for UG/PG programmes and new research centre and to AICTE seeking extension of approval for the AY 2022-23. The IQAC conducted academic audit for the period 2021-22. As part of the process, internal audit teams were constituted. The audit teams conducted quality check on different activities undertaken by the departments. The audit recommendations were shared with the respective departments for needful action. The intuitional strategic plan, Research and IPR Policy, Good governance Document and Management norm documents were updated along with other institutional policy documents. The IQAC entered into MOU with Adamya Chetana Foundation during June 2022. Numerous Green lifestyle, environmental and social awareness programmes were conducted. Being part of various academic and administrative committees, the IOAC actively contributed in improving the academic and administrative performance of the institution.

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. Selfanalysis 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)
1

A. Any 4 or all of the above

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

INSTITUTIONAL VALUES AND BEST PRACTICES

7.1 - Institutional Values and Social Responsibilities

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

The institution makes sincere efforts to empower 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	No File Uploaded
Paste link for additional Information	Nil

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

B. Any	3 of t	he above
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File Description	Documents
Geotagged Photographs	<u>View File</u>
Any other relevant information	No File Uploaded

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

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 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	<u>View File</u>
Any other relevant information	No File Uploaded

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

A. Any 4 or all of the above

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

7.1.5 - Green campus initiatives include

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

- 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	<u>View File</u>
Various policy documents / decisions circulated for implementation	<u>View File</u>
Any other relevant documents	No File Uploaded

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

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- 7.1.6.1 The institution's initiatives to preserve and improve the environment and harness energy are confirmed through the following:
- A. Any 4 or all 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

 Reports on environment and energy audits submitted by the auditing agency

 Certification by the auditing agency

 Certificates of the awards received

 Any other relevant information

 Documents

 View File

 View File

 No File Uploaded
- 7.1.7 The Institution has a disabled-friendly and barrier-free environment: Ramps/lifts for easy access to classrooms and centres Disabled-friendly washrooms Signage including tactile path lights, display boards and signposts Assistive technology and facilities for persons with disabilities: accessible website, screen-reading software, mechanized equipment, etc. Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading materials, screen reading, etc.
- A. Any 4 or all of the above

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

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

The Institution conduct national festivals like Independence Day, Republic Day, Gandhi Jayanthi, Ambedkar Jayanthi and other festivals with an aim to imbibe the spirit of Harmony and patriotism. The Institution regularly organises extension activities through NSS, NCC, Rotaract, YRC like Plantation drives, Blood Donation Camps, Yoga, Environment Awareness, Swatch Bharat Program etc. Under BMSCE Unnat Bharat Abhiyaan, institution adopted 5 villages in Kolar district. The NSS Unit of BMSCE received appreciation letter from State Govt. on 26.06.2022 for co-ordinating Drugs Awareness event (more than 600 BMSCE students participated). The Institution entered into MOU with Adamya Chetana Foundation with an aim to achieve Green lifestyle, Environmental and other initiatives. The Differently abled Service Cell conducted Mega Job Fare for Engineering Graduates with Disability on 30.04.2022. More than 92 graduates from across the State participated. The Institutional Social Responsibility Cell distributed more than 3000 books to government PU College students during June 2022. Under Ek Bharat Shreshtha Bharat programme -a GoI initiative, 50 students from Gurukul Kangri, Haridwar, visited BMSCE towards student cultural exchange programme. BMSCE hosted the IEEE SPS K12 training program for school teachers and students, where 120 participants were given electronic kits and they learnt basics of signal processing.

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

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

7th July to 7th August 2021, 27th August 2021, and 22nd October 2021 vaccine efforts: The NSS took active vaccination programmes to prevent the COVID-19 pandemic.

Youth Camp (2nd January 2021): The NSS organised a Youth Camp to provide young volunteers a chance to participate in interactive seminars, leadership development activities, and team-building activities. Women's Day Walkathon (8 March 2022): The NSS hosted a walkathon to promote gender equality and women's empowerment in honour of International Women's Day. Volunteers carried signs promoting gender equality and emphasising the value of women's contributions to society as they marched through the streets.

Abhaya Breath India Mission (May 23 and 24): The NSS worked with the Abhaya Breath India Mission to organise training sessions and seminars targeted at enhancing mental health and wellbeing. RD Camp: The NSS held an RD (Regular Deputation) Camp to provide NSS volunteers an opportunity to growth as individuals and develop social responsibility. BMSCE NSS volunteers took part in Green Sundays, a weekly event that aims to boost Bengaluru's tree population.Numerous other events were also planned, including: packing grocery kits, T-shirt painting, essay contests, plogruns, plastic fischer, beautifying government schools, job fairs for the disabled, exhibitions, cultural programmes, etc.

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

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

A. All of the above

on the Code of Conduct are organized

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

Independence Day Parade Training was conducted from 7t to 14th Aug 2021. Independence Day was celebrated with great enthusiasm and respect. Rashtriya Ekta Diwas was celebrated to reaffirm the inherent strength and resilience of our nation. 152nd Gandhi Jayanti was celebrated on 2nd Oct 2021. 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. Bharata Ratna Ambedkar Jayanthi was celebrated on 14th April 2022.

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

7.2 - Best Practices

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

Teaching Learning Center @ BMS College of Engineering

Objectives and Practice

The institution constituted a Teaching Learning Center (TLC) with an aim to support newly recruited faculty in enhancing their teaching skills, promoting student learning and fostering a culture of continuous professional development. The five-member core committee is entrusted with the responsibility to organize activities/programmes to upskill the young faculty members and achieve the following aims and objectives of the TLC:

- To groom young teachers into digitally proficient educators through training by leading academicians and professionals
- To collaborate with national and international institutes of technical education
- To organize programs for capacity enhancement, knowledge upgradation and exposure to emerging technological developments for the faculty
- To facilitate the sharing of best pedagogical practices among teachers across disciplines

Under the aegis of TLC, the following events/activities were also conducted

- Hands-on session on "Use of Canvas LMS for Course Management"
- 2. IPR Session on "Indian Patent: Filing and Grant Procedure"
- 3. OBE Workshops
- 4. Seminar on Robot Yantra
- 5. Training programme on Pedagogical innovations
- 6. Hands-on Workshop on Adobe Express

The TLC is providing platform to young faculty to upskill themselves through relevant and structured programmes/activities.

File Description	Documents
Best practices in the Institutional website	https://bmsce.ac.in/assets/files/agar/docu ments/2021-22/Best%20Practice- Teaching%20Learning%20Center.pdf
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)

Imparting high quality technical education continues to be the hallmark of its distinctiveness. From curriculum, state of the art infrastructure, best placement record and effective teaching learning activities blended with latest pedagogical approach sets BMSCE apart from other institutes. The institute proactively identifies the needs with current trend of marketwhile proposing new programmes of study. The Curriculum is updated regularly to keep pace with the fast-growing technological advances. In addition to academics, the institute focuses on holistic development of students through wide range of add-on facilities that go beyond the traditional classroom experience. The institute also organizes various programs for providing hands-on training for students on latest technology adopted by the industry. The Institution has MOUs with various organizations across the globe. It has developed many Centres of Excellence, cutting edge laboratories and incubation centres in collaboration with industries with an aim to enrich the learning experiences of the graduating students and to comply with the programme outcomes. The learning experiences and quality educational practices created at the institute supplemented with academic ambience, state of the art infrastructure, pedagogy, research, training provided to diverse student population is enabling the institute to produce graduates who are industry ready

File Description	Documents
Appropriate link in the institutional website	https://bmsce.ac.in/assets/files/agar/documents/2021-22/7.3.1-Distinctiveness.pdf
Any other relevant information	No File Uploaded

7.3.2 - Plan of action for the next academic year

Owing to the rising demand for cutting edge programmes, it is proposed to enhance the intake of the programmes commencing from 2022-23 and also introduce new programmes of study. To seek affiliation from University for research centres to offer Ph.D Programmes. The institute shall continue to take forward its vision of effective implementation of NEP 2020. Activities associated with NEP 2020 viz.,

1) To offer few Minor Degree Program titles from the academic

year 2023-24. The focus will be on IT/Emerging areas, with emphasis towards placement opportunity enhancement,

- 2) students' registration forAcademicBankofCredits(ABC) and
- 3) more emphasis on multi-disciplinary activities etc.

Strengthening E-Governance by Complete Automation of all Academic/Administrative Processes to Maintain Transparency.

IQAC plan to encourage conduction of multiple training programmes for students and staff leading to skill enhancement and technology trend awareness