YEARLY STATUS REPORT - 2020-2021

Part A
Data of the Institution

1.Name of the Institution	Mar Baselios College of Engineering and Technology
• Name of the Head of the institution	Dr Abraham T Mathew
• Designation	Principal
• Does the institution function from its own campus?	Yes
• Phone no./Alternate phone no.	04712545868/ 04712545869
• Mobile No:	8281145869
• State/UT	Kerala

	Pin Code	695015
2.Institutional status		
	Type of Institution	Co-education
	Location	Urban
	Financial Status	Self-financing
	Name of the Affiliating University	APJ Abdul Kalam Technological University
	Name of the IQAC Coordinator	Dr.M.J.Jayashree
	Phone No.	9349338747
	Alternate phone No.	0471-2545868(extn-207)
	IQAC e-mail address	iqac@mbcet.ac.in
	Alternate e-mail address	principal@mbcet.ac.in
3.Website address (Web link of the AQAR (Previous Academic Year)		https://mbcet.ac.in/wp-content/uploads/2021/07/NAAC_AQAR_2019-20.pdf
4.Whether Academic Calendar prepared during the year?		Yes
	if yes, whether it is uploaded in the Institutional website Web link:	https://mbcet.ac.in/academic-calendar
5.Accreditation Details		

Cycle	Grade	CGPA	Year of Accreditation	Validity from	Validity to
Cycle 1	A	3.13	2016	05/11/2016	31/12/2025

6.Date of Establishment of IQAC	07/04/2015

7.Provide the list of funds by Central / State Government UGC/CSIR/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.,

Institutional/Department /Faculty	Scheme	Funding Agency	Year of award with duration	Amount
Nil	Nil	Nil	Nil	Nil

8.Whether composition of IQAC as per latest NAAC guidelines	Yes
• Upload latest notification of formation of IQAC	**View File**

9.No. of IQAC meetings held during the year	2
• Were the minutes of IQAC meeting(s) and compliance to the decisions have been uploaded on the institutional website?	Yes
• If No, please upload the minutes of the meeting(s) and Action Taken Report	**View File**

10.Whether IQAC received funding from any of the funding agency to support its activities during the year?	No

11.Significant contributions made by IQAC during the current year (maximum five bullets)

- Conducted Academic Audit as per the affiliating University's guidelines
- Submitted Annual Report to UGC as per the UGC guidelines on July 31st 2021.
- Conducted the internal Administrative Audit of the College covering all Sections and Departments during April 2021
- Submitted the details for NIRF and ARIIA Ranking, KSHEC (Kerala State Higher Education Council) Survey of IT Infrastructure facilities and Coordinated the AICTE-CII online survey.

- **Initiated Strategic Plan 2022-2027**

12.Plan of action chalked out by the IQAC in the beginning of the Academic year towards Quality Enhancement and the outcome achieved by the end of the Academic year

Plan of Action	Achievements/Outcomes
1. Upgrading of infrastructure to cater to the requirements of autonomy towards significantly enhancing the quality of education. This includes facilities for a fully functional examination system and modernisation of labs to create a better learning environment.	i. Construction of an Examination Block with 12000 sq.feet is under progress. Office of Controller of Examinations, Secret Cell, Valuation Room, Data Centre and Computer Room, Server Room, etc. are ready. Controller of Examinations, Deputy Controllers and the staff have been appointed. Academic Management software has been procured. ii. Added equipment namely Water Analyzer worth Rs. 76,000; i50 GNSS Receiver and Electronic graphical pulse total station (Rs. 9,35,000) and Rotational Viscometer (Rs. 10 lakhs) to the Civil Engineering Laboratories. iii. Knowledge Lab (CSE) - An i9 workstation is procured for undertaking high-end computations in Artificial Intelligence and Cyber Security projects.
2. Re-organising of the Career Guidance and Placement Unit (CGPU) in order to create more opportunities for Placements, internships, Entrepreneurship and to establish more linkages with Industry.	i. College has set up the new portfolio of Corporate Relations and appointed a full time Professor as Director of Corporate Relations in October 2020. ii. The terms of reference for Director Corporate relations include students' training, internship, innovation, startups, etc. along with the development of corporate relations with industries and R&D organizations iii. A number of MoUs have been signed to expand the relationships with industries and R&D organizations iv. Significant development was the signing of MoU with GTech(Group of Technological Companies) which is a consortium of Companies in Kerala. v. Inclusion of Communication Skills, Hardware and Technical skills Development made mandatory for students in I,II, III and IV year vi. Training skills programmes (Foundational and Advanced) provided by Wadhwani Foundation for enhancing and encouraging entrepreneurship and employability skills vii. MoU with IBM for setting up Software Technology

	Lab and certificate programmes in AI, Cyber Security and Data Science viii. MoU with Centre for Development of Advanced Computing, Trivandrum (CDAC-T) for expert lectures, invited talks, staff and student training, industrial visits, sharing R and D projects etc. in numerous areas of Electronics, Communication, Computer Science etc.
3. Setting up of facilities for video recording and providing a better out of classroom teaching-learning experience that includes online teaching and flipped classrooms.	i. Smart classrooms have been set up by installing interactive smartboards in place of the blackboards ii. Teachers use the smartboards for the online classes making classes livelier and more interactive. iii Online platforms like Google Meet and Webex are available through campus wide licensing. Teachers use both the synchronous and asynchronous modalities for the lecture classes. Video recorded sessions are made available to the students for offline learning iv. Use of Linways® Learning Management system for systematic updation of attendance and course progress.
4. Inculcating a culture among students and faculty to work on projects that have more social relevance and creating a commitment towards Society and Environment.	i. Socially relevant projects are assigned to the students. These projects are identified through community interactions. ii. Outreach 150 – An IET MBCET initiative to inspire students and faculty towards inclusion of sustainable development through interaction with the rural communities and schools. UBA Cell also play important part in identifying and reaching out to the communities for this venture. iii. Collaboration with Govt. bodies like KILA, for promoting more awareness programmes, trainings and projects pertaining to the UN SDG goals. iv. College has been selected by the Water Resources Department of Government of Kerala as one College for study on Rejuvenation of Karamana River, along with other Colleges in Trivandrum based on the directions from the National Green Tribunal and has completed the tasks of the water quality measurement for DPR Preparation. v. Students are assigned projects like air pollution, water resource, energy, transportation etc. for mathematical modelling to sensitize them about matters of social importance.
5. Upgrading of faculty skill-set and technical knowledge through Faculty Development	Large number of Faculty Development programmes have been conducted with focus on technical as well as teaching skills of faculty members. Following FDPs/Workshops/STTPs needs special mention: Organized by the Teaching Learning Centre, MBCET a) Workshop on Effective Online Teaching Tools b) Seminar on National Education Policy 2020: New Challenges and Opportunities

Programmes, Conferences and Industry Training with specific focus.	for Technical Education in the Context of Autonomy c) Session on Course Delivery Cycle d) Session on Designing Questions to Assess Outcomes in Higher Learning Levels e) Staying Grounded in the Ferris Wheel Organized by the various Departments a)APJAKTU sponsored FDP on Recent Advances in Seismic and Wind Load Analysis b) AICTE sponsored STTP on High Performance Computing and Deep Learning for Image and Text Analysis c) ASAP Amazon Web Service Cloud Essentials Program d) Training Programme on PHP and MySQL in collaboration with Spoken Tutorial Project, IIT Bombay e) Hands on workshop on Simulation and Implementation of Digital Circuits f) FDP on Biomedical Engineering and its Applications g) ISTE Sponsored FDP on Smart Power Grid Technologies - Trends, Opportunities and Challenges h) Online FDP on Modern Control Techniques in Electrical Systems MCTES i) IET Sponsored Online FDP on Performance Improvement in Smart Grid using Artificial Intelligence Techniques (PISGAI) j) Faculty training for the IBM courses in Data Science, Artificial Intelligence and Cybersecurity k) Sessions on Some Applications of Mathematics in Engineering and Role of Science and Humanities Department in an Engineering College Initiation of Research groups/Cells within Departments and Inter Department as follows a) Assistive Technology group b) Artificial Intelligence group c) EV Research Cell d) Net Security Group e) Control Systems Research group f) Power Electronics group g) Structural Engineering group h) Transportation Engg. Group i) Environmental and Water Resources Engg. Group j) Communication Research Group k) Signal Processing Research Group l) Biomedical Research Group m) VLSI and Embedded System Research Groups n) Thermal Science, Machine Design and Manufacturing Group o) Intellectual Property Rights Cell MoUs with Industry for collaborative projects, research, internships, etc. a) MoU with BSNL for projects and internships b) Collaborative work with Dr. Sajeev V Thomas, Professor and Head of Neurology, SCT Institute for Medical Sciences and Technology with the faculty of CSE, for study of data on Women with Epilepsy using Machine Learning Techniques. c) Collaborative Project with CDAC-T on Software Defined Network and Security Analytics. d) Agreement with KSCSTE- National Transportation Planning and Research Centre (NATPAC), Trivandrum extended its collaborative efforts on Research and Development in Transportation Engineering with the Department since January 2021 e) Collaboration with agencies such as Vydyuthi Energy Services, ChargeMOD, Energy Management Centre (EMC) by Electrical and Electronics Dept. to create awareness about e-mobility, EV Technologies and enhance R&D works and career opportunities

for faculty and students in these emerging areas f) MoU between MBCET and Vydyuthi Energy Services (VES) for the collaborative venture of IET Outreach 150 Community Project In-house Project Funding by Management as seed Money for junior faculty to kickstart their research works - Total of 8 projects worth Rs. 4 lakhs under review for sanction during 2021-2022. Proposals from faculty to Govt. agencies for research grant: a) Research project proposals submitted to APJAKTU (1No.), AICTE (2No.) and KSCSTE (1) b) Following two proposals submitted to SERB, DST and are under review: i. Development of Smart Instrumentation for Electric Vehicles for Monitoring SOC and SOH of Batteries (EEE) ii. Traffic video summarization for intelligent transportation systems using deep learning techniques (CSE) Student project funding from University Secured funding for seven student projects from APJAKTU 2021.

13.Whether the AQAR was placed before statutory body?

	Yes

- Name of the statutory body

Name	Date of meeting(s)
College Council	24/01/2022

14.Whether institutional data submitted to AISHE

Year	Date of Submission
2019-2020	20/04/2020

15.Multidisciplinary / interdisciplinary

16.Academic bank of credits (ABC):

17.Skill development:

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

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

20.Distance education/online education:

Extended Profile

1.Programme	
1.1 Number of courses offered by the institution across all programs during the year	369

File Description	**Documents**
Data Template	View File

2.Student	
2.1 Number of students during the year	2124

File Description	**Documents**
Data Template	View File

2.2 Number of seats earmarked for reserved category as per GOI/ State Govt. rule during the year	140

File Description	**Documents**
Data Template	View File

2.3 Number of outgoing/ final year students during the year	546

File Description	**Documents**

Data Template	View File

3.Academic

3.1 Number of full time teachers during the year	161

File Description	Documents
Data Template	View File

3.2 Number of Sanctioned posts during the year	171

File Description	Documents
Data Template	View File

4.Institution

4.1 Total number of Classrooms and Seminar halls	62
4.2 Total expenditure excluding salary during the year (INR in lakhs)	613
4.3 Total number of computers on campus for academic purposes	707

Part B

CURRICULAR ASPECTS

1.1 - Curricular Planning and Implementation

1.1.1 - The Institution ensures effective curriculum delivery through a well planned and documented process

Effective delivery of the curriculum starts with the preparation of the academic calendar. The Head of the Department then allocates the Courses considering the expertise, specialization and preference of the faculty members. The Department prepares the timetable for theory, lab courses, and project work based on the credits allotted for each course, along with the slots for B.Tech. Minor and Honor courses. The Course Instructor prepares the course plan and required study materials. The instructor then delivers the course as per the plan using ICT tools (like Smart Boards) and innovative teaching-learning methodologies. Faculty members make sure that the curriculum gaps are identified and appropriately addressed, to ensure a smooth learning experience for the students. Content beyond syllabus taught for the Course, strengthens and expands the existing knowledge of the students. Remedial classes and counseling support are provided for Slow Learners, and Advanced Learners are encouraged to pursue MOOC courses to facilitate self-learning.

Apart from the structured curriculum, co-curricular, value-added and extra-curricular activities are also planned for the Semester.In addition to this, the Institute encourages students to undertake Internships, Field trips, Industrial visits etc., to equip the students to face real-time challenges and identify societal needs by incorporating critical thinking and problem solving.

Class committee monitors effectiveness of content delivered. Student performance is monitored through assessments. Based on the feedback, corrective measures are adopted.

https://mbcet.ac.in/academic-calendar/

File Description	Documents
Upload relevant supporting document	**View File**
Link for Additional information	**https://mbcet.ac.in/academic-calendar/**

1.1.2 - The institution adheres to the academic calendar including for the conduct of Continuous Internal Evaluation (CIE)

The Academic Calendar marks the date of commencement and last working day of the Semester along with the dates for the conduct of Continuous Assessment Tests (CAT), class committee meetings, publishing of internals and attendance, End Semester Examination, and declaration of results. The Calendar also includes the details like the upcoming holidays in the Semester. All academic activities are conducted as per the academic Calendar, except in unforeseen circumstances. The Faculty prepares the Course Plan in accordance with the academic calendar and the Head of

Department monitors the syllabus coverage for the Course. CAT timetable prepared by the Examination Cell is published, and conducted as per the schedule. Deadlines are prepared by the Dean Academic for the conduct of CAT (including the deadlines for the preparation of question paper, its scrutiny, evaluation and publication of marks) in accordance with the published academic calendar.The Course Instructors then prepares the question papers based on the revised Bloom's Taxonomy along with the scheme of evaluation, which is then reviewed by the Scrutiny Committee. Continuous evaluation and assessments are also done for Laboratory Course, Project Work and Seminars. College is following the outcome-based education.

https://mbcet.ac.in/academic-calendar/

File Description	Documents
Upload relevant supporting documents	**View File**
Link for Additional information	**https://mbcet.ac.in/academic-calendar/**

1.1.3 - Teachers of the Institution participate in following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the year. Academic council/BoS of Affiliating University Setting of question papers for UG/PG programs Design and Development of Curriculum for Add on/ certificate/ Diploma Courses Assessment /evaluation process of the affiliating University	B. Any 3 of the above

File Description	Documents
Details of participation of teachers in various bodies/activities provided as a response to the metric	**View File**
Any additional information	**View File**

1.2 - Academic Flexibility

1.2.1 - Number of Programmes in which Choice Based Credit System (CBCS)/ elective course system has been implemented

1.2.1.1 - Number of Programmes in which CBCS/ Elective course system implemented

10

File Description	Documents
Any additional information	**View File**
Minutes of relevant Academic Council/ BOS meetings	**View File**
Institutional data in prescribed format (Data Template)	**View File**

1.2.2 - Number of Add on /Certificate programs offered during the year

1.2.2.1 - How many Add on /Certificate programs are added during the year. Data requirement for year: (As per Data Template)

5

File Description	Documents
Any additional information	**No File Uploaded**
Brochure or any other document relating to Add on /Certificate programs	**View File**
List of Add on /Certificate programs (Data Template)	**View File**

1.2.3 - Number of students enrolled in Certificate/ Add-on programs as against the total number of students during the year

257

1.2.3.1 - Number of students enrolled in subject related Certificate or Add-on programs during the year

257

File Description	Documents
Any additional information	**No File Uploaded**
Details of the students enrolled in Subjects related to certificate/Add-on programs	**View File**

1.3 - Curriculum Enrichment

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

MBCET strives to inculcate value-based education and thus promote the holistic development of students, by integrating cross cutting issues relevant to Gender, Environment, Sustainability, Human values, and Professional Ethics into the curriculum. To focus on Human values and Ethics, courses like Life Skills and Professional Ethics have been offered to the students as part of the curriculum. In view of the social and overall personality development of the students in the college, MBCET organizes various activities including blood donation camps, community outreach programs through the NSS unit, UBA MBCET, and other social service wings of the various departments - Sparsham, Spandanam and Thanal. To make the students aware of the issues in the areas of sustainability and environment, curriculum offers compulsory courses on Sustainable Engineering to first year students in the college and elective courses on Disaster management, Energy conservation and management, Energy management and auditing, Environmental Assessment Impact and Environmental Health and Safety. Also, the nature club and various professional societies in the college organizevarious activities like planting the tree, conducting the workshops, celebrating the Environment day, Water day, Earth day, etc. every year, to sensitize the students about the importance of the environment. To address Gender sensitivity issues, the Women's Studies Unit (WSU) of MBCET organizes various seminars, workshops, invited talks and Quiz competitions. A Gender Equity Policy has been designed, approved and publicized besides the Environment Policy.

https://mbcet.ac.in/wp-content/uploads/2021/07/AQAR-Resource-Mobilization-Policy-2021.pdf

File Description	Documents
Any additional information	No File Uploaded
Upload the list and description of courses which address the Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum	View File

1.3.2 - Number of courses that include experiential learning through project work/field work/internship during the year

103

File Description	Documents
Any additional information	No File Uploaded
Programme / Curriculum/ Syllabus of the courses	View File

Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	**View File**
MoU's with relevant organizations for these courses, if any	**No File Uploaded**
Number of courses that include experiential learning through project work/field work/internship (Data Template)	**View File**

1.3.3 - Number of students undertaking project work/field work/ internships

416

File Description	Documents
Any additional information	**View File**
List of programmes and number of students undertaking project work/field work/ /internships (Data Template)	**View File**

1.4 - Feedback System

1.4.1 - Institution obtains feedback on the syllabus and its transaction at the institution from the following stakeholders Students Teachers Employers Alumni	**A. All of the above**

File Description	Documents
URL for stakeholder feedback report	**View File**
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management (Upload)	**View File**
Any additional information(Upload)	**View File**

1.4.2 - Feedback process of the Institution may be classified as follows	**A. Feedback collected, analyzed and action taken and feedback available on website**

File Description	Documents
Upload any additional information	**View File**

URL for feedback report	**https://mbcet.ac.in/feedback/**

TEACHING-LEARNING AND EVALUATION

2.1 - Student Enrollment and Profile

2.1.1 - Enrolment Number Number of students admitted during the year

2.1.1.1 - Number of sanctioned seats during the year

768

File Description	Documents
Any additional information	**View File**
Institutional data in prescribed format	**View File**

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

2.1.2.1 - Number of actual students admitted from the reserved categories during the year

28

File Description	Documents
Any additional information	**View File**
Number of seats filled against seats reserved (Data Template)	**View File**

2.2 - Catering to Student Diversity

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

The Institution organizes a two-weeks orientation program for the students when they join first year for their smooth transition from higher secondary education to professional education. Orientation program includes motivational talks, lab visits, campus tours, address by hobby club co-ordinators etc. The institute allots 20 students to each mentor who keeps in close touch with the allotted students and try to understand their academic and personal requisites in order to

help and extend customised support. Advanced learners and slow learners are identified on the basis of assignments and internal examinations.

Advanced Learners: Advanced learners are encouraged to interact with industry and academicians regularly. They are made to be part of the executive committees of Department Associations. To improve the overall learning skills, they are encouraged to attend Interactive talks and webinars on a regular basis. During peer group tutorials, fast learners are made leaders to guide slow learners. Advanced learners are encouraged to take MOOC courses of their interest. Honours subjects are offered by the institution for advanced learners. Institution takes a keen interest in motivating the students to take part in college seminar, university level exhibition, Research festival, Hackathons, Bootcamp etc.

Slow Learners: Slow learners are identified, and extra sessions and assignments are given for them. The system has proved to be effective in improving the academic performance of the students. Personal Counselling is given for slow learners to boost up their confidence level and to realize their weakness. Hours for remedial teaching are provided in the timetable itself.

File Description	Documents
Link for additional Information	Nil
Upload any additional information	**View File**

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

Number of Students	Number of Teachers
2124	161

File Description	Documents
Any additional information	**View File**

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

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

The Teaching - Learning Centre of the Institute puts forward innovative teaching initiatives. Active Co-operative Learning is a learning strategy in which the students are actively involved in learning. Flipped classes and group-based assignments are given to inculcate self-learning and teamwork among students. ACL delivery methods include Problem solving, Simulation, Brain/Mind Mapping, Flipped Classroom, Scaffolding, Think-Pair-Share. The various assessment methods used are Quiz, MCQ, Minute Paper, Surprise Tests, Peer Group presentations etc. Our College is equipped with the latest labs and most modern software's that enables students to have a novel experimental learning process. We have Dr APJ Abdul Kalam Centre for Innovation, Incubation and Entrepreneurship Centre for the purpose to inculcate entrepreneurship instincts among students. Kerala State Information Technology Infrastructure Limited (KSITIL) have chosen MBCET as one of the centres for conducting Skill Delivery Platform Kerala (SDPK) , a platform for engineering students to excel in Industry relevant skill programs. As part of the programme a high tech lab has been set up in our college with all modern facilities including, LG smart TV with remote and 2 stylus pens, Ceiling Mic, Speaker tracker camera and DV 10 Touch panel ,and Sonodyne Speakers. Students are exposed to real world problems and encouraged to do real world projects in subjects like sustainable engineering and design engineering.

https://mbcet.ac.in/teaching-learning/

File Description	Documents
Upload any additional information	No File Uploaded
Link for additional information	https://mbcet.ac.in/teaching-learning/

2.3.2 - Teachers use ICT enabled tools for effective teaching-learning process. Write description in maximum of 200 words

The college promotes the usage of latest technology in course content delivery. In order to promote this, the Teaching - Learning centre was formed. It inspires supports and strengthens new directions in pedagogy and learning at MBCET. The college conducts numerous programmes in association with TLC on advanced teaching and encourages the teaching and non-teaching members to participate in these and apply this knowledge in course content delivery. MBCET is using G-Suite as the Learning Management System (LMS) to facilitate online teaching and learning. The platform used for conducting online classes is Google Meet. Regular classes as well as assignments/test and remedial classes are conducted via Google Meet.

NPTEL: Self-learning is promoted among students using online resources from SWAYAM-NPTEL. The faculty members provide the students with the information regarding the ideal courses with respect

to their curriculum. The students are then given assignments and encouraged to take lectures as part of their assignments based on these contents.

DIGITAL LIBRARY:The fully-automated library was powered by KOHA on cloud and DSpace digital library software and had the facility to access e-resources 24x7 within and off-the campus.

FLIPPED CLASSROOM AND PEER GROUP LEARNING: Video lectures are provided to the students and doubt clearing sessions are arranged by the faculty to discuss these topics. This enables in developing the self-learning capability among students. Students are divided among groups and each group is assigned group projects as part of their course content, thereby developing teamwork and leadership skills among students.

MODE OF DELIVERY: Projectors are installed in every classroom and interactive boards are also used for effective content delivery. PPT, Animation Videos, YouTube videos, etc. are used as part of content delivery to effectively deliver the course content.

INTERACTIVE SMART BOARDS: In order to broaden the use of technology into education,10 interactive smart boards were purchased by the institution. It has indeed proven to be a great addition. This is because the faculty and the students have found the online classes using the smart boards as an excellent alternative to the offline classes, during the COVID lockdown. The interactive boards enabled the students to join via both online and offline mode during the contact classes paving way for remote education in the present engineering education scenario.

GRAPHIC TABLET: The faculty members have utilized graphic tablets for the purpose of taking online classes. The graphic tablets along with softwares like Google Jamboard, etc. enabled the faculty members to provide a competent teaching learning platform to the students from their homes. This has opened up avenues where the concept of work from home can be incorporated into the education sector.

File Description	Documents
Upload any additional information	**View File**
Provide link for webpage describing the ICT enabled tools for effective teaching-learning process	Nil

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

2.3.3.1 - Number of mentors

116	
File Description	Documents
Upload, number of students enrolled and full time teachers on roll.	**No File Uploaded**
Circulars pertaining to assigning mentors to mentees	**No File Uploaded**
mentor/mentee ratio	**View File**

2.4 - Teacher Profile and Quality

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

161	
File Description	Documents
Full time teachers and sanctioned posts for year (Data Template)	**View File**
Any additional information	**No File Uploaded**
List of the faculty members authenticated by the Head of HEI	**View File**

2.4.2 - Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.B Superspeciality / D.Sc. / D.Litt. during the year (consider only highest degree for count)

2.4.2.1 - Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.C Superspeciality / D.Sc. / D.Litt. during the year

30	
File Description	Documents
Any additional information	**View File**
List of number of full time teachers with Ph. D. / D.M. / M.Ch./ D.N.B Super specialty / D.Sc. / D.Litt. and number of full time teachers for year(Data Template)	**View File**

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

2.4.3.1 - Total experience of full-time teachers

1304

File Description	Documents
Any additional information	**View File**
List of Teachers including their PAN, designation, dept. and experience details(Data Template)	**View File**

2.5 - Evaluation Process and Reforms

2.5.1 - Mechanism of internal assessment is transparent and robust in terms of frequency and mode. Write description within 200 words.

Besides the KTU norms the College has constituted DQAC (Department Quality Assurance Cell) which appoints a Subject Expert for scrutinizing the quality of the question paper and CO's compliance of each Course. The question paper is further scrutinized by the Module Co-ordinator. The internal examination question papers are framed according to the Bloom's Taxonomy for facilitating higher levels of thinking in students. The mark distribution of each question is checked by the Subject Expert and Module Co-ordinator and the required changes are noted down in the question paper and reverted to the Course Instructor. Then, the Course Instructor will make the required corrections and submit the final version of the question paper to the Department Exam Cell Representative. The Module Co-ordinator will submit a report of the scrutiny of the question paper of that module to the HoD. The course coordinator evaluates the answer sheets adhering to the scheme of valuation. The answer sheets are also scrutinized by the subject expert. For assignment and internal examination question papers, the mapping of questions to Course Outcomes is shown at the end of the question paper. Student's attendance is strictly monitored. To make the students more committed Parent- Teacher meeting is arranged. To boost up the academic performance several awards are given at the Institution Level.

File Description	Documents
Any additional information	**View File**
Link for additional information	**Nil**

2.5.2 - Mechanism to deal with internal examination related grievances is transparent, time- bound and efficient

Grievance Redressal Committee is constituted to addresses the grievances of the students and to consider their appeals. The committee looks into students' grievances which include matters related to leave, internal examinations and internal assessments. The Committee has Vice Principal of the College as Chairman and senior faculty who are professors as its members.

After every internal examination the students get an opportunity to view their evaluated answer scripts and may get the anomalies rectified, if any, in discussion with the faculty handling the course. The marks scored by the students in tests and assignments are published regularly after evaluation to maintain transparency. Two tests and a minimum of 3 assignments are considered for internal assessment marks. The internal assessment marks are published by the departments at the end of the semester. Along with the published marks, students are informed to submit grievances, if any, to the Dean (Academic Affairs) through proper channel with supporting documents. The student grievances will be submitted to the Grievance Redressal Committee for further consideration. The Committee scrutinises the cases and based on the merit, in consultation with the faculty concerned, recommends corrections, if any, to the original marks awarded to the student. These are conducted in a timely manner so as to submit the marks in the University portal according to the deadlines provided by the University.

File Description	Documents
Any additional information	**View File**
Link for additional information	**Nil**

2.6 - Student Performance and Learning Outcomes

2.6.1 - Teachers and students are aware of the stated Programme and course outcomes of the Programmes offered by the institution.

POs and PSOs of the departments have been included in the pages of the corresponding departments in the college website www.mbcet.ac.in

The POs and PSOs are disseminated in all the staffrooms, classrooms, library and laboratories.

POs and PSOs are also communicated to students via Assignment Books, lab manuals and lab records, hand books.

The Course Outcomes are laid out for each subject by the APJ Abdul Kalam Technological University and if needed the subject expert can modify and frame it according to Bloom's Taxonomy. The Course

Outcomes so framed are further reviewed by the module coordinator and the Department Quality Assurance Cell (PAQIC). For theory subjects and laboratory classes, Course Outcomes are communicated by the faculty handling the subject.

The data being voluminous only samples of course outcomes are attached.

Link for COs of B.Tech and M.Tech Autonomous batches (https://mbcet.ac.in/curriculum/)

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for Additional information	**https://mbcet.ac.in/curriculum/**
Upload COs for all courses (exemplars from Glossary)	**View File**

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

The evaluation of attainment of Course Outcome is carried out based on the performance of the students in continuous assessment tests/ assignments/ mini-projects/ tutorials/ objective tests and final examinations.

Continuous Internal Assessment:

Direct Method: The question papers are formulated in such a way that by calculating the marks received by the students, its attainment can be calculated. The COs are said to be attained through assignments and internal exams, if the mark scored by the student is above 60% of the maximum marks awarded to the question. The ratio of students with marks above 60% to total number of students who attempted the question are then calculated.

Indirect Method: Survey is conducted for the students to check the response of students with respect to the attainment of COs. All responses above "FAIR" are counted as CO attained. Based on the following formula, the overall CO attainment percentage is calculated.

CO(%) = (0.8 x Direct method + 0.2 x Indirect Method) x 100%

University results:

The number of students graduating in the stipulated time is indicator of the attainment of COs of various courses as COs are related to POs and POs reflect number of students graduating in the

stipulated time. Attainment of CO is measured using the number of students (as a percentage) who score grade point > 6 in the Examinations in a given course and graduating in the stipulated time of study. Based on both, the overall CO attainment is calculated as

CO(%) = (0.8 x University result ratio + 0.2 x CIA CO ratio) x 100%

Based on the value of CO obtained levels of attainment are calculated:

(60 < CO% < 70) - 1

(70 < CO% < 80) - 2

(CO% > 80) - 3

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

2.6.3 - Pass percentage of Students during the year

2.6.3.1 - Total number of final year students who passed the university examination during the year

390

File Description	Documents
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	**View File**
Upload any additional information	**View File**
Paste link for the annual report	**page 5-6, https://online.fliphtml5.com/vxsoh/smro/#p=8**

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://mbcet.ac.in/wp-content/uploads/2022/01/STUDENTS-FEEDBACK-Oct-2020.pdf

RESEARCH, INNOVATIONS AND EXTENSION

3.1 - Resource Mobilization for Research

3.1.1 - Grants received from Government and non-governmental agencies for research projects / endowments in the institution during the year (INR in Lakhs)

3.1.1.1 - Total Grants from Government and non-governmental agencies for research projects / endowments in the institution during the year (INR in Lakhs)

38.45

File Description	Documents
Any additional information	**No File Uploaded**
e-copies of the grant award letters for sponsored research projects /endowments	**View File**
List of endowments / projects with details of grants(Data Template)	**View File**

3.1.2 - Number of departments having Research projects funded by government and non government agencies during the year

3.1.2.1 - Number of departments having Research projects funded by government and non-government agencies during the year

4

File Description	Documents
List of research projects and funding details (Data Template)	**View File**
Any additional information	**No File Uploaded**
Supporting document from Funding Agency	**View File**
Paste link to funding agency website	**Nil**

3.1.3 - Number of Seminars/conferences/workshops conducted by the institution during the year

3.1.3.1 - Total number of Seminars/conferences/workshops conducted by the institution during the year

79

File Description	Documents
Report of the event	**View File**
Any additional information	**No File Uploaded**
List of workshops/seminars during last 5 years (Data Template)	**View File**

3.2 - Research Publications and Awards

3.2.1 - Number of papers published per teacher in the Journals notified on UGC website during the year

3.2.1.1 - Number of research papers in the Journals notified on UGC website during the year

16

File Description	Documents
Any additional information	**View File**
List of research papers by title, author, department, name and year of publication (Data Template)	**View File**

3.2.2 - Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during the year

3.2.2.1 - Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings during the year

24

File Description	Documents
Any additional information	**View File**
List books and chapters edited volumes/ books published (Data Template)	**View File**

3.3 - Extension Activities

3.3.1 - Extension activities are carried out in the neighborhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the year

The institution undertakes many activities which sensitize the students to develop social values, widespread their responsibilities and knowledge in societal issues and problems by making them to involve with the community people. This is facilitated through the department associations and the wings of NSS and UBA. Completion of the electrification work of two houses, visit to a charitable organization, distribution of masks and sanitizers to the students of a school etc. are some of the activities which help in imbibing in students, the values of social responsibility such as, to help people in need and distress and to understand and share the need of under privileged children and old people. The recycling of calendar papers to make bags creates awareness about the care for the nature and sustainability in the young minds. National Service Scheme plays a vital role in the improvement of human life through inculcating social, economic, cultural, and ethical values in students. Participation in NSS activities provides the base for experiential learning that can be related to concepts discussed in the classroom. The students develop a sense of social and civic responsibility and gain skills in organizing community participation. They acquire leadership qualities and develop skills like public speaking, raising funds, educating others etc. They gain confidence and get to learn from their failures. The tasks undertaken give the students a chance to know the society in a greater depth. They become mentally strong and build themselves up to be compassionate adults even while working in a rash environment, being able to think about others before one's own selfish reasoning. They learn about team spirit, hard work and brotherhood. On the whole, the students are fortunate to have a platform for personality development also for serving the society.

File Description	Documents
Paste link for additional information	**https://mbcet.ac.in/outreach/**
Upload any additional information	**View File**

3.3.2 - Number of awards and recognitions received for extension activities from government / government recognized bodies during the year

3.3.2.1 - Total number of awards and recognition received for extension activities from Government/ government recognized bodies during the year

30

File Description	Documents
Any additional information	No File Uploaded

Number of awards for extension activities in last 5 year(Data Template)	**View File**
e-copy of the award letters	**View File**

3.3.3 - Number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc., (including the programmes such as Swachh Bharat, AIDS awareness, Gender issues etc. and/or those organized in collaboration with industry, community and NGOs) during the year

3.3.3.1 - Number of extension and outreach Programs conducted in collaboration with industry, community and Non-Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the year

58

File Description	Documents
Reports of the event organized	**View File**
Any additional information	**No File Uploaded**
Number of extension and outreach Programmes conducted with industry, community etc for the last year (Data Template)	**View File**

3.3.4 - Number of students participating in extension activities at 3.3.3. above during the year

3.3.4.1 - Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the year

173

File Description	Documents
Report of the event	**View File**
Any additional information	**No File Uploaded**
Number of students participating in extension activities with Govt. or NGO etc (Data Template)	**View File**

3.4 - Collaboration

3.4.1 - The Institution has several collaborations/linkages for Faculty exchange, Student exchange, Internship, Field trip, On-the- job training, research etc during the year

260	
File Description	Documents
e-copies of linkage related Document	**View File**
Details of linkages with institutions/industries for internship (Data Template)	**View File**
Any additional information	**View File**

3.4.2 - Number of functional MoUs with national and international institutions, universities, industries, corporate houses etc. during the year

3.4.2.1 - Number of functional MoUs with Institutions of national, international importance, other universities, industries, corporate houses etc. during the year

7	
File Description	Documents
e-Copies of the MoUs with institution./ industry/corporate houses	**View File**
Any additional information	**No File Uploaded**
Details of functional MoUs with institutions of national, international importance, other universities etc during the year	**View File**

INFRASTRUCTURE AND LEARNING RESOURCES

4.1 - Physical Facilities

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

Creating a better environment for education is always the main aim of our institution. It ensures adequate availability and optimal utilization of physical infrastructure for the excellence in education through advanced technologies. An assessment of the existing infrastructure is carried out in each academic year and according to the suggestions, replacement or up gradation is done thereby enhancing innovative teaching and learning facilities. All the classrooms have good acoustic condition with LCD projectors and internet facilities among which ten classrooms are

smart classrooms (supplied with smart boards and cameras). There are more than one seminar hall in each department with addressing area, whiteboard, LCD projector, internet connection and cameras. Each hall has a maximum capacity of 150 students. The laboratories are well equipped with multiple sets of apparatus. Latest configuration desktops and softwares are provided in computer labs. The lab attached to the mechanical engineering department was recently upgraded. The library consists of a wide variety of books and an adequate number of journals is at the service of students and faculties. The library is computerized with all the features of library management systems. It maintains e-books as well. The institution has an exam wing to house the office of the Controller of Examination and the Deputy COEs. This wing deals with the question paper setting, assigning supervisors, preparation of exam schedule, paper valuation , declaration of results and awarding degrees and certificates. An academic management software called Linways is installed in the college which provides centralized and automated administration.

https://mbcet.ac.in/resources/library/

https://mbcet.ac.in/departments/civil-engineering/facilities/

https://mbcet.ac.in/departments/computer-science-engineering/facilities/

https://mbcet.ac.in/departments/science-humanities/facilities/

https://mbcet.ac.in/departments/electronics-communication-engineering/facilities/

https://mbcet.ac.in/departments/electrical-electronics-engineering/facilities/

https://mbcet.ac.in/departments/mechanical-engineering/facilities/

https://mbcet.ac.in/departments/physical-education/facilities/

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

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

The institution gives due importance to extracurricular activities along with academic subjects for the all-round development of the students. It helps the students not only to improve their academic performance but also to explore their interests and create broader perspectives. The

activities regarding this are coordinated by the Physical Education Department ably assisted by the Students' Senate and members of the staff. Besides, about 20 students Clubs/Committees/Cells function on the campus to ensure meaningful involvement of the students in the co-curricular, extra-curricular and cultural activities. MBCET emphasizes the importance of sports as integral part of the curriculum and provides sports facilities (indoor and outdoor) to the students. College has a multi-purpose Hall with a 3 flood light court for Shuttle Badminton, one Net Ball court and a Yoga hall and has separate halls for Table Tennis, Chess, and Caroms. The college has a full-fledged 6 station –multi gymnasium, and a Yoga club which aims at the physical, mental and spiritual practice and discipline. As part of the soft skill development, class hours are utilized to foster the public speaking ability among students. To develop the cultural traits among the students, the institution regularly carries out inter branch cultural fest called BASELIAN FEST and CROSSROADS – a national inter collegiate Cultural and Technical fest is conducted annually.

https://mbcet.ac.in/departments/physical-education/facilities/

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

4.1.3 - Number of classrooms and seminar halls with ICT- enabled facilities such as smart class, LMS, etc.

62

4.1.3.1 - Number of classrooms and seminar halls with ICT facilities

62

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

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

4.1.4.1 - Expenditure for infrastructure augmentation, excluding salary during the year (INR in lakhs)

306.34927

File Description	Documents
Upload any additional information	**No File Uploaded**
Upload audited utilization statements	**View File**
Upload Details of budget allocation, excluding salary during the year (Data Template)	**View File**

4.2 - Library as a Learning Resource

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

MBCET Central library is well-equipped with latest infrastructure and well-stocked with a good collection of books. Library migrated to KOHA ILMS version 20.11 January 2021. Our Department Libraries are automated with KOHA ILMS version 3.12.06 since 2014 . From 2017 to 2020 library circulation functions have been automated through Ecoleaide ERP. Barcode based circulation system is followed. All books are classified based on DDC 20th edition.The central library has a good collection of records including 26783 volumes and 10879 titles, 73 printed national journals, E-Journals packages such as IEEE (Instituon of Electronics and Electrical Engineers)-ASPP. ASCE (Americal Society for Civil Engineers), ASME (American Society for Mechanical Engineers), IEI (India), E-Books from EBSCO Engineering Host (6500+ books) and DELNET Digital database, 1450 CD-ROMS and BIS codes. The Library has Remote Access to e-resources using Knimbus Remote access facility that can be accessed in Mobile application also. The library has Institutional Digital Repository using DSPACE Digital library OSS. Collection of 1888 volumes are in the department libraries attached to each department.

https://mbcet.ac.in/resources/library/

KOHA OPAC - http://library.mbcet.ac.in/

File Description	Documents
Upload any additional information	**No File Uploaded**
Paste link for Additional Information	**https://mbcet.ac.in/resources/library/**

4.2.2 - The institution has subscription for the following e-resources e-journals e-ShodhSindhu Shodhganga Membership	**A. Any 4 or more of the above**

e-books Databases Remote access toe-resources

File Description	Documents
Upload any additional information	**View File**
Details of subscriptions like e-journals,e-ShodhSindhu, Shodhganga Membership etc (Data Template)	**View File**

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

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

16.10717

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

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

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

3560

File Description	Documents
Any additional information	**No File Uploaded**
Details of library usage by teachers and students	**View File**

4.3 - IT Infrastructure

4.3.1 - Institution frequently updates its IT facilities including Wi-Fi

MBCET Information Technology services provide secure and seamless access to information resources in all forms and provide exceptional support to students, faculty and staff. This is done by the Information Technology Management and Services Department (ITMS) . All related infrastructure to facilitate education, research, communication facility, computing network environment are provided by the ITMS. The ratio of computer to students is 1:4. All PC'sare connected to Local Area Network (LAN). Campus wide Wi-Fi is given to faculty and students on their laptops and mobile phones. The Wi-Fi facility is updated according to the requirement and it was last updated in April 2021. College has an Internet Leased Line of 100 mbps bandwidth, 1:1 uncompressed on optical fiber. All staffrooms are provided with network connected PC's and each department has software labs with computing facility for the students. Several licensed soft wares are made available to each departments. Free soft wares are also made available. Video lectures for the effective Teaching – Learning processes are captured by the facilities provided by ITMS. A Central Computing Facility (CCF) is also working in the institution to provide central site for hands on computer training with 65 high performance computers. Dual boot operating systems are available in the systems. The college has a provision of central storage space and email service for all staff. Student management system , course management system, digital library, Biometric attendance system, streaming media server , E-mail server and other campus management software's are aided by ITMS department of our college. The budget provision for IT is given in the Audited financial statement.

Policies-Update.pdf (mbcet.ac.in)

File Description	Documents
Upload any additional information	**View File**
Paste link for additional information	**Policies-Update.pdf (mbcet.ac.in)**

4.3.2 - Number of Computers

707

File Description	Documents
Upload any additional information	**No File Uploaded**
Student – computer ratio	**View File**

4.3.3 - Bandwidth of internet connection in the Institution

A. ≥ 50MBPS

File Description	Documents
Upload any additional Information	**View File**
Details of available bandwidth of internet connection in the Institution	**View File**

4.4 - Maintenance of Campus Infrastructure

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

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

377.60846

File Description	Documents
Upload any additional information	**No File Uploaded**
Audited statements of accounts.	**View File**
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	**View File**

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

The Existing policy of the institution regarding the maintenance and utilization of physical academic and support facilities is as follows. The chairman of the management council entrust the Bursar with the above task. Annual maintenance is done every year including the painting, repair (if any) replacement of damaged items such as furniture, electrical gadgets etc. Smart class rooms are instituted in all the wings. The Electrical wing of the college takes care of the repair, maintenance or replacement of electrical fittings as per the requirements. The labs updation and maintenance, installation of new machineries replacement of new systems instead of outdated ones are done as per the requirement submitted by the respective heads of the departments. The Information Technology Management System (ITMS) is a separate wing which takes care of all the computer labs and IT enabled facilities. The librarian takes care of the requirements of library and routine affairs over major maintenance and updation work if any are brought to the notice of

the Bursar who in turn gets it done. The college buses are maintained properly. The sports complexes of the college, the gymnasium and the basketball court, tennis court etc. are managed by the Physical Education director. The management and maintenance of the boy's hostel and the ladies hostel is also done by the Bursar and the Assistant Bursar. An estate manager and the house keeping staff both male and female assist the Bursar in the execution of all such works. Full time Counsellor takes care of the counselling needs of the students while the Nursing Superintend is at the service of those in need at the nursing station. . The structure of the procedures and policies of maintenance is represented in the flow chart given in the website.

https://mbcet.ac.in/resources/maintenance-cell/

https://mbcet.ac.in/resources/library/

https://mbcet.ac.in/departments/civil-engineering/facilities/

https://mbcet.ac.in/departments/computer-science-engineering/facilities/

https://mbcet.ac.in/departments/science-humanities/facilities/

https://mbcet.ac.in/departments/electronics-communication-engineering/facilities/

https://mbcet.ac.in/departments/electrical-electronics-engineering/facilities/

https://mbcet.ac.in/departments/mechanical-engineering/facilities/

https://mbcet.ac.in/departments/physical-education/facilities/

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	https://mbcet.ac.in/resources/maintenance-cell/

STUDENT SUPPORT AND PROGRESSION

5.1 - Student Support

5.1.1 - Number of students benefited by scholarships and free ships provided by the Government during the year

5.1.1.1 - Number of students benefited by scholarships and free ships provided by the Government during the year

165	

File Description	Documents
Upload self attested letter with the list of students sanctioned scholarship	**View File**
Upload any additional information	**View File**
Number of students benefited by scholarships and free ships provided by the Government during the year (Data Template)	**View File**

5.1.2 - Number of students benefitted by scholarships, free ships etc. provided by the institution / non- government agencies during the year

5.1.2.1 - Total number of students benefited by scholarships, free ships, etc provided by the institution / non- government agencies during the year

190	

File Description	Documents
Upload any additional information	**View File**
Number of students benefited by scholarships and free ships institution / non- government agencies in last 5 years (Date Template)	**View File**

5.1.3 - Capacity building and skills enhancement initiatives taken by the institution include the following: Soft skills Language and communication skills Life skills (Yoga, physical fitness, health and hygiene) ICT/computing skills	**A. All of the above**

File Description	Documents
Link to institutional website	**www.mbcet.ac.in**
Any additional information	**View File**
Details of capability building and skills enhancement initiatives (Data Template)	**View File**

5.1.4 - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year

756

5.1.4.1 - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year

756

File Description	Documents
Any additional information	**View File**
Number of students benefited by guidance for competitive examinations and career counseling during the year (Data Template)	**View File**

5.1.5 - The Institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases Implementation of guidelines of statutory/regulatory bodies Organization wide awareness and undertakings on policies with zero tolerance Mechanisms for submission of online/offline students' grievances Timely redressal of the grievances through appropriate committees	A. All of the above

File Description	Documents
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	**View File**
Upload any additional information	**View File**
Details of student grievances including sexual harassment and ragging cases	**No File Uploaded**

5.2 - Student Progression

5.2.1 - Number of placement of outgoing students during the year

5.2.1.1 - Number of outgoing students placed during the year

160

File Description	Documents
Self-attested list of students placed	**View File**
Upload any additional information	**View File**

5.2.2 - Number of students progressing to higher education during the year

5.2.2.1 - Number of outgoing student progression to higher education

71

File Description	Documents
Upload supporting data for student/alumni	**No File Uploaded**
Any additional information	**No File Uploaded**
Details of student progression to higher education	**View File**

5.2.3 - Number of students qualifying in state/national/ international level examinations during the year (eg: JAM/CLAT/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations)

5.2.3.1 - Number of students qualifying in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations) during the year

13

File Description	Documents
Upload supporting data for the same	**View File**
Any additional information	**No File Uploaded**

5.3 - Student Participation and Activities

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

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

5

File Description	Documents
e-copies of award letters and certificates	**View File**
Any additional information	**No File Uploaded**
Number of awards/medals for outstanding performance in sports/cultural activities at university/state/national/international level (During the year) (Data Template)	**View File**

5.3.2 - Institution facilitates students' representation and engagement in various administrative, co-curricular and extracurricular activities (student council/ students representation on various bodies as per established processes and norms)

MBCET College Senate is the official Students' Council. It consists of an Executive Committee, Chairperson, Vice Chairperson, General Secretary, Joint Secretary, Arts Secretary, Sports Secretary, Treasurer, Media Secretary, Social Service Secretary, two Staff Advisors and two class representatives from each class. The Senate acts as a representative body of all students. It takes initiatives and coordinates efforts towards development of cultural, social and recreation programmes of interest to the students. The Senate also coordinates cultural, sports and technical events of the Institution such as the Baselian Fest which involves cultural and literary competitions for the students, Crossroads which is a Techno Cultural Fest, Sports Meets etc.

Administrative bodies/committees of the Instituition with student representation include Course Committees and Class Committees as directed by the Kerala Technological University. Course Committee is for common courses offered to students admitted for the B.Tech Programme irrespective of their branch of study. The Committee includes four Student Representatives as members. Beginning from the third semester, all branches of study will have class committees for every Semester constituted by the respective Heads of Departments. This committee has two Student Representatives nominated by the Head of the Department.

The College also has an IEDC Executive Committee with student representation. The Innovative and Entrepreneurship Development Centre (IEDC) has an executive committee working as a team to identify the opportunities and challenges around social as well as engineering scenarios. The core working committee of IEDC has 14 student members and one faculty member designated as the Nodal

Officer. The student members of executive committee are Chief Executive Officer, Chief Operations officer, Chief Technical Officer, Chief Creative Officer, Chief Marketing Officer, Chief Social Officer, Chief Finance Officer and 7 student members as Executive Creative Curators.

In addition to the above, Professional bodies namely IEEE, IET, ISTE, CSI, ACM, ASCE and ASME with student representation are actively functioning in the College.

https://mbcet.ac.in/orders/

File Description	Documents
Paste link for additional information	**https://mbcet.ac.in/orders/**
Upload any additional information	**No File Uploaded**

5.3.3 - Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions)

5.3.3.1 - Number of sports and cultural events/competitions in which students of the Institution participated during the year

107

File Description	Documents
Report of the event	**View File**
Upload any additional information	**No File Uploaded**
Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions (Data Template)	**View File**

5.4 - Alumni Engagement

5.4.1 - There is a registered Alumni Association that contributes significantly to the development of the institution through financial and/or other support services

Mar Baselios College of Engineering and Technology Alumni Association (MBCETAA), the alumni association of MBCET, was conceived with the help and co-operation of the Principal, and Management of the college. The association was formally inaugurated on 25th of January, 2009.The alumni association is registered as a society in accordance with the Travancore-Cochin Literary,

Scientific and Charitable Societies Registration Act, 1955, Registration number : TVM/TC/684/2020 on 21/12/2020. MBCETAA supports the institution in fields of Curriculum development, Placement and Training, social obligations, among others. MBCETAA provides financial support to Programmes intended for alumni/student development. MBCETAA sponsors the Mar Baselios Youth Excellence Award, intended to identify and promote the pursuit of Innovation, entrepreneurship and overall excellence among the outgoing final year Engineering students in Kerala.The award comprises a Prize Money of Rs. 1,00,000/-, Certificate, and Memento. Annual alumni meet "RENDEZVOUS" is organized to bridge the sense of unity among all alumni members. MBCETAA Middle East Chapter consists of UAE, Oman, Qatar, Saudi Arabia.

File Description	Documents
Paste link for additional information	**https://mbcet.ac.in/alumni/**
Upload any additional information	**No File Uploaded**

5.4.2 - Alumni contribution during the year (INR in Lakhs)	**E. <1Lakhs**

File Description	Documents
Upload any additional information	**View File**

GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 - Institutional Vision and Leadership

6.1.1 - The governance of the institution is reflective of and in tune with the vision and mission of the institution

- **The vision and mission of the institution is to improve the efficacy of governance making it more expedient. Since the conferment of autonomy towards better governance, the number of Deans has been increased from three to five:**

(i) Dean Administration

(ii) Dean Academic Affairs - UG

(iii) Dean Research & Consultancy

(iv) Dean PGSR

(v) Dean Student Affairs

Roles and responsibilities have been identified and assigned to each of them.

- **Office of the Controller of Examinations and two Deputy Controller of Examinations**
- **Separate building for the office of the Controller of Examinations and valuation camp**
- **The Academic Council and Board of Studies have been constituted**
- **Office administration will be streamlined through proper documentation and creating facilities for the same**
- **To disseminate the vision and mission of the institution e-bulletin has been started for publicizing the important activities of the institute.**
- **Information dissemination through social media.**
- **The Founder of the College (Late) His Beatitude Moran Mor Cyril Baselios Catholicos, in 2002, stated that "this Engineering College is meant to train and develop men and women of higher caliber, equipped with the most modern scientific knowledge and technological skills destined not only to help our people in their march towards progress but also to bring glory and honour to our people and our country…The Students of our College are to strive for excellence and skills and in the pursuit of success in life, in terms of their commitment to bring happiness to our fellow beings and for the development of our Nation." College envisions "To be an Institution moulding globally competent Professionals as epitomes of Noble Values" and the Mission is "To transform the Youth as technically competent, ethically sound and socially committed Professionals by providing a vibrant learning ambience" The motto is "DUC IN ALTUM". The Strategic Plan and the Programme Educational Objectives are all aligned with the Vision and Mission of the College. Good governance practices and the egalitarian approach are maintained in enabling the faculty in the decision-making process by way of their membership in the Statutory Bodies and also in the administration.**
- **https://mbcet.ac.in/about/#vision-mission**
- **https://mbcet.ac.in/about/administration/**

File Description	Documents
Paste link for additional information	**https://mbcet.ac.in/about/administration/**
Upload any additional information	**No File Uploaded**

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

The Management has created multiple levels in the administration besides The Principal & The Vice Principal, creating more posts of Deans in the wake of autonomous status. The roles and responsibilities of the Deans have been defined with a view to decentralize the Management functions and have communicated the following as the major roles and responsibilities of the Deans.

1. Playing an active role in coordinating the governance of the College
2. Contributing actively in developing the College's Vision, Mission, Goals, Strategic plans, Curriculum development plans and the policies through extensive consultations
3. Leadership in establishing and maintaining a cooperative, collegial work climate
4. Provide inputs for developing a College budget;
5. Leadership in the design of processes for supervising, evaluating, and supporting the Departments deliver good quality education and research.
6. Providing the necessary support in the performance review and appraisal for the career advancement of faculty and staff and identifying the training needs
7. Taking lead roles in formulating the policies and procedures at the College
8. Suggesting means for encouraging resource mobilization in support of the College's goals and the goals of its departments and programmes
9. Leadership in Alumni coordination, community outreach and the public service efforts.
10. Any other roles and responsibilities assigned/delegated from time to time
11. In addition to the above, the Board of Studies for each department, the Academic Council and the College Council function in the college to ensure the distribution of the administrative work.

- https://mbcet.ac.in/about/strategic-plan/
- https://mbcet.ac.in/about/administration/

File Description	Documents
Paste link for additional information	**https://mbcet.ac.in/about/administration/**
Upload any additional information	No File Uploaded

6.2 - Strategy Development and Deployment

6.2.1 - The institutional Strategic/ perspective plan is effectively deployed

In the Strategic Plan the Goal 1 was stated as "Be among the highly respected institutions in the country for undergraduate and post graduate studies in Engineering and Technology" The objective is to "Benchmark the pedagogy with that of the top tier Institutions in the Country" For this there were multiple strategies of which one of them was "Enhance faculty and student interaction with reputed institutions/ organizations through training programmes, workshops and collaborative projects". College has taken up various measures to build the strengths for achieving the objective. One important step was to create a a separate division called Corporate Relations and appointing a full time Professor as Director Corporate Relations. Through the initiatives of this Directorate it has been possible to establish linkages with the industries. Directorate of Corporate Relations will be focussing on skill development, entrepreneurship, industry-institute linkages and the innovations. College has entered into the memorandum of understanding the consortium of companies working from the Trivandrum Technopark, namely GTech. There are around 200 companies in the consortium who will empathetically support the college in its pursuits for achieving the vision. There are linkages through other MoUs as well which will add value to our plans.

https://mbcet.ac.in/about/strategic-plan/

File Description	Documents
Strategic Plan and deployment documents on the website	**No File Uploaded**
Paste link for additional information	**https://mbcet.ac.in/about/strategic-plan/**
Upload any additional information	**No File Uploaded**

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

MBCET is administered by the Malankara Catholic Church through the charitable Society namely Malankara Catholic Educational Society which is registered with the Government of India. His Beatitude Moran Mor Baselios Cardinal Cleemis Catholicos is the Patron and the Manager. Functions of the top management are discharged through the Bursar and Assistant Bursar. They take care of Infrastructure development, Appointments and Promotions, Finance and Accounts, Hostels, Bus, Canteen, Stores, House-keeping, e-governance and IT Management and Services. The Principal is the Head of all academic matters and the general administration. The Deans and the Heads of the Departments form the Academic lead team supported by the Office Superintendent, Controller of Examinations, Librarian and so on. The Statutory bodies of Academic Council, Boards of Studies and Finance Committee provide the complete system for the College as an autonomous institution.

The appointment and service rules, etc are managed by the Bursar and the Principal. In order to make the administrative process effective, various policies and procedures have been streamlined.

- **https://mbcet.ac.in/about/administration/**

File Description	Documents
Paste link for additional information	**Nil**
Link to Organogram of the Institution webpage	**https://mbcet.ac.in/about/administration/**
Upload any additional information	**No File Uploaded**

6.2.3 - Implementation of e-governance in areas of operation Administration Finance and Accounts Student Admission and Support Examination	**A. All of the above**

File Description	Documents
ERP (Enterprise Resource Planning)Document	**No File Uploaded**
Screen shots of user interfaces	**View File**
Any additional information	**View File**
Details of implementation of e-governance in areas of operation, Administration etc (Data Template)	**View File**

6.3 - Faculty Empowerment Strategies

6.3.1 - The institution has effective welfare measures for teaching and non- teaching staff

For the Teaching faculty, the facilities for National Pension Scheme, Group insurance, Accidental insurance have been implemented and for the Non-teaching staff, mandatory ESI scheme have been implemented. Besides this, in case of emergencies financial support is given to those who are in need. As a social responsibility, the Management and Teaching faculty contribute generously to meet the requirements of the needy such as construction and /or renovation of houses. Financial help is given to support the medical expenses of those who are in urgent need. For the house-keeping staff mandatory ESI scheme is there. The College supports the education of their children

providing them with school fees. All staff members completing a minimum of 5 years are eligible for getting gratuity.

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

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

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

15

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

6.3.3 - Number of professional development /administrative training programs organized by the institution for teaching and non-teaching staff during the year

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

10

File Description	Documents
Reports of the Human Resource Development Centres (UGCASC or other relevant centres).	**No File Uploaded**
Reports of Academic Staff College or similar centers	**No File Uploaded**
Upload any additional information	**View File**

Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff (Data Template)	**View File**

6.3.4 - Number of teachers undergoing online/face-to-face Faculty development Programmes (FDP) during the year (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course etc.)

6.3.4.1 - Total number of teachers attending professional development Programmes viz., Orientation / Induction Programme, Refresher Course, Short Term Course during the year

64

File Description	Documents
IQAC report summary	**View File**
Reports of the Human Resource Development Centres (UGCASC or other relevant centers)	**No File Uploaded**
Upload any additional information	**View File**
Details of teachers attending professional development programmes during the year (Data Template)	**View File**

6.3.5 - Institutions Performance Appraisal System for teaching and non- teaching staff

Teaching and non-teaching staff Performance Appraisal -MBCET

The College is using multiple modalities for the performance appraisal of the Teaching and Non-teaching Staff for enabling them continuously improve their knowledge and competency in the areas of pedagogy, research pursuits, administrative acumen, etc. The vision of the College is to achieve global compétence by strengthening the domains of education and research. The College endeavors to achieve this by enhancing its academic and intellectual environment and by providing avenues for the staff to pursue their professional and personal interests and concurrently developing their teaching, research and technical skills.

PERFORMANCE APPRAISAL

1. Self-Appraisal of Faculty members

Faculty is given a chance to do a self-appraisal on an annual basis. A structured format of annual self-appraisal form assesses the performance in teaching, research, administrative duties, co-curricular and extracurricular activities during the period of consideration.

The Performa of self- appraisal for the faculty member is available at the intra-Net. Following are the focus areas:

- Personal information about the faculty member
- Teaching learning and evaluation related activities
- Co-curricular and extension activities
- Research and development
- Funded project
- Consultancy project
- Research guidance
- Participation in Workshop, professional training, MOOC/NPTEL courses
- Skill development, Industry linkage program etc
- Use of innovative teaching methodology, updating subject contents and course improvements

The faculty members who have been in service in the year under review as on March 31 and continuing with the College service shall fill in the SELF APPRAISAL FORM annually, at the end of every academic year(July to June) and submit to the concerned Heads of the Department. The HoDs collect the appraisal form and student feedback report and submit to the Principal along with the confidential report. An institute level screening committee headed by the Principal shall be formed which will evaluate the faculty self-assessment report. Appropriate weightage is given for the assessment of self – appraisal, student's feedback and confidential report where minimum API score as per the AICTE norms is ensured. The promotion and yearly increment of faculty member is based on the recommendations of the self-appraisal Screening Committee.

2. Self-Appraisal of non-teaching staff

Members of Non-teaching staff are given a chance to do self-appraisal document on an annual basis. The purpose is to motivate and encourage them to carry out their duties more effectively. The staff member shall submit self-appraisal document annually to the concerned Heads of the Department. An institute level screening committee headed by the Principal shall be formed which will evaluate the self-appraisal documents submitted by the non-teaching staff and rate their performance. The promotion and yearly increment of non-teaching staff member is based on the recommendations of the self-appraisal Screening Committee.

File Description	Documents
Paste link for additional information	Nil

Upload any additional information	**View File**

6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly Enumerate the various internal and external financial audits carried out during the year with the mechanism for settling audit objections within a maximum of 200 words

Internal audit is done by the management through its representatives namely, the Bursar and the Assistant Bursar. They are supported by the administrative section of the institution especially the Superintendent and the Head Accountant. All the bills and vouchers are audited by them and the entire accounts are preserved digitally as part of e-governance to ensure transparency and accountability.

Annual financial audit is statutory as per the regulations of the university and AICTE. Accordingly, this year the same has been conducted by a competent reliable and established external agency. The audit has been conducted in accordance with the Government norms.

- https://mbcet.ac.in/wp-content/uploads/2022/01/Auditors-Report-2020-21.pdf

File Description	Documents
Paste link for additional information	**https://mbcet.ac.in/wp-content/uploads/2022/01/Auditors-Report-2020-21.pdf**
Upload any additional information	**No File Uploaded**

6.4.2 - Funds / Grants received from non-government bodies, individuals, philanthropers during the year (not covered in Criterion III)

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

nil

File Description	Documents
Annual statements of accounts	**No File Uploaded**
Any additional information	**No File**

	Uploaded
Details of Funds / Grants received from of the non-government bodies, individuals, Philanthropers during the year (Data Template)	**No File Uploaded**

6.4.3 - Institutional strategies for mobilization of funds and the optimal utilization of resources

For any organization, self-sufficiency in terms of the resources is a desirable status; it seldom happens due to the ever increasing requirements in terms of the quality and scope and the social commitments.

College is a fully self-financed private institution run by the charitable society that runs several educational institutions from primary level to the tertiary and research levels and we ensure organizational sustainability through the best utilization of the resources.

Management has strategically placed each institution as financially independent to ensure better accountability and to avoid cross flow of funds. The resources for capital and recurring expenditures are mobilized from multiple sources. Major component of the revenue inflow is the fees collected from the students.

Management has signed an agreement with the Government of Kerala to seamlessly adhere to the principle of social service and equitable access by which it will charge only legitimate fees. Since our students come from different strata of the society and the College is trying to reduce the burden of the cost of education for the student through means scholarships by way of fee concessions. In addition, the merit scholarships are also provided to top students to encourage high academic performance.

The cardinal principle of the Management is to provide best resources to the student to meet the academic, research and training requirements so that they can build a fruitful career. So, it is necessary to find the other means also for continuously updating the facilities and expanding the infrastructure.

The sponsorship from corporate sponsors, the research grants from Government and industrial sources, R&D projects from organizations like ISRO, DST, and so on and the revenue receipts from the testing and consultancy works, etc. shall go into the development of research and consultancy facilities along with the fund earmarked from the fees collected.

The infrastructure development plans are taken up in a phased manner to ensure the capacity expansion commensurate with the requirements of the academic departments. Optimal utilization of

the funds is ensured through careful planning and strong supervision from the Management in the execution of the infrastructure projects. Financial audit and checks and balances ensure transparent and efficient utilization of resources. The lookout shall be to strengthen academic quality and research excellence.

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

6.5 - Internal Quality Assurance System

6.5.1 - Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes

1. Skill Development program:

In order to bridge the gap between Industry and Academia, MBCET has initiated a new division 'Corporate Relations', to frame and encompass the skills needed to succeed in the 21st century globalized world. The key skills needed include, Critical thinking and problem-solving, Creativity and innovation, Communication, Collaboration, Personal/Social responsibility and Career/Life Skills. The focus areas of Skill Development include soft skills and technical skills in emerging technologies, Industry Collaborations, Entrepreneurship Development, Career Guidance and Placements.

- **https://mbcet.ac.in/corporate-relations/**

2. Framing of Policies

In 2014, procedures were framed and in 2020 we have reframed the policies and the draft is available on the website.

- **https://mbcet.ac.in/wp-content/uploads/2021/07/Policies-Update.pdf**

File Description	Documents
Paste link for additional information	**https://mbcet.ac.in/wp-content/uploads/2021/07/Policies-Update.pdf**

Upload any additional information	**No File Uploaded**

6.5.2 - The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms and recorded the incremental improvement in various activities

TLC Seminar: National Education Policy 2020

A seminar on 'National Education Policy 2020: New Challenges and Opportunities for Technical Education in the Context of Autonomy' was conducted by the Teaching Learning Centre on March 23, 2021. The Chief Guest and Keynote Speaker for the session was Padma Vibhushan Dr. G. Madhavan Nair (Former Chairman, ISRO). Dr. Dilip Sharma, Professor and Former Dean (MNIT, Jaipur), the AICTE panelist and Dr. Prashant B. Maheshwari (J.D College of Engineering and Management, Nagpur), the Guest of Honor addressed the faculty members online.

The experts presented the evolution of the education policy in India since 1948-49 and the significant aspects of the National Education Policy (NEP 2020). Promoting multidisciplinary learning by breaking boundaries between disciplines, emphasis on practical and experiential learning to instill creativity and critical thinking skills in students, modifying the evaluation methods to assess the skills and analytical ability of learners, incorporation of credit transfers and hence flexibility and mobility for students during their study, the necessity of faculty training in a learner-centric environment, were certain aspects that were discussed. The greater need for doing research and establishing linkages with industry was also highlighted during the presentations by the experts.

Course Delivery Cycle Session by Prof Edamana Prasad

An interactive two-hour session on 'Course Delivery Cycle' was conducted by the Teaching Learning Centre on Saturday, March 20, 2021. The resource person for the session was Professor Edamana Prasad, IIT Madras. Dr. Prasad briefed about the different phases of the course delivery cycle. As part of the session. various suggestions on making the students attentive and interactive in the class were discussed. Achieving various course outcomes through specific classroom activity was also discussed. More than 100 faculty members participated in the session.

Preparatory Workshop on Course Delivery Cycle

The Preparatory session for the workshop on "Course Delivery Cycle" was conducted in all the departments (CED, CSED, ECE, EEE, MED, S&H) from 15th March to 20th March 2021. TLC Coordinators and NBA Coordinators of the departments, gave an introduction on accessing learning level for each

Course Outcome. Faculty members of S2 presented the course outcomes and the levels for various courses, each of which was followed by a discussion.

Online workshop on Designing Questions to Assess Outcomes in Higher Learning Levels" by Dr. Edamana Prasad, Professor, Teaching Learning Center, IIT Madras conducted during 25 November 2020

Workshop on Effective Online Teaching Tools for Faculty in Engineering

Teaching Learning Centre and Department of Civil Engineering, Mar Baselios College of Engineering and Technology is organizing a Workshop on Effective Online Teaching Tools for Faculty in Engineering. The webinar will provide insights into the online teaching pedagogies and tools. Dates: 29, 30, 31 July 2020, Time: 10 am – 12 noon, Resource Persons: Mr. Binu A, RSET and Dr. Anurag Goswami, Bennett University.

Additional Information

https://mbcet.ac.in/teaching-learning/teacher-learning-centre/

File Description	Documents
Paste link for additional information	**https://mbcet.ac.in/teaching-learning/teacher-learning-centre/**
Upload any additional information	**No File Uploaded**

6.5.3 - Quality assurance initiatives of the institution include: Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analyzed and used for improvements Collaborative quality initiatives with other institution(s) Participation in NIRF any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)	**A. All of the above**

File Description	Documents
Paste web link of Annual reports of Institution	**https://mbcet.ac.in/magazine/ 2021(page No 5-9)**
Upload e-copies of the accreditations and certifications	**View File**
Upload any additional information	**View File**

Upload details of Quality assurance initiatives of the institution (Data Template)	**View File**

INSTITUTIONAL VALUES AND BEST PRACTICES

7.1 - Institutional Values and Social Responsibilities

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

The Institution is committed to maintaining a harmonious and inclusive environment that promotes gender equity and inculcates a very progressive stand in driving a healthy teaching—learning platform that appreciates the freedom of ideas without any form of discrimination. The Women Studies Unit is one of the cells that actively function in the college towards gender-specific programs. The Women Studies Unit [WSU]of the college takes care of the planning, organization, and execution of various co and extracurricular activities for the promotion of gender equity and sensitization. The WSU had organized the following programmes in 2020-2021:- 1. Two Days Online Symposium by Women's Studies Unit In connection with Women's Day, Women's Studies Unit (WSU) MBCET organized two Days Online Symposium on the theme Arise, Awake, Anew: Equal Future, on5th and 6th of March (from 2 pm to 6 pm Sub events conducted during the Symposium include:- a) Interactive Session - Life Skills for Equal Future b) Panel Discussion - Campus Interventions for Gender Equality. c) Hasyayoga - The session included many tricks for a healthy life. d) Interactive talk - Women in Leadership Achieving an equal future in a Covid-19 world. e) Competency Test on Emotional Intelligence f) Interactive Session - Digital Safety and Security for Women. g) Alumnae Interaction - Women in power change the world. 2. Talk on Women Empowerment The WSU unit in collaboration with IEEE Women in Engineering (WIE) MBCET, organized a talk on "Women empowerment" on 8th March 2021, on the occasion of International Women's day. The speaker for the event was Dr. Divya S. Iyer, IAS, Mission Director, Mahatma Gandhi National Rural Employment Guarantee Scheme. A total of 74 participants. 3. WSU Online Quiz — Topic - 'Women Empowerment' Facilities Available for women on campus Safety and security are ensured through 24/7 security personnel. Surveillance cameras function in the entire area of the campus. Housekeeping staff is deployed for any emergency as per requirement. Common rooms are attached to each department. A centralized nursing station with a full-time nursing superintendent functions in the college.

Gender Equity Policy

Weblink - https://mbcet.ac.in/wp-content/uploads/2021/07/Policies-Update.pdf

Page No. 23 - 26

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

7.1.2 - The Institution has facilities for alternate sources of energy and energy conservation measures Solar energy Biogas plant Wheeling to the Grid Sensor-based energy conservation Use of LED bulbs/ power efficient equipment	**A. 4 or All of the above**

File Description	Documents
Geo tagged Photographs	**View File**
Any other relevant information	**View File**

7.1.3 - Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 200 words) Solid waste management Liquid waste management Biomedical waste management E-waste management Waste recycling system Hazardous chemicals and radioactive waste management

The Institute has a Waste Management Cell that facilitates the smooth functioning of the various types of wastes generated in the premises. Regular monitoring, conduct of awareness sessions for the stakeholders, encouraging innovative ideas and projects towards efficient disposal of waste are undertaken by the cell and various departments as when required. • Relevant documents like agreements/MoUs with Government and other approved agencies • Geotagged photographs of the facilities • Any other relevant information Initiatives taken up in the last year 2020-21 is mentioned below: • Project done by ECE students on Disposafe - a household, low cost, easy to use sanitary napkin incinerator which can be installed even inside the washrooms, which is an affordable solution for the rural household population as well • Sustainable Together: The Department of EEE organized an online video competition of making creative/practical products from discarded objects. This event was open for the students of all Departments of MBCET. The valuation was based on the raw materials used, usefulness of the end product, and Prototype/Aesthetics of the product. • Faculty of the Waste Management cell attended a training session conducted by CII-certified Masterclass on Compliance to recent amendments in Waste Management rules on 19-20 Jan 2021. • The Waste Management Cell Coordinators visited Suchitwa Mission, Trivandrum to collect

details about a Compost pit to be constructed inside the campus. The site plan and implementation measures are under discussion.

Waste Management Policy

Weblink - https://mbcet.ac.in/wp-content/uploads/2021/07/Policies-Update.pdf

Page No. 52 - 54

File Description	Documents
Relevant documents like agreements/MoUs with Government and other approved agencies	**View File**
Geo tagged photographs of the facilities	**Nil**
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
Geo tagged photographs / videos of the facilities	**View File**
Any other relevant information	**View File**

7.1.5 - Green campus initiatives include

7.1.5.1 - The institutional initiatives for greening the campus are as follows: 1. Restricted entry of automobiles 2. Use of Bicycles/ Battery powered vehicles 3. Pedestrian Friendly pathways 4. Ban on use of Plastic 5. landscaping with trees and plants	**A. Any 4 or All of the above**

File Description	Documents
Geo tagged photos / videos of the facilities	**View File**
Any other relevant documents	**No File Uploaded**

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

7.1.6.1 - The institutional environment and energy initiatives are confirmed through the following 1.Green audit 2. Energy audit 3.Environment audit 4.Clean and green campus recognitions/awards 5. Beyond the campus environmental promotional activities	**A. Any 4 or all of the above**

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

7.1.7 - The Institution has disabled-friendly, barrier free environment Built environment with ramps/lifts for easy access to classrooms. Disabled-friendly washrooms Signage including tactile path, lights, display boards and signposts Assistive technology and facilities for persons with disabilities (Divyangjan) accessible website, screen-reading software, mechanized equipment 5. Provision for enquiry and information : Human assistance, reader, scribe, soft copies of reading material, screen reading	**B. Any 3 of the above**

File Description	Documents
Geo tagged photographs / videos of the facilities	**View File**
Policy documents and information brochures on the support to be provided	**No File Uploaded**

Details of the Software procured for providing the assistance	**No File Uploaded**
Any other relevant information	**View File**

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

The Institute make sincere efforts through its stakeholders to provide an inclusive environment which is harmonious and open to all ideas and initiatives that include all diversities. CULTURAL:- ➢ ShrIEEEk 2021 (Flagship event of IEEE MBCET for the first year students, that focuses on bringing out the creativity from within the freshers out into the limelight) was conducted on 30th and 31st of January 2021. REGIONAL:- ➢ State Govt. Project ➢ A group of 5th semester students under the guidance of a faculty from Department of Civil Engineering is preparing a detailed project report (DPR) in association with the Hon'ble National Green Tribunal (NGT) in OA No. 673/2018 dated 20.9.2018, an order for rejuvenation of 21 rivers identified with "critically polluted river" in the state. They will conduct site visits, collect data, carry out a series of tests for assessing the level of pollution and prepare an actionable DPR. ➢ CSI MBCET Student Chapter organized the "Slogan Competition" based on the theme " Hum Fit Toh India Fit" in order to commemorate the 72nd Republic Day of our country on January 26th,2021. Best slogan was awarded to Emil Ben Joseph of S5CS1 for the slogan "Congregate your Strengths through fitness so India burns its fats". LINGUISTIC:- ➢ IEEE Special Interest Group on Humanitarian Technology (SIGHT) of Mar Baselios College of Engineering and Technology and IEEE SIGHT Kerala Section jointly organized a technical article writing competition "WE WRITE WE INNOVATE" on 07 December 2020. ➢ IET MBCET Activities- o Fine Tune Talks: A series of personality development talks conducted by IET MBCET On Campus, the Fine Tune Talks engage the audience on topics that help to add value to their professional skills. 1) Mr. Joseph John Panicker (Alumni, EEE) on 19.09.2020 - Topic: Acing an Interview 2) Ms. Ashwini A Kammath (Alumni, EEE) on 20.09.2020 - Topic: Creating a Resume 3) Ms. Gouri A V (Alumni, ECE) on 21.09.2020 - Topic: Branding Yourself 4) Mr. Tom Thomas Theckel, Facilitator, Lead Training Consultant and Regional leader for VIVO India delivered a talk on How to Stand Out in a Group Discussion on 17.02.2021. The Webinar was open to first year students of Department of Electrical and Electronics Engineering. 5) Mr.Sachin Satheesh Kumar (Alumni, EEE), Former Research Associate from Aerospace Department, IIT Kanpur, and presently Online Tutor at Course Hero, Redwood, California, USA delivered a talk on 26.06.2021 . Topic – Reignite the Spark within you. COMMUNAL:- ➢ IEEE Special Interest Group on Humanitarian Technology (SIGHT) of MBCET organized a webinar on "ENVIRONMENT TECHNOLOGIES - SUSTAINABLE AND STRONG" by Ms. Nanma Gireesh, Co-founder, NestAbide (also a Translational-Civil Engineer, and a TEDx speaker) on 21st November

2020. A total of 78 participants attended the webinar. ➢ The Department of Electronics and Communication Engineering organized an interactive session (online) on "Managing in times of uncertainty'" by Shri Madhava C. Kurup, Associate Professor, Asian School of Business, Trivandrum on 1st December 2020. The session covered the relevance of learning management techniques and how to apply some of them in personal lives to achieve career excellence. A total of 70 students attended the session ➢ Ms. Sajna Samad (Alumnus, 2002-2006 Batch of ECE), currently the Supply chain Business Consultant at Oracle systems Ltd., delivered a motivational talk online, as part of the department activity of the Student Induction Programme, on 18th November 2020. ➢ OUTREACH 150: On 29th March 2021, the 2-member team from IET MBCET visited Pirappancode, to get a brief idea about the geography and its possibilities, the local socio-economic and political climate, and the demography, that would facilitate in planning further activities to promote sustainable practices in the community. SOCIO-ECONOMIC:- ➢ Dr. Jisha S V and Ms. Lekshmi Chandran from the Department of Civil Engineering,MBCET , is doing a socially relevant project under AICTE – RPS, titled "Study on isolation of train induced ground vibrations using infilled trenches with waste materials", the total budget of the project is Rs 19,67,254/-. ➢ Analysis of groundwater quality of a residential area near Parvathy Puthanar using GIS. ➢ Shanmugham Beach Restoration ➢ Integrative approach to transform Munroe Island using sustainable technologies ➢ Water quality analysis of Vellayani lake ➢ Assessment of Flood Resilience and Vulnerability in Pathanamthitta district ➢ Review of Probable Maximum Flood (PMF) of Idamalayar Dam in the Periyar Basin ➢ Assessment of Ground water quality in Karakulam Panchayath,Trivandrum ➢ Experimental Study On Heavy Metal Removal in Ashtamudi Lake Using Water Hyacinth ➢ Spatial and Temporal Modelling of Urban Air Pollution Using Artificial Neural Network (ANN) Approach ➢ Identification and rectification of crash prone locations on selected road stretch in Thiruvananthapuram ➢ Analysis of Floating Treatment Wetland System in Pulliyil Pond at Trivandrum. ➢ Ms. Gouri A.V., Associate Software Engineer at EY (Alumna, 2016-2020 Batch of ECE), delivered a motivational talk on "Luring Benefits of Never Giving Up", as part of the SoCHH Session organized by Catalyst Mar Baselios IEDC, on 26th February 2021. ➢ On 19th Feb 2021, Catalyst Mar Baselios IEDC organised a SOCHH session by Mr. Rakesh Venugopal, Associate Director, Unacademy. In a picturesque way, he indulged the listeners over the subject of Tackling Change in Everyday Life, through vivid examples from his own experiences. ➢ Women's Studies Unit (WSU) in association with Institution's Innovation Council (IIC) organized a motivational talk (online) - "My Entrepreneurial Life Journey" by Ms. Joshila Ramesh, Founder and CEO, Aspire HR Solutions, India, on 11th February 2021. ➢ A career guidance session by Mr. Rajesh P. S., Manager (HR & Admin), CGP Career Avenues, Trivandrum, was

conducted for S5 ECE students, on 8th February 2021 from 10 am to 12 pm. ➢ DSC MBCET Event - Le Debut DSC MBCET organized Le Debut - a session exclusively for freshers, from 23rd to 24th of January 2021. The event focused on providing basic knowledge of different technologies such as app development, web development, etc. and how to get started with it. ➢ Catalyst Mar Baselios IEDC in association with IIC organized "Sochh- A thought to Share" by Mr. William George, CEO, Catalyst IEDC on 6th January 2021. ➢ A career guidance session on "What after B. Tech" by Mr. Rajesh P. S., Manager (HR & Admin), CGP Career Avenues, Trivandrum, was conducted for S3 ECE students on 20th January from 10 am to 12 pm. 59 students participated in the session. ➢ CSI organized a motivational talk by alumni Mr. Micheal Teddy, Senior Software Engineer, ONNE on October 1st,2020 for S5 CSE students. He talked about the importance of identifying the truth and purpose of life. He made the students aware of the importance of software engineers in this pandemic situation. Since almost everything has gone online, the opportunities are endless. Around 120 students attended the session. Students were very much interactive and gave very good feedback about the session. ➢ Alumni Group of Department of Computer Science and Engineering organized a talk on "Zero to One — About Entrepreneurship" on November 4th, 2020 from 10.00 am to 11.30 am. Mr. FariqNoushad, an alumnus of MBCET family, handled the session effectively. ➢ A webinar on "Quick tips for a head start to the corporate world" was organized by Department of Computer Science and Engineering for final year students on 31/10/2020 from 10:00AM-11:30 AM. The session was handled by Ms. Dainu Kuruvilla, Associate Manager, Learning and development, Tata Elxsi,Trivandrum. OTHER DIVERSITIES:- ➢ CSI organized a motivational talk "Alumni Walk Through MBCET" forthe first year students on 30/1/2021. Mr. Michael, Senior Software Engineer, ONNE was the speaker. ➢ CSI MBCET Student Chapter in association with CSI Trivandrum Chapter organized FC Kohli National Student Talk Series on 22/04/21. Student speakers from different colleges talked about the following topics. ➢ Vishnu M Nair, EEE , MBCET - Energy Demand Forecasting Using Deep Neural Networks ➢ Roshan J, College of Engineering, Muttathara - Virtual Personal Assistant ➢ Bhavya B, GPCET, Hyderabad - Machine Learning in today's world ➢ Lakshmi R Nair, University of College Kariavattom - 5g and Internet of Things. Mr. Kamal Rajan, Associate Consultant, TCS was the chair for the session. More than 70 students participated in the talk. ➢ . ○ Facilitated the MoU signing between MBCET and Kerala Institute of Local Administration (KILA) which is an autonomous institution functioning for the Local governments in Kerala on 19 March 2021. The collaboration looks forward to facilitating training and awareness programs in the communities pertaining to the UN SDGs. ○ On 29th March 2021, the 2-member team from IET MBCET visited Pirappancode, to get a brief idea about the geography and its possibilities, the local socio-economic and political climate, and the demography. The visit threw light on some factors in the village which the team plans to bring more focus on, such as the (i) proper waste management in tourist's spots, (ii)

awareness campaign on air pollution caused by quarrying, which is one of the major sources of income for the community and (iii) sustainable methods to provide electricity in low income communities.

Cultural Policy

Website Link -

https://mbcet.ac.in/wp-content/uploads/2021/07/Policies-Update.pdf

Page No. 18 - 20

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

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

HUMAN VALUES:- ➢ Spandanam Activities – [Social Service wing of Department of ECE]- • Faculty representatives from the Department of ECE visited the Central Institute on Mental Retardation (CIMR - A national Level NGO in India) , Murinjapalam, Trivandrum, on 19th February 2021 and handed over stationary items and toys, to facilitate the teaching - learning process in CIMR. • Student representatives from S3 EC2,Ms. Teena Rajan , and Mr. Anoop K. Johnson , Assistant Professors in the department of ECE, , visited Mrs. Radha's house at Nalanchira on 18th December 2020. She belongs to a poor family and is suffering from acute diabetes. Rs. 5000 has been donated to her, for her treatment purpose. • On 3rd October 2020, SPANDANAM took the initiative to provide essential commodity kit to Mr. Shivakumar's family residing at Thiruvallom. Mr. Shivakumar, the only earning member in the family, met with an accident, and the family was struggling to make ends meet. • Staff members of ECE department donated few insulin kits to poor diabetic patients residing at Kallayam on 28th August 2020. ➢ UBA Activities:- • As part of UBA initiative ,100 paper bags comprising of sanitizer and face masks were made by students from UBA MBCET team, IET MBCET Outreach team and Nature Club on 4th January 2021UBA • Contributed 100 masks and 50 sanitizers, out of the 400 masks and 150 sanitizers distributed to the students of Government Boys High School, Kanniakulangara , as part of the Unnat Bharat Abhiyan (UBA) MBCET activity conducted

on 06th January 2021. PROFESSIONAL ETHICS:- ➤ Organized a webinar on "Evading Social Engineering Attacks: COVID'19″ in association with CSI MBCET student chapter on 21st JULY 2020. ➤ NETSEC Research Group in association with CSI MBCET Student chapter organized a webinar on "Trends and Challenges in Cyber Security" on 28th October, 2020. The speaker was Smt. Ananthalekshmi Ammal, Senior Director, CDAC, Trivandrum. Around 100 students attended the webinar. ➤ AICTE Online FDP on Universal Human Values was conducted from 8.03.2021 to 12.03.2021. ➤ The 31 Annual Faculty Convention of ISTE Kerala Section was inaugurated by Shri. Arif Mohammad Khan, Hon'ble Governor of Kerala and presented the various ISTE Awards instituted by the Kerala Section at a solemn function held at the College on 23 rd January 2021.The theme of the convention was 'Opportunities and Challenges in Technical Education in the Post COVID Scenario' ➤ ILLUMINA, The Department Association of Electrical and Electronics Engineering has contributed to a noble cause as a part of Social service by completing the Electrification work (Wiring and Installation) of 2 houses with the support of the faculty and the technical staff. The work was completed on 14/12/2020 and April 2021 respectively. The second house is one of the members of the MBCET Family. ➤ The Electrical Maintenance Cell of MBCET in association with Illumina, conducted a Demonstration and Training on Handling Fire Extinguishers for the entire staff of MBCET, as part of Safety Awareness measures, on 8 and 9 February 2021. The session was handled by Mr. Aswin R. B., Assistant Professor, EEE and the Technical staff of EEE. Coordinator: Mr. F. R. Rejish Babu, Assistant Professor, EEE. ➤ CSI MBCET Student Chapter organized a webinar on "Social Media & Data Privacy" on 27/02/2021. Mr. Georgie Kurien, Information Security and Data Privacy Expert was the speaker. ➤ Organized a webinar on "Evading Social Engineering Attacks: COVID'19″ in association with CSI MBCET student chapteron 21st JULY 2020. ➤ NETSEC Research Group in association with CSI MBCET Student chapter organized a webinar on "Trends and Challenges in Cyber Security" on 28th October, 2020. The speaker was Smt. Ananthalekshmi Ammal, Senior Director, CDAC, Trivandrum. Around 100 students attended the webinar.

In addition, all the days of national importance were celebrated by the Institution.

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

7.1.10 - The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and	C. Any 2 of the above

conducts periodic 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   4. Annual awareness programmes on Code of Conduct are organized

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

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

➢ CSI MBCET Student Chapter organized the 'Slogan Competition' based on the theme 'Hum Fit Toh India Fit' in order to commemorate the 72nd Republic day of our country on 26th January 2021. Best slogan was awarded to Emil Ben Joseph of S5CS1 for the slogan 'Congregate your Strengths through fitness so India burns its fats'. ➢ e-NIX Activity e-NIX, the ECE departmental association of MBCET, organized a competition (in connection with the Republic Day) called "The Parade" exclusively for ECE students, to honour and appreciate the Indian Defence forces, from 28th January to 1st February 2021. Each participant was given an equipment used by Indian Defence Forces, about which they had to create a business card. ➢ World Engineers Day In accordance with Engineer's Day (15th September), Indian Plumbing Association (Trivandrum Chapter) and Department of Civil Engineering MBCET conducted an online talk session by Dr. Subhash Chandra Bose, the former Director of Water Resource Department, former State Manager Rain Water Harvesting programme and Scientist in Water and Environment Management. The talk was scheduled from 16:30 hours to 17:30 hours. The talk was focused on the topic of "Water Conservation and Harvesting techniques" and had an active participation. ➢ World Wetland Day As part of *World Wetlands Day* (2nd February) celebration and awareness campaign, the Environmental and Water Resources Engineering Division of the Department of Civil Engineering, MBCET & Nature Club organized a Live Webinar on "Wetlands and Water". Speaker: *Dr. P. S. Harikumar*, Senior Principal Scientist & Head, Ecology and Environment Research Group, CWRDM, Kozhikode on 04 February 2021 at 03.00 pm (IST). ➢ World Water Day Environmental and Water resources Engineering Division of Department of Civil Engineering, MBCET organized a Webinar on "Water resources of Kerala - development issues and

strategies" on 22nd March 2021 in account with world water day . The session was handled by Dr. Dineshan V P, Rtd. Senior Principal Scientist, CWRDM Kunnamangalam. ➢ World Environment Day • In connection with 'World Environment Day','PRAKRUTHI' ,the Nature club of MBCET organized the following activities 1.A poster making contest based on the theme, 'Time for Nature' was conducted. 2.To explore the curious minds, a quiz competition based on the theme, 'Environment' was conducted. • OUTREACH 150 – The IET MBCET Student Chapter released the promo video of Outreach 150 on June 5, 2021, highlighting the importance of taking action toward Energy conservation and Environment protection, calling out to faculty and students to join together to work towards attaining the UN SDGs. ➢ World Population Day As part of World population day a quiz competition was conducted by the Nature Club on July 11th ,2020 ➢ World Nature Conservation Day A quiz competition was organized by the Nature club on July 28th 2020 in connection with the World Nature Conservation Day. ➢ World Ozone Day

On account of the world Ozone Day celebrations, the Nature club conducted the following events:- • A slogan writing competition for its members and the theme for the contest was, 'Preservation of the Ozone layer'. • A drawing competition based on the theme, 'Climate change and Sustainability'. ➢ World Wetland Day The following activities were conducted by the Nature Club in connection with the World Wetland Day • A quiz competition was held to find the witty ones via google forms on February 2nd,2021 • A poster making competition was also organized in which members were asked to make posters based on the topic 'Wetlands And Water'. • An online webinar was conducted on the topic "Wetlands And Water" to reaffirm the protection and love for wetlands and to create an awareness about the importance of wetlands. World Peace Day • On the occasion of World Peace Day on 21st September ,2020 ISTE MBCET Student Chapter organized a 'Plant Sapling Challenge ' .All the students &faculties were requested to plant a sapling on this auspicious day marking the celebration of peace and calmness of our world.

File Description	Documents
Annual report of the celebrations and commemorative events for the last (During the year)	**View File**
Geo tagged photographs of some of the events	**View File**
Any other relevant information	**No File Uploaded**

7.2 - Best Practices

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

The Best practices in the Institution ensure continuous refining and efficient course of actions that assure constant improvement and inclusion of innovative practices that indulge in fine tuning and upgrading the professional skills and social responsibilities of the stakeholders. In the year 2020-21, some of the Best practices initiated in the College includes both Academic practices and ISR. I. Academic Initiatives 1. IBM SPECIALITY LAB IN EMERGING TECHNOLOGIES The College has signed an MoU with IBM India Pvt Ltd for conducting internationally valid training courses for students the topics of Cyber Security, Data Science and Artificial Intelligence. The average duration for each course will be 50 hours which will include 25 % concepts, 35 % technologies and 40 % group work activities. The group work activities contain different industry case studies and every use case would require approx. 16 hours group work. Benefits of the course include improving the prospects of students for a global career using live industry cases, availability of IBM software tools for training as part of the program, workforce development, executive training, boot camps, intensive workshops, professional certification and Digital IBM Badges on completion of course by IBM. College shall use the study materials prescribed by IBM India and conduct the courses on campus/online. Practical sessions shall also be conducted as per the training curriculum. 2.MOU BETWEEN C-DAC AND MBCET An MoU has been signed between C-DAC and MBCET on 15, February 2021. C-DAC(T) has expertise in numerous areas of Electronics, Communication, Computer Science etc. C-DAC(T) can support MBCET for expert lectures, invited talks, staff and student training, industrial visits, sharing R and D projects etc. 3.INGRESS-24 HOUR HACKATHON The Computer Science Department of Mar Baselios College of Engineering and Technology organized Ingress, a national event that lasted an entire week, ending with a hackathon on February 13th and 14th.Ingress was sponsored by various globally reputed companies namely Devfolio, Figma, Give My Certificate, repl.it, Portis, egghead.io, Axure RP, Digital Ocean, echoAR, Tezos, Voiceflow, Matic Network (BVI)Ltd. and Stream Yard. Ingress also had Jovian AI and Interview Cake, onboard were the Educational Partners and ISTE MBCET, ACE MBCET, CSI MBCET Student Chapter, Catalyst Mar Baselios IEDC, FOSS Cell MBCET, MBCETAA and Microsoft Learn Student Ambassadors were the Community Partners. Webinars, workshops and talks by eminent people from the tech industry were conducted as part of it. Every night there were fun activities like a game night, a movie night, Pictionary games and quizzes to coax participants out of their shells and bond with everyone present. Mr. Ananthan R., a Research Engineer at Kerala Blockchain Academy, took a hands-on workshop on blockchain using Ethereum. Mr. Mohammed Shine, a Security Engineer at UST, took a webinar on how to get started with bug bounty. A Github Campus Expert, Mr. Athul Cyriac Ajay's session helped the attendees learn the ropes of Github, to use it for Ingress. Mr. Rahul Sunil, Core Coordinator of Ingress, took a lively session to build and deploy a website. Mr. Prashanth Reddy, founder of StudyOwl, handled a session on chatbots and the resources needed . Mr. Gautham Krishna, a Blockchain Developer at Accubits Technologies Inc., spoke about his experience with blockchain and why he pursued it. Mr. Rahul Maheshwari, Engineer at Google and the founder of Linux Socials,spoke

about the job prospects of data structures and how to get employed at tech giant companies. Mr. Abhiram A., co-founder of Odyn Reality, gave an introductory session to Augmented Reality with Unity and elucidated all the resources needed to get started with this field. Mr. Lazim Aslam, CEO and founder of Printartica, took a webinar about turning ideas into products. Mr. Alon Grinshpoon, CEO and founder of echoAR, conducted a workshop to build a cloud-connected AR/VR app in 15 minutes or less. 4.Project Build-A-Thon was a tech building initiative by SmartBridge Team & Data Science Research Group, Dept. of Computer Science and Engineering, MBCET to enable students with practical skills of emerging technologies. The event was a 15 days project development program from 16th December to 31st December 2020 with both internal and external participants. The results of Project Build-A-Thon have been announced by the SmartBridge team.This program provided project-based learning & development experience through smart Internz Platform. Students could enrich their skills, gain project experience and earn exciting benefits from this Project Build-A-Thon. 5.AICTE sponsored STTP on High Performance Computing and Deep Learning on Image, Text Analysis: Deep Learning enables computers to capture concept level features hidden in the input data. The methods based on deep learning have a significant impact in the performance of algorithms used for speech recognition, image and video processing, text analysis and medical image processing. The Department of Computer Science and Engineering organized Six-days AICTE sponsored STTP on "High Performance Computing and Deep Learning for Image, Text Analysis" from 22 Feb 2021 to 27 Feb 2021 , to promote research, assist educators and designers in the field of deep learning. More than 70 members participated in the event. The sessions enabled participants to understand the basics of deep learning and the various deep learning architectures. 6.IEDC ACTIVITIES • CATALYST CHATS Webinar series from 3 August 2020 to 7 August 2020 It was a five-day webinar sessioN . Starting from Mr. Kochouseph Chittilappilly, followed by Mr. Ashwin Panicker, Mr. Andrine Mendez, Dr. Arun Surendran and Mr. Mathew Joseph. All the talks had concluded with a Q&A session. • RELEvent 2020 on 12th and 13th September 2020 RELEvent Recruitment of Emerging Leaders Event of IEDC is a 2-day flagship ideathon event conducted for recruiting the Emerging Leaders of IEDC. The event was conducted through the digital collaborating tool Discord and Google Meet on 12th and 13th September 2020. Mr. Arun J. S., Prof. Sarju S, Nodal Officer SJCET, Abhiram, Technical Officer KSUM delivered their experiences with IEDC in three interactive sessions. START-O-VEMBER from 16th November to 21st November 2020 Catalyst-Mar Baselios IEDC organized the 6-day Startup workshop for aspiring entrepreneurs. Six experienced entrepreneurs and leaders shared different aspects of their entrepreneurial and professional lives that covered their stories, thoughts and challenges and specifically provided guidance and motivation to the participants which enabled focused and personalized attention and guidance for each participant. II.Activities of Institutional Social Responsibility 1.As a sign of fraternity and fellow feeling and as a gesture of social responsibility ,an economically backward member of the Technical Staff was given financial assistance to build a home of her own. The amount required was collected through voluntary

contribution from the members of the staff. The Management supported the endeavour with its own share of contribution. An amount of Rs 8lakhs was given to the beneficiary. 2.Department of Civil Engineering in association with Staff club of MBCET carried out the plumbing and painting work of the house of a cleaning staff in college for renovating the house.

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

7.3 - Institutional Distinctiveness

7.3.1 - Portray the performance of the Institution in one area distinctive to its priority and thrust within 200 words

MBCET drives forward many initiatives which defines its uniqueness and distinct qualities. Every year many innovative initiatives are taken up that follow its Vision and Mission to mould technically competent and socially committed professionals for the welfare of humanity. The 2020-21 year highlights about the unique initiative - OUTREACH 150. Outreach 150 For celebrating the 150th year of IET, the UK headquarters had opened a Global Engagement Fund asking proposals from all over the world for events pertaining to Sustainability. Based on that theme, IET MBCET Student chapter had also submitted a proposal, called the IET Outreach 150, an initiative to reach out to the community to extend our engineering skills as well as to learn how the engineering fraternity can make an impact or change, for a better and sustainable living among those in need. The IET MBCET On Campus proposal on Outreach 150 is one among the 4 that got selected from India. The chapter looks forward to work with associations like the UBA, NSS etc existing in the College towards initiatives that involve Sustainable well-being and also establish the necessary tie-ups with Govt. agencies, private companies for establishing better connection with the society. In line with this agenda the College has signed an MoU with a. Vydyuthi Energy Services Ltd (VES), founded by an Alumni of the College. The Company is driven by a vibrant group of ladies and started with the vision of supporting the economy in achieving the Sustainable Development Goals (SDG) target by 2030. The VES company is listed in United Nations Women Empowerment Program thus ensuring official support of UN in all their activities oriented towards enhancing women capabilities. b. KILA (Kerala Institute of Local Administration) which is an autonomous training, research and consultancy organization constituted under the Ministry of Local Self Government, Government of Kerala, with the main objective of strengthening decentralization and local governance. Owing to the Covid pandemic situation, this initiative which involves more of offline activity that needs the team to reach out to the community, came to a standstill. But the team continues to improvise and work towards their objective through other online initiatives. 1. A

small offline survey was conducted in March 2021, in one of the villages coming under the UBA activity of the college. A 2-member team visited Pirappancode, to get a brief idea about the geography and its possibilities, the local socio-economic and political climate, and the demography. The visit threw light on some factors in the village which the team plans to bring more focus on, such as the (i) proper waste management in tourists' spots, (ii) awareness campaign on air pollution caused by quarrying, which is one of the major sources of income for the community and (iii) sustainable methods to provide electricity in low income communities. Through this communication, the team can later choose Outreach Champions who will act as the ambassadors for this initiative and give awareness in their own community on Sustainable practices. The team anticipates to create 150 such champions in various communities that would help in spreading the word of sustainability. 2. IET MBCET will be starting with the Online Bootcamp 150 series from July 2021, to promote sustainable engineering practices in the community. Speakers with sustainable innovative initiatives that got recognized are invited to the Online Bootcamp to introduce the engineering community to this sphere of thought that requires much more attention today than ever before. This plan also includes training and workshops for the student community to make them ready with the technical knowhow that will be needed for the Outreach activity

https://mbcet.ac.in/home/professional socities/iet/

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

7.3.2 - Plan of action for the next academic year

Our College was conferred with the Autonomous status in July 2020 by the UGC. Accordingly, a number of actions are being planned to take the institution to higher levels of excellence in education and research. Review of the Vision and Mission statements, followed by the recasting of the Strategic Plan so as to cover the forthcoming period of 2022-2027 will be done. Introduction of curriculum with flexibility, shall also be undertaken to attain the outcomes envisioned in the Strategic Plan. Training and development of faculty, in line with the new curriculum shall be of equal priority. IQAC will be strengthened under the autonomous status. Detailed academic and administrative audits will be conducted to monitor and enhance the performance in a transparent manner. PG students will be attracted by offering scholarships. R&D will be encouraged, by supporting intramural research projects and by seeking external sponsorship. Efforts for modernization of laboratory facilities, library, classrooms and the maker space for student shall continue. Additional space for the Examination Block to house examination related works shall be

made available. Start up and placement activities shall be strengthened. The lab attached to the department of Mechanical Engineering will be updated with the installation of a machinery worth 25 lakhs. A new software Linways will be installed to better efficiency. The ITMS will be taking care of it.