

YEARLY STATUS REPORT - 2021-2022

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 Yes

campus?

• Phone No. of the Principal 0471-2545868

• Alternate phone No. 0471-2545869

• Mobile No. (Principal) 8281145869

• Registered e-mail ID (Principal) principal@mbcet.ac.in

• Address Mar Ivanious Vidyanagar, Nalanchir

a, Thiruvananthapuram

• City/Town Thiruvananthapuram

• State/UT Kerala

• Pin Code 695015

2.Institutional status

• Autonomous Status (Provide the date of 15/07/2020

conferment of Autonomy)

• Type of Institution Co-education

• Location Urban

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• Financial Status

Self-financing

• Name of the IQAC Co-ordinator/Director Dr. M. J. Jayashree

• Phone No. 0471-2545868 (Ext: 504)

• Mobile No: 9349338747

• IQAC e-mail ID iqac@mbcet.ac.in

3. Website address (Web link of the AQAR (Previous Academic Year)

https://mbcet.ac.in/naac/

4.Was the Academic Calendar prepared for that year?

Yes

• if yes, whether it is uploaded in the Institutional website Web link:

https://mbcet.ac.in/academiccalendar/

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

Institution/ Depart ment/Faculty/Sch ool	Scheme	Funding Agency	Year of Award with Duration	Amount
Nil	Nil	Nil	Nil	Nil

8. Provide details regarding the composition of the IQAC:

• Upload the latest notification regarding the composition of the IQAC by the HEI

9.No. of IQAC meetings held during the year 3

 Were the minutes of IQAC meeting(s) and Yes compliance to the decisions taken uploaded on the institutional website?

• If No, please upload the minutes of the meeting(s) and Action Taken Report

No File Uploaded

10.Did IQAC receive funding from any funding agency to support its activities during the year?

• If yes, mention the amount

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

*Pre qualifier of NBA was submitted during December 2021 and the SAR was submitted on 22nd Jan 2022.

*Prepared the Annual Quality Assurance Report 2020-2021 (AQAR) of the HEI based on the quality parameters / assessment criteria developed by NAAC in the prescribed format and was approved by IQAC and submitted on 3rd Feb 2022.

*MBCET is ranked as band PROMISING under the category of Colleges/ Institutes (Private/Self-Financed) (Technical) on Dec 31st 2021 based on the details submitted for ARIIA ranking on 24th March 2021 and also submitted details for The National Institutional Ranking Framework (NIRF) on 8th Feb 2022.

*Conducted Internal and External Academic and Administrative Audits and submitted the reports to University and UGC.

*Arrangement for feedback response from students, parents and other stakeholders on quality-related institutional processes for the year 2021-2022 were initiated during May 2022 and also initiated the preparation of Strategic Plan 2022-2027 during May 2022.

12.Plan of action chalked out by IQAC at the beginning of the academic year towards quality enhancement and the outcome achieved by the end of the academic year:

Plan of Action	Achievements/Outcomes
Review of Vision and Mission Statements	• Internal discussions on redefining the Vision and Mission Statements started. Keep autonomy in perspective.
Revision of curriculum with flexibility	• Thorough revision of the M.Tech Curriculum has been done and new framework has been developed to replace the existing curriculum in 2022-2023. • Discussion on the revision of B.Tech Curriculum initiated with a new to implement in 2023-2024.
Review of outcomes in strategic planning	• Review of the level of attainment of the goals framed in the Strategic Plan 2017-2022 has been initiated, towards fulfilling the requirements of the period 2022-2027.
Training and Development of Faculty inline with the new curriculum	• Faculty has been advised to do the SWAYAM MOOC Courses to get prepared to teach new courses.
Strengthening of IQAC	• IQAC is provided additional clerical support for smooth functioning of the office.
Academic and Administrative Audit	• Academic and administrative audits with internal and external peer team have been completed.
Scholarship to PG Students	• Scholarships, by way of reduction in Tuition Fee and provision for Teaching Assistantship have been made available in the reporting year.
Modernization of Lab Facilities	• Discussions have been initiated towards the Modernization and Strengthening of Laboratory facilities under the new mandate.

Additional space for Examination Block	• Examination Wing, under the controller of Examinations, have been shifted to a new block which has been partially completed.
Upgradation of Lab attached to Mechanical Department	• CNC machine has been procured and installed.
Installation of new software	• Management Information System has been partially implemented and further development is under progress.
Encouraging R&D	• A new scheme of Internal Internship for connecting B.Tech Students with faculty research has been initiated.

13. Was the AQAR placed before the statutory body?

• Name of the statutory body

Name of the statutory body	Date of meeting(s)
College Council	08/08/2022

14.Was the institutional data submitted to AISHE?

Yes

• Year

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. of the Principal	0471-2545868			
Alternate phone No.	0471-2545869			
Mobile No. (Principal)	8281145869			
Registered e-mail ID (Principal)	principal@mbcet.ac.in			
• Address	Mar Ivanious Vidyanagar, Nalanchi ra, Thiruvananthapuram			
• City/Town	Thiruvananthapuram			
State/UT	Kerala			
• Pin Code	695015			
2.Institutional status				
Autonomous Status (Provide the date of conferment of Autonomy)	15/07/2020			
Type of Institution	Co-education			
• Location	Urban			
• Financial Status	Self-financing			
Name of the IQAC Co- ordinator/Director	Dr. M. J. Jayashree			

• Phone No.			0471-2545868 (Ext: 504)					
Mobile No:				9349338747				
• IQAC e-mail ID			iqac@m	bcet	.ac.in			
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•	hether it is uploa onal website Web		the	https:		cet.ac	.in/a	cademic-
5.Accreditation	Details			1				
Cycle	Grade	CGPA	A	Year of Accredit	ation	Validity	from	Validity to
Cycle 1	A	A 3.13		2010	6	05/11,	/201	31/12/202
	6.Date of Establishment of IQAC			07/04/2015				
7.Provide the li	st of Special Sta	atus co		y Central	and/o			
	st of Special Sta artment/Facult IGC, etc.)?	atus co		by Central CSIR/DS	and/o		TEQII	
7.Provide the li Institution/Dep Bank/CPE of U Institution/ Dep tment/Faculty/S	st of Special Sta artment/Facult IGC, etc.)?	atus co	ool (UGC/	by Central CCSIR/DS Agency	and/o	of Award	TEQII	P/World
7.Provide the li Institution/Dep Bank/CPE of U Institution/ Dep tment/Faculty/S hool	st of Special Sta artment/Facult IGC, etc.)? Dar Scheme Sc Nil	atus co y/Scho	Funding	y Central CSIR/DS Agency	Year with	of Award	TEQII	P/World mount
7.Provide the li Institution/Dep Bank/CPE of U Institution/ Dep tment/Faculty/S hool Nil 8.Provide detai Upload the	st of Special Sta artment/Facult IGC, etc.)? Dar Scheme Sc Nil	e comp	Funding Ni osition of arding the	y Central CSIR/DS Agency	Year with	of Award	TEQII	P/World mount
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If No, please upload the minutes of the meeting(s) and Action Taken Report	No File Uploaded	
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13. Was the AQAR placed before the statutory body?	Yes

• Name of the statutory body

Name of the statutory body	Date of meeting(s)
College Council	08/08/2022
14. Was the institutional data submitted to AISHE?	Yes

• Year

Year	Date of Submission
2022	16/04/2022

15. Multidisciplinary / interdisciplinary

The new National Education Policy 2020(NEP 2020) is being implemented at the national level with the objectives of access, equity, inclusivity and quality. Mar Baselios College of

Engineering and Technology (MBCET) is collocated with an Arts and Science College and a Law College in the same campus under the same Management. An interdisciplinary approach to education is critical for engineering colleges. So, the running curriculum already contains 5% Humanities, roughly 14% Basic Science, 14% Engineering Science and only 45% Professional Core. Remaining part is for the electives. We shall explore more options to blend the curriculum with the adequate provisions for giving more options for the student, without losing the emphasis on the core engineering knowledge and skills attributable to the core knowledge domain of the respective engineering discipline.

16.Academic bank of credits (ABC):

NEP 2020 is deemed as a transformative and ambitious policy in terms of the access and equity that it envisages. Lateral movement for the students across the institutions to continue the studies is seen as an option to enable a person to pursue studies until one secure higher degrees and get settled in the career. College is autonomous and is affiliated to the University. Hence Degrees are awarded by the University. So, if University enables multiple exit and multiple entry, without compromising the merit, it will be adopted as long as the affiliation status continues. College will explore the registration on the Academic Bank of Credits. College is following the tabulation pattern for the marks which can be in line with the data format needed for the Academic Bank of Credits. CSV is the output format that is prescribed for the digital academic management system of the College.

17.Skill development:

After becoming autonomous, College has started the skill development programme. We shall explore the design of our skill acquisition programmes in line with the NSQL. Topics like Constitution of India, Life Skills, Sustainable Engineering are the courses included in the curriculum to impart values through the education.

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

The significance of promoting the Indian Knowledge Systems is emphasized through various community oriented programmes. Students are encouraged to observe the days of regional and national importance. Student clubs like Aksharakoottam is aiming at nurturing language skills in the local language. Members of the faculty contribute their expertise in translating the SWAYAM

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MOOC courses into Malayalam.

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

College has completely embraced outcome education more than a decade ago, while getting prepared for the first round of assessment by NBA for accreditation. Under autonomy, OBE is specified as the framework for teaching and learning.

20.Distance education/online education:

Engineering is a broad discipline that applies scientific, economic, social and practical factors to the design, building, maintenance and improvement of structures, machines, devices, systems, and materials. College has been using the online tools for the online teaching during the lockdown. We have experienced the limitations in content delivery for the highly technical courses. So, extensive content development and virtual learning enabler solutions are required for the modality of Open Distance learning. This will be explored.

Extended Profile

1.Programme

1.1

Number of programmes offered during the year:

File Description	Documents
Institutional Data in Prescribed Format	<u>View File</u>

2.Student

2.1

Total number of students during the year:

File Description	Documents
Institutional data in Prescribed format	<u>View File</u>

2.2

Number of outgoing / final year students during the year:

File Description	Documents
Institutional Data in Prescribed Format	<u>View File</u>

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2.3

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

File Description	Documents
Institutional Data in Prescribed Format	<u>View File</u>

3.Academic

3.1

Number of courses in all programmes during the year:

File Description	Documents
Institutional Data in Prescribed Format	<u>View File</u>

3.2

Number of full-time teachers during the year:

Extended Profile		
1.Programme		
1.1	10	
Number of programmes offered during the year:		
File Description Documents		
Institutional Data in Prescribed Format	<u>View File</u>	
2.Student		
2.1	2017	
Total number of students during the year:		
File Description	Documents	
Institutional data in Prescribed format	<u>View File</u>	
2.2	491	
Number of outgoing / final year students during	the year:	
File Description	Documents	
Institutional Data in Prescribed Format View File		
2.3	2017	
Number of students who appeared for the examinations conducted by the institution during the year:		
File Description	Documents	
File Description Institutional Data in Prescribed Format	Documents View File	
-		
Institutional Data in Prescribed Format		
Institutional Data in Prescribed Format 3.Academic	View File 398	
Institutional Data in Prescribed Format 3.Academic 3.1	View File 398	
Institutional Data in Prescribed Format 3.Academic 3.1 Number of courses in all programmes during the	View File 398 e year:	

3.2	155	
Number of full-time teachers during the year:		

File Description	Documents
Institutional Data in Prescribed Format	<u>View File</u>
3.3	171
Number of sanctioned posts for the year:	
4.Institution	
4.1	116
Number of seats earmarked for reserved categor GOI/State Government during the year:	ries as per
4.2	62
Total number of Classrooms and Seminar halls	
4.3	715
Total number of computers on campus for academic purposes	
4.4	672.88
Total expenditure, excluding salary, during the Lakhs):	year (INR in

Part B

CURRICULAR ASPECTS

1.1 - Curriculum Design and Development

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

Mar Baselios College of Engineering & Technology initiated curriculum design and development on the conferment of autonomy in September 2020. The models considered for design of curriculum are curricular structure of the affiliated University (KTU), the model curriculum prescribed by AICTE, recommendations by Industry Experts and Alumni and recent advances in Technology, so as to reflect the regional, national and global

perspectives.

The Institution is practising Outcome Based Education from the academic year 2014-2015 onwards. All the Undergraduate Programmes are accredited by National Board of Accreditation. Each B.Tech programme defines its Programme Educational Objectives and the Programme Specific Outcomes defined by NBA in alignment with the Institution Mission/Vision Statements. Each course in the curricula has its Course Objectives/Course Outcomes aligned with the POs, PSO's and PEO's.

As for the procedure the draft curriculum is prepared and is then placed for discussion/approval by the Board of Studies (BoS). The BoS has experts from academia, industry in addition to faculty as members. The curriculum suitably revised on the basis of the suggestions by BOS is then placed for approval during the Academic Council (AC). The Curriculum is finalized after incorporating suggestions by the Academic Council if any, so as to produce students capable of fulfilling the needs of the job market globally. Such students will be directly and indirectly contributing through their commitment to the development and welfare of the nation.

File Description	Documents
Upload additional information, if any	No File Uploaded
Link for additional information	https://mbcet.ac.in/wp- content/uploads/2020/10/PO-PEO-PSO.pdf

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

7

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

1.1.3 - Number of courses focusing on employability/entrepreneurship/ skill development

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offered by the Institution during the year

335

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

1.2 - Academic Flexibility

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

65

File Description	Documents
Minutes of relevant Academic Council/BoS meetings	<u>View File</u>
Any additional information	<u>View File</u>
Institutional data in prescribed format (Data Template)	<u>View File</u>

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

10

File Description	Documents
Minutes of relevant Academic Council/BoS meetings	<u>View File</u>
Any additional information	<u>View File</u>
List of Add on /Certificate programs (Data Template)	<u>View File</u>

1.3 - Curriculum Enrichment

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

The University curriculum has prescribed the study of Professional Ethics, human values, environment and sustainability at the levels of semester S3, S4, S6, S7 and S8.

In addition to this the college has approved and published a policy document in which the separate policies for code of conduct, research, academics, cultural, energy management, water management, waste management etc. are included.

The code of conduct policy, cultural policy, gender equity policy, Grievance Redressal Policy and other such policies are designed to address these issues. Besides the Grievance Redressal Committee (Staff), Grievance and Appeal Committee (students) and Women's Grievance Redressal Committee constituted as per directions of the government will be addressing the issues in these areas.

All these policy documents are published on the website to ensure transparency and for the information of the stakeholders and the public. The various clubs and technical societies such as IEEE, IET, ISTE, ASCS, ASME, Music club, Creative writing club etc. organise co curricular activities highlighting these aspects.

Under the auspices of the clubs and societies also of the institution national and international commemorative day's events and festivals are celebrated.

This promotes and strengthens the sense of values and ethics of the students.

World Engineering day, World Wetland day, World Water day, World Environment day, World Ozone day, World Population day, World Conservation day and such days are celebrated

Such curricular and co curricular activities will create greater awareness among the students about these areas.

02-03-2023 04:30:02

File Description	Documents	
Upload the list and description of the courses which address issues related to Gender, Environment and Sustainability, Human Values and Professional Ethics in the curriculum	<u>View File</u>	
Any additional information	<u>View File</u>	

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

3

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

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

929

File Description	Documents	
List of students enrolled	<u>View File</u>	
Any additional information	<u>View File</u>	

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

360

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

1.4 - Feedback System

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

A. All 4 of the above

File Description	Documents	
Provide the URL for stakeholders' feedback report	https://mbcet.ac.in/feedback/	
Upload the Action Taken Report of the feedback as recorded by the Governing Council / Syndicate / Board of Management	<u>View File</u>	
Any additional information	No File Uploaded	

1.4.2 - The feedback system of the Institution comprises the following

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

File Description	Documents	
Provide URL for stakeholders' feedback report	https://mbcet.ac.in/feedback/	
Any additional information	<u>View File</u>	

TEACHING-LEARNING AND EVALUATION

2.1 - Student Enrollment and Profile

2.1.1 - Enrolment of Students

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

460

File Description	Documents
Any additional information	<u>View File</u>
Institutional data in prescribed format	<u>View File</u>

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

119

File Description	Documents
Any additional information	<u>View File</u>
Number of seats filled against seats reserved (Data Template)	<u>View File</u>

2.2 - Catering to Student Diversity

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

The Institution organizes a one-week 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 tries 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. The 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: The 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 Counseling is given for Slow Learners to boost up their confidence level and to realize their possibilities for improvement.

File Description	Documents	
Upload any additional information	<u>View File</u>	
Paste link for additional information	https://mbcet.ac.in/wp- content/uploads/2021/08/second_book.pdf	

2.2.2 - Student – Teacher (full-time) ratio

Year	Number of Students	Number of Teachers
31/08/2021	2017	155

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

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) has 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.

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 including online resources for effective teaching and learning

The college promotes the usage of latest technology in course content delivery. In order to promote this, the Teaching - Learning centre was formed which inspires support 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.

NPTEL: Self-learning is promoted among students using online resources from SWAYAM-NPTEL. Faculty members suggest information regarding ideal courses based on student curriculum. Later the students are given assignments and encouraged to take lectures as part of their assignments.

FLIPPED CLASSROOM AND PEER GROUP LEARNING: Video lectures are provided to the students and doubt clearing sessions are arranged by the faculty. This enables development of self-learning capability among students. Also group projects are assigned develop teamwork and leadership skills among students.

INTERACTIVE SMART BOARDS:10 interactive smart boards were installed. Projectors in classroom and use of Graphic tablets by the faculty members has indeed proven to be an excellent alternative to the offline classes, during the COVID lockdown. PPT, Animation Videos, YouTube videos, etc. are used as part of

content delivery to effectively deliver the course content.

File Description	Documents
Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process	https://mbcet.ac.in/teaching- learning/teacher-learning-centre/
Upload any additional information	No File Uploaded

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

2.3.3.1 - Number of mentors

113

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

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

At the start of every academic year the College prepares an academic calendar. The academic calendar consists of reopening day, continuous assessment test dates, important events dates, end semester examination dates, holiday and vacation dates etc for each Semester. The same is made available to the staff, students and parents through internet. The calendar of activities is centrally monitored by the Dean Academic and Controller of Examinations and it is ensured that the Calendar of academic activities is strictly adhered. The deadline for correction of continuous assessment test papers and entry of these marks in the web portal are strictly followed.

Further each faculty has to prepare a detailed course teaching plan with course objectives and course outcomes. The students are given a copy of detailed course teaching plan by the course faculty within a week from the commencement of the classes. The faculty has to submit weekly subject coverage to the Head of the Department, who ensures that the course content delivery is done as per the schedule prepared. Along with that the department audits are conducted by IQAC twice every Semester, where the

adherence of the Faculty in preparation of the Teaching Plan and Content delivery are monitored and necessary directions are given.

Academic calendar and sample teaching plan uploaded

File Description	Documents
Upload the Academic Calendar and Teaching Plans during the year	<u>View File</u>

2.4 - Teacher Profile and Quality

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

172

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

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

42

File Description	Documents
List of number of full-time teachers with PhD./ D.M. / M.Ch. / D.N.B Super-Specialty / D.Sc. / D.Litt. and number of full-time teachers for 5 years	<u>View File</u>
Any additional information	<u>View File</u>

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

1266

File Description	Documents
List of teachers including their PAN, designation, Department and details of their experience	<u>View File</u>
Any additional information	<u>View File</u>

2.5 - Evaluation Process and Reforms

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

40.8

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

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

47

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

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

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 level thinking in students. Then a report of the scrutiny is submitted to the HoD. 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 towards 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 the academic performance several Awards are given at the Institution Level.

Exam Management in Linways: Linways AMS, is used for online exam registration, hall arrangement, generation of false number consolidated mark list, grace mark & moderation. It is also used for advanced result analysis and online certificate verification. mbcet.linways.com

Preparation of QP-OBE (Autonomous): For the Autonomous batches, the End Semester Exam Question Papers are set on the basis of Bloom's Taxonomy Level. This helps in moving towards an Outcome Based Education (OBE) which transpires to good learning outcomes.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	mbcet.linways.com

2.6 - Student Performance and Learning Outcomes

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

POs 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 (DQAC). 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 COs for all courses (exemplars from the Glossary)	<u>View File</u>
Upload any additional information	No File Uploaded
Link for additional Information	https://mbcet.ac.in/curriculum/

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

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

Continuous Internal Assessment: Direct Method: Each question in the question paper is mapped to one or more course outcomes. No. of attempts and no: of studentsscored more than 60% of the maximum marks are claculated.

Indirect Method: Survey is conducted to check the response of students with respect to the attainment of COs. Responses above "FAIR" are considered for CO attainment.

Based on the following formula, the overall CO attainment percentage is calculated.

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

Then the attainment levels are assigned as

(60 < C0% < 70) - 1

(70 < C0% < 80) - 2

(CO% > 80) - 3

University results:

The number of students graduating in the stipulated time is indicator of the attainment of COs of various courses (COs are related to POs). Percentage of students who have scored greater than C grade in the Examinations and graduating in the stipulated time of study are calculated. This percentage is also assigned attainment levels based on the above criteria.

Then the overall CO attainment is calculated as

 $CO(%) = (0.8 \times University attainment level + 0.2 \times Continuous Internal Assessment level). This score will be out of scale 3$

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	Nil

2.6.3 - Pass Percentage of students

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

428

File Description	Documents
Upload list of Programmes and number of students appear for and passed in the final year examinations	<u>View File</u>
Upload any additional information	<u>View File</u>
Paste link for the annual report	https://mbcet.ac.in/annual-report/

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

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https://mbcet.ac.in/wp-content/uploads/2022/10/STUDENTS-FEEDBACK-May-2022.pdf

RESEARCH, INNOVATIONS AND EXTENSION

3.1 - Promotion of Research and Facilities

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

MBCET is committed to serve society and the industry by conducting state-of-the-art research at par with National and International standards. The institution strives to foster a research culture and provide the required support to the staff and students through research framework, infrastructure, and policies.

MBCET has defined the Research Policy and uploaded it to the College website, which outlines the strategic plan, the guiding principles, and the development of research for all those involved in research activities. The researchers will abide by the Research Policy following the two key principles, namely, Quality and Ethics. The implementation and updating of the Research Policy are carried out by the Research Promotion Committee of the College. The R&D activities in the individual departments are monitored by the Department RPC (DRPC) headed by the Head of the respective Department. The Academic Council and Governing Body of the College advise on matters related to setting and achievement of research goals. Plan for revision of research goals and action steps are initiated to frequently uplift the standards of research and innovation activities of the College. Quality research undertaken by the faculty and students is recognized and rewarded.

File Description	Documents
Upload the Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption	<u>View File</u>
Provide URL of policy document on promotion of research uploaded on the website	https://mbcet.ac.in/wp-content/uploads/20 21/07/Policies-Update.pdf
Any additional information	No File Uploaded

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

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

3.6878

File Description	Documents
Minutes of the relevant bodies of the institution regarding seed money	<u>View File</u>
Budget and expenditure statements signed by the Finance Officer indicating seed money provided and utilized	View File
List of teachers receiving grant and details of grant received	<u>View File</u>
Any additional information	<u>View File</u>

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

1			

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

3.2 - Resource Mobilization for Research

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

48.16

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

3.2.2 - Number of teachers having research projects during the year

26

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	Nil
List of research projects during the year	<u>View File</u>

3.2.3 - Number of teachers recognised as research guides

18

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

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

6

File Description	Documents
Supporting document from Funding Agencies	<u>View File</u>
Paste link to funding agencies' website	https://kscste.kerala.gov.in/student- project/, https://ktu.edu.in/eu/core/stud entProject.htm, https://ktu.edu.in/eu/cor e/researchSeedMoney.htm, https://ktu.edu. in/eu/core/cerdFunding.htm?=3HV6Ucew%2FoY LW4qc7M0718%2FH00sY%2FEHqYGM5zJnJ1%2BA%3D , https://ktu.edu.in/eu/core/cerdFunding. htm?=3HV6Ucew%2FoYLW4qc7M0718%2FH00sY%2FE HqYGM5zJnJ1%2BA%3D, https://ktu.edu.in/eu /core/cerdFunding.htm?=3HV6Ucew%2FoYLW4qc 7M0718%2FH00sY%2FEHqYGM5zJnJ1%2BA%3D, htt ps://tvsss.co.in/https://ikst.res.in/http s://www.serbonline.in/SERB/emr?HomePage=N ew, https://kscste.kerala.gov.in/engineer ing-technology-programme-etp/,
Any additional information	<u>View File</u>

3.3 - Innovation Ecosystem

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

Catalyst- The Innovation and Entrepreneurship Development Centre of MBCET aims to sharpen students' skills, broaden their knowledge, and equip them with technical and non-technical skills that Engineers need. The centre believes in inculcating the entrepreneurial spirit in students. In 2021-2022, Catalyst

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Mar Baselios IEDC trained1262 college students and 140 school students through 18 self-driven eventsdesigned and envisaged to lay the seeds of entrepreneurship in the young minds so that they can return to college whenever they wish to pursue entrepreneurship as a career.

Funding attracted by IEDC in 2021-2022

- 1.Rs. 2 lakhs as a performance reward from KSUM
- 2.Rs. 20,000/- from ICFOSS
- 3.Rs. 25,000/- Innovator Premier League.
- 4.Rs. 2 Lakhs as Idea Grant from KSUM

Significant Accomplishments and recognitions by IEDC in 2021-2022

?Best Performing IEDC Thiruvananthapuram

?Best Performing IEDC First Runner up South Zone

?Best Student Innovator Award

?Best Student Performerin Thiruvananthapuram(Male, Female)

?Best Student Performerin South Zone

?Best Student Start-up

?Winners of IPL Start-up Pitch

?Winners of IPL Hackathon

(All instituted by Kerala Start-up Mission)

?Got recognized as Technology Business Incubator (TBI) by KSUM.

?The low-cost IoT-enabled Pulse Oximeter developed by Vishnu P Kumar under the mentorship of Mr. Arun J. S, got nominated for technology transfer by KTU.

?AiDrone Pvt Ltd won the First Prize of 35 lakhs in the Swadesi Microprocessor challenge

?10 Automatic Hand sanitizer dispensers were designed and distributed to various schools in collaboration with the UBA Cell of MBCET.

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

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

80

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

3.4 - Research Publications and Awards

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

A. All of the above

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

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

year

3.4.2.1 - Number of PhD students registered during the year

4

File Description	Documents
URL to the research page on HEI website	https://mbcet.ac.in/research/
List of PhD scholars and details like name of the guide, title of thesis, and year of registration	<u>View File</u>
Any additional information	<u>View File</u>

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

0.17

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

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

0.234

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	Nil

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

3.4.5.1 - Total number of Citations in Scopus during the year

306

File Description	Documents
Any additional information	<u>View File</u>
Bibliometrics of the publications during the year	<u>View File</u>

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

3.4.6.1 - h-index of Scopus during the year

15

File Description	Documents
Bibiliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	<u>View File</u>
Any additional information	<u>View File</u>

3.5 - Consultancy

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

0.462

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

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

0

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

3.6 - Extension Activities

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

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 interact 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, donation of food packets, distribution of study materials and smart phones to economically backward students, distribution of stationery and other essential commodities to the young students, providing mixer grinder, diapers and basic essentials to 'Care Home' for the old aged, interaction with inmates, campaign on Gender Sensitization, donation of wheelchairs etc. are some of the activities which help in imbibing in students the values of social responsibility. The Beach Cleaning Drive created awareness about the care fornature in the young minds. The National Service Scheme helps in the improvement of human life through inculcating social, economic, cultural, and ethical values in students. Students acquire leadership qualities and develop skills like public speaking, raising funds, educating others etc. They learn about team spirit, hard work and brotherhood.

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

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

50

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

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

74

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

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

301

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

3.7 - Collaboration

3.7.1 - Number of collaborative activities during the year for research/ faculty exchange/

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student exchange/ internship/ on-the-job training/ project work

132

File Description	Documents
Copies of documents highlighting collaboration	<u>View File</u>
Any additional information	<u>View File</u>

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

16

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

INFRASTRUCTURE AND LEARNING RESOURCES

4.1 - Physical Facilities

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

Creating a better environment for education is 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. A CNC machine (Turning and Milling) has been purchased. Latest configuration desktops and softwares are provided in computer labs. The lab attached to all Departments were 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.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	Nil

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

The Institution 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/Technical Societies 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 an 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 Yogahall 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. In addition the Main Ground is utilized for conducting Athletic Meets. 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.

File Description	Documents
Geotagged pictures	<u>View File</u>
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

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

62

File Description	Documents
Upload any additional information	No File Uploaded
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	<u>View File</u>

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

552.41637

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

4.2 - Library as a Learning Resource

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

MBCET Central library is well-equipped with latest infrastructure and well-stocked with a good collection of books. Library migrated to KOHA ILMS version 21.11.05 January 2021. Our Department Libraries are automated with KOHA ILMS version 21.11.05 since 2014 . From 2017 to 2020 library circulation functions have been automated through Ecoleaide ERP. Barcode

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based circulation system is followed. All books are classified based on DDC 20th edition. The central library has a good collection of records including 27123 volumes and 11155 titles, 75 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), Elesevier's Science Direct, 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/

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

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

A. Any 4 or more of the above

File Description	Documents
Details of subscriptions like e- journals, e-books, e- ShodhSindhu, Shodhganga membership	<u>View File</u>
Upload any additional information	<u>View File</u>

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

1	5		9	2
	~	•	_	_

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

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

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

12246

File Description	Documents
Upload details of library usage by teachers and students	<u>View File</u>
Any additional information	<u>View File</u>

4.3 - IT Infrastructure

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

MBCET ITMSprovides secureaccess to information resources to students, faculty and staffto facilitate education, research, communication facility &computing network. The ratio of computer to students is 1:4. All PC's with configuration are 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 was updated in April 2022. College has an Internet Leased Line of 150 mbps bandwidth, 1:1uncompressed on optical fiber. All staffrooms are provided with network connected PC's and each department has software labs with computing facility for the students. All the classrooms and seminar halls have wired internet or wifi facilities Several licensed soft wares areavailable to each department. 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 allstaff. 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.My Payroll Master, a new software to manage staffattendance functions since 30th March 2022.

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	<u>View File</u>
Paste link for additional information	Nil

4.3.2 - Student - Computer ratio

Number of Students	Number of Computers
2017	715

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

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

A. ?50 Mbps

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

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

D. Any one of the above

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

4.4 - Maintenance of Campus Infrastructure

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

120.46651

File Description	Documents
Audited statements of accounts	<u>View File</u>
Upload any additional information	<u>View File</u>

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

The Chairman of the Management Council entrusts the Bursar with the above task. Annual maintenance is done every year including replacement of damaged items. Smart class rooms have been instituted in all the wings. The Electrical wing of the college takes care of the repair, maintenance or replacement of electrical fittings. The labs updation and maintenance, installation of new machineries replacement of new systemsare done as per the requirement of Departments. The Information Technology Management System (ITMS) takes care of all the computer labs and IT enabled facilities. The Librarian takes care of library and routine affairs over major maintenance and updation work are executed bythe Bursar. 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 aredone 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. A Full time Counsellor takes care of the counselling needs of the students while the Nursing

Superintendent 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/

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

STUDENT SUPPORT AND PROGRESSION

5.1 - Student Support

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

188

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

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

160

File Description	Documents
Upload any additional information	<u>View File</u>
Institutional data in prescribed format	<u>View File</u>

5.1.3 - The following Capacity Development and Skill Enhancement activities are organised for improving students' capabilities Soft Skills Language and Communication Skills Life Skills (Yoga,

A. All of the above

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

File Description	Documents
Link to Institutional website	
	https://mbcet.ac.in/magazine/
Details of capability development and schemes	<u>View File</u>
Any additional information	<u>View File</u>

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

174

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

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

A. All of the above

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

5.2 - Student Progression

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

213

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

5.2.2 - Number of outgoing students progressing to higher education

24

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

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

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

13

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

5.3 - Student Participation and Activities

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

3

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

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

MBCET College Senate, the representative body of all students consists of a Chairperson, Vice Chairperson, General Secretary, Magazine editor, Arts Club Secretary, two Councilors to the election field of University Union General Council, 2 girl students representing the girl students of the College, 1 student representative from each branch (both UG and PG) and two Staff Advisors. It coordinates cultural, social and recreation programmes, sports and technical events such as the Baselian Fest and Crossroads, Techno Cultural Fest, Sports Meets etc.

Administrative bodies/committees of the Institution with student representation include Course Committees and Class Committees as directed by the University. Course Committee is for common Courses of the B.Tech Programme. The Committee includes 4 Student Representatives. Beginning from the Third Semester, all branches will have class committees for every Semester constituted by the respective Heads of Departments, with two Student Representatives nominated by the HoD.

The Innovative and Entrepreneurship Development Centre has an executive committee with 14 student members and one faculty member designated as the Nodal Officer.

Under the UBA programme of MHRD, Government of India, the UBA

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cell of the college functions with a Project Coordinator, ten student representatives and one faculty representative from each Department.

Professional bodies namely IEEE, IET, ISTE, CSI, ACM, ASCE and ASME with student representation are also actively functioning in the College. In Internal Quality Assurance Cell, Senate chairperson is included as the student representative.

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

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

32

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

5.4 - Alumni Engagement

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

MBCETAA (Mar Baselios College of Engineering and Technology alumni association) was conceived with the help and cooperation of the Principal, and Management of the College. The Association was formally inaugurated on 25 January, 2009. The alumni association is registered as a society in accordance with the Travancore-Cochin Literary, Scientific and Charitable Societies Registration Act, 1955. MBCETAA supports the Institution in fields of curriculum development, placement and training, social obligations, among others. MBCETAA Middle East Chapter consisting of Alumni from UAE, Oman, Qatar, Saudi Arabia is functioning.

MBCETAA provides financial support to programmes intended for

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alumni/student development and sponsors the Mar Baselios Youth Excellence Award for the final year Engineering students in Kerala. The award comprises a Prize Money of Rs. 1,00,000/-, Certificate, and Momento. Annual alumni meet "RENDEZVOUS" is organised to bridge the sense of unity among all alumni members.

In order to support the Government's effort to address the digital divide, MBCETAA sponsored a laptop for a student which was handed over at a function held at the college in May 2022.

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

5.4.2 - Alumni's financial contribution during the year

E. <2 Lakhs

File Description	Documents
Upload any additional information	No File Uploaded

GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 - Institutional Vision and Leadership

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

- The vision and mission of the institution envisages improving the efficacy of governance. For better governance, in addition to the existing Heads of Departments the number of Deans has been increased from three to five-Dean Administration, Dean Academic, Dean Research & Development, Dean PG, Dean Student Affairs
- Office of the Controller of Examinations and two Deputy Controller of Examinations
- Separate building for the exam wing
- The Academic Council and Board of Studies have been constituted

- Office administration will be streamlined
- e-bulletin has been started for publicizing the important activities of the Institute.
- Information dissemination through social media.
- The Strategic Plan and Programme Educational Objectives are aligned with the Vision and Mission of the College. Good governance practices are maintained involving faculty in the decision-making process through membership in the Statutory Bodies.
- College aims at becoming a globally renowned centre of excellence focusing on academics especially research. College is adhering to the principles and values imbibed from the vision of our Founder. The Strategic Plan for the period 2017-2022 focusses on attaining quality and infrastructure and it had enabled the conferment of the "Autonomous Status" by the UGC in 2020. Involvement of the teachers in the governance is ensured through the devolution of the power to the various levels and the membership in the decision making bodies.
- https://mbcet.ac.in/about/#vision-mission
- https://mbcet.ac.in/about/administration/

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

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

The Managementcreated 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.

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The College as an organization practices the decentralization of the power and participative decision making in the management of the activities and institutional development. Successful conduct of the International Conference on "Signal Processing, Informatics, Communication and Energy Systems" SPICES 2022 during 10 to 12 March 2022, with IEEE Kerala Section. Pursuant to the permission from the Management to host the Conference, Dr J Jayakumari, Professor and Head, ECED was appointed as the general coordinator and the committees with members from the faculty and external experts were constituted. More than 100 research papers, Tutorials and keynotes by Leading academicians were the highlights. Entire event was conducted through active participation of the faculty, staff and students. The team had effectively managed the fiancé and monitored the expenditure to judiciously utilize the available funds. The key players were three Departments-CSE, EEE and ECE, supported by others.

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

https://mbcet.ac.in/news-events/

https://ieeespices2022.com/

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

6.2 - Strategy Development and Deployment

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

In the Strategic Plan the Goal 3 was stated as "To create an environment for the students to succeed at their highest level through high quality academic programs, co -curricular and extracurricular activities and community outreach programmes" The objective articulated for attaining this goal is to "Develop a culture to serve the society" For this there were multiple strategies of which one of them was "Arrange inspirational

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activities encouraging students for community service". Each Department has a philanthropic wing along with the professional associations. It's mandatory for the students to do charitable activities like coding skills,, helping orphanages, visiting old age homes, providing study materials for the school going children of the financially weaker families, constructing the houses for the needy persons, electrification of the houses including wiring, cleaning the beach and recreation centres to remove plastic, conducting environment sensitization programmes for public , conducting community surveys, covid awareness, distribution of the sanitizer dispenser to Government schools and so on through their own initiatives under the guidance of faculty and staff. These are apart from the community service activities of the National Service Scheme Unit of the College. Automatic sanitizer dispenser was developed by our student Mr Vishnu P Kumar.

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

https://mbcet.ac.in/outreach/

• https://mbcet.ac.in/research/mous/

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 various institutional bodies is effective and efficient as visible from the policies, administrative set-up, 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.MBCET campus provides an ideal milieu for academic pursuits. The Governance system includes the Governing Body chaired by the Patron himself. 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. 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 provides the complete system for the College as an autonomous institution. The Organogram of the Institution depicts the delegations adequately.

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

File Description	Documents
Paste link to Organogram on the institution webpage	https://mbcet.ac.in/about/administration/
Upload any additional information	No File Uploaded
Paste link for additional Information	https://mbcet.ac.in/about/administration/

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

A. All of the above

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

6.3 - Faculty Empowerment Strategies

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

For the Teaching faculty, the facilities for National Pension Scheme, Group Insurance, Accidental Insurance have been implemented and for the Non-teaching staff, statutory EPF and 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 school fees.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://mbcet.ac.in/faculties/staff-club/

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

12

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

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

12

File Description	Documents
Reports of the Human Resource Development Centres (UGC HRDC/ASC or other relevant centres)	<u>View File</u>
Upload any additional information	<u>View File</u>

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

113

File Description	Documents
Summary of the IQAC report	<u>View File</u>
Reports of the Human Resource Development Centres (UGC ASC or other relevant centers)	<u>View File</u>
Upload any additional information	<u>View File</u>

6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly

Institution conducts internal and external financial audits regularly

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 egovernance 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/auditors-report/

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

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

0.25

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

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

The resources for capital and recurring expenditures are mobilized from multiple sources. Major component of the revenue inflow is the 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. Merit scholarships also are provided to top students.

The Management aims to provide best to meet the academic, research and training requirements so as to build a fruitful career.

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. Financial audit and the checks and balances ensure transparent and efficient utilization of resources.

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

6.5 - Internal Quality Assurance System

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

We have imbibed that the exercise of Quality Assurance is essential for sustaining institutional excellence. Coordinated the AICTE-CIIsurvey and submitted the survey on5.10.2021. Organized an OBE Workshop jointly with the Teaching Learning Centre (12 and 20 December 2021). Pre qualifier of NBA was submitted during December 2021. SAR was submitted on 22nd Jan 2022. MBCET is ranked as band PROMISING under the category of Colleges/ Institutes (Private/Self-Financed) (Technical) on Dec 31st 2021 based on the details submitted on 24th March 2021. Prepared the Annual Quality Assurance Report 2020-2021 (AQAR) of the HEI based on the quality parameters / assessment criteria developed by NAAC in the prescribed format and was approved by IOAC and submitted on 3rd Feb 2022. Submitted details for The National Institutional Ranking Framework (NIRF) on 8th Feb 2022. The internal audits were conducted on 10th and 11th of August 2021 and 18th, 21st and 24th of March 2022. The internal administrative audit was conducted from 7th to 13th April 2022. Initiated the preparation of Strategic Plan 2022-2027 during May 2022. Arrangement for feedback response from students, parents and other stakeholders on quality-related institutional processes for the year 2021-2022 were initiated during May 2022.

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

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

The Teaching Learning Centre(TLC) has been established by the Management for focusing on the preparation of teachers for delivering the contents effectively and for their continuous professional development. It also set the ecosystem for making the learning more experiential and immersive for the students. Training of the teachers are regularly conducted. The induction of newly appointed teachers, their training, etc. are also pursued by the TLC. New thinking about imbibing the NEP 2020 was also started. Following paragraphs give a gist of the activities during 2021-2022.

- (A) NEP 2020 Focus Seminar on New Challenges and Opportunities for Technical Education in the context of NEP 2020-Importance of Autonomy
- (B) Microteaching Workshop for newly joined Faculty
- (C) Orientation Programme for new faculty
- (D) Interaction with Leading Academicians- Teaching GenZ
- (E) Training Programme on Outcome Based Curriculum Design (Virtual mode)
- (F) New Normal New Life: Let Us Bounce Back
 - https://mbcet.ac.in/teaching-learning/teacher-learningcentre/

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

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

A. Any 4 or all of the above

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

INSTITUTIONAL VALUES AND BEST PRACTICES

7.1 - Institutional Values and Social Responsibilities

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

The Institution is committed in maintaining a harmonious and inclusive environment that promotes gender equity and inculcate a very progressive stand in driving a healthy teaching - learning platform that appreciates freedom of ideas without any form of discrimination. The Women Studies Unit, IEEE and ISTE SHE cells actively functions towards gender specific programs.

Women's Studies Unit (WSU) conducted a week long programs from 2nd to 8th March in connection with International Women's Day. The programs started with a campaign on Gender Sensitization by District Women and Child Development officer on March 2nd at

Senatus Hall

Motivational talk by a successful Women Entrepreneur Dr. Sheeja Gangan and an invited talk on Women's Health and Hygiene by Dr. Sheeja R K, were organized.

WSU made a peer to peer interactive session with high school girl students of LMSHSS Vattappara.

"The Life Journey of Daya Gayathri" an inspirational talk by a transgender woman was organised

WSU organized an interactive session titled "Udaan" by Lt. Cdr. Janet Maria Philip (Naval Construction Overseer, Warship Overseering Team, WOT(KOC), Indian Navy at Senatus Hall.

Facilities Available for women on campus

A centralized nursing station with a full time nursing superintendent functions in the College

College provides counselling facility with a permanent counsillor

Common rooms are attached to each department.

Safety and security are ensured through 24/7 security personals.

Surveillance cameras function in the entire area of the campus.

Housekeeping staff are deployed for any emergency as per requirement.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://mbcet.ac.in/wp-content/uploads/20 22/11/22.Gender-Equality.pdf

7.1.2 - The Institution has facilities for alternate sources of energy and energy conservation: Solar energy Biogas

A. Any 4 or All of the above

plant Wheeling to the Grid Sensor-based energy conservation Use of LED bulbs/power-efficient equipment

File Description	Documents
Geotagged Photographs	<u>View File</u>
Any other relevant information	<u>View File</u>

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

The college has a Waste Management Cell that facilitates the smooth functioning of the various types of wastes generated in the premises through effective Waste Management and sustainable practices in converting Waste to resource. 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

Solid waste management methods:

Biogas Plant:

A 80 m3 fixed dome biogas plant is commissioned in Mar Aprem Hostel. The food waste from MBCET canteen and hostel is deposited in this biogas plant. The produced is used for cooking in hostel.

Material Recovery Facility:

The different types of waste collected from the college is segregated in the Material recovery facility. Different color bins are used for waste collection. The waste segregated are disposed through local vendors.

Incinerator:

An incinerator placed near MRF is used for burning dry waste. Small incinerators are placed in ladies toilet for napkin disposal.

E-Waste Disposal:

E-waste collected from various departments are disposed to ewaste collection agency. Desktops that can be repaired or reused are given to needed students.

Chemical waste:

Chemical waste from lab is collected and disposed safely in Chemistry lab of Mar Ivanios College.

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

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

A. Any 4 or all of the above

File Description	Documents
Geotagged photographs / videos of the facilities	<u>View File</u>
Any other relevant information	<u>View File</u>

7.1.5 - Green campus initiatives include

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

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

a. Any a or Arr or the above

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

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

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

C. Any 2 of the above

- 1. Green audit
- 2. Energy audit
- 3. Environment audit
- 4. Clean and green campus recognitions/awards
- **5. Beyond the campus environmental promotional activities**

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

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

A. Any 4 or all of the above

assistance, reader, scribe, soft copies of reading materials, screen reading, etc.

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

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

Inclusive Environment

The institution has been setup with minimum tampering to the geographical structure of the terrain.

Tolerance

Tolerance to nature- We preserve the water bodies intact

Tolerance to humans- Though hosted by a particular religion, people of other religion, caste, creed, belief and custom also are accommodated without distinction.

Regional considerations are taken in the institution for account of admissions (economically backward students are given fee concession).

To provide harmony among staff, get together, recreation and tours are arranged with a financial support up to 50% to the needy staff.

Silent prayer which is practiced daily shows the respect to all religions without highlighting any particular one.

Socio economic aspects

The institute whole heartedly support the housing charity

program for the benefit of economically and socially backward people with an amount of Rs.10 lakh every year.

Various departments and cells such as NSS, Sparsham, Thanal etc. of the institute has provided food and necessities to the old age homes, hospitals and streets.

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

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

Several classes, programmes and outreach activities have been conducted to sensitize the students and employees of the institution to constitutional obligations, values, rights, duties and responsibilities of citizen.

Constitutional obligation - The institution prompts its stakeholders to abide the Constitution and respect its ideals and institutions, the National Flag and the National Anthem through its curricular and co-curricular initiatives. As an educational institution we strive towards excellence in all spheres of individual and collective activity so that the nation constantly rises to higher levels of endeavour and achievement which is one of the fundamental duties.

- 'Constitution of India' is taught as a non-credit course to the second year students.
- The preamble of the Constitution is read in every classes on the Constitution Day.
- MBCET have adopted the integrity pledge as Organization and staff pledged as Citizen and is committed to uphold the highest standards of honesty, integrity and to follow probity and rule of law in all walks of life
- Independence Day and Republic Day were celebrated.

Values - UHV cell of MBCET is active and motivate all staffs to attend the FDP, which is an initiative of AICTE.

Duties and Responsibilities of Citizen - Protect and improve the natural environment including forests, lakes, rivers and wildlife and to have compassion for living creatures and to Safeguard public property and to abjure violence the following initiatives have been taken by the various departments and cells of MBCET.

File Description	Documents
Details of activities that inculcate values necessary to transform students into responsible citizens	<u>View File</u>
Any other relevant information	<u>View File</u>

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

A. All of the above

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

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

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MBCET celebrate national and international commemorative days, events and festivals through its various Cells/Units to aware the students and staff the significance and promote collective responsibility towards the nation and universe.

The following commemorative days are observed and celebrated

- Independence Day
- Republic Day
- International Yoga Day
- World Population Day
- World Day for International Justice

Teachers Day

- Global Literacy Day
- World Suicide Prevention Day
- World First Aid Day
- International Peace Day
- NSS Day
- World Rivers Day

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

7.2 - Best Practices

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

Two Best Practices have been identified:

- 1. 'Student innovation excellence through best practices Award'. This was selected by an expert team of externals and internal faculty members. 10 projects were identified. These teams were presented with cash awards and citations. Some projects have the potential for prototyping. The Alumni association sponsored the award. Students had to depend on Industries for the fabrication work.
- 2. 'Scholarship for Engineering Aspirants' was the second practice to encourage the aspirants in the field of Engineering and Technology so as to develop their skills for sustainable growth of the society. The scholarship was meant for the best outgoing students of the school, given to 30 students based on their merit and extracurricular activities. A total amount of 1.5 Lakh for 30 students was earmarked. The practice instituted this year was notified through the leading printed media and social media. Difficulty in getting students who are academically meritorious and financially backward at the same time was encountered.

File Description	Documents
Best practices in the Institutional website	https://mbcet.ac.in/naac/
Any other relevant information	Nil

7.3 - Institutional Distinctiveness

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

Proposals for Innovative Projects- WASTE TO VALUE

Waste Management Cell invites proposals for innovative projects from undergraduate students of MBCET on the topic Waste to Value. The objective of this is to empower young innovators to do research and implement actions to reduce waste for a greener planet. The role of college students is pivotal in sensitizing the community on waste management and offering innovative solutions for the conversion of waste to value. The scheme also envisages the talented minds of MBCET to develop solutions for a sustainable ecosystem in the MBCET campus

File Description	Documents
Appropriate link in the institutional website	https://mbcet.ac.in/naac/
Any other relevant information	No File Uploaded

7.3.2 - Plan of action for the next academic year

ACTION PLAN 2022-2023

- 1. Enable 25% to 50% of the Faculty to attend the NPTEL/SWAYAM MOOC Course and get certified. Top Performers among them will be appreciated.
- 2. Conduct new recruitment and also the Career Advancement related processes for the Faculty and Staff
- 3. Secure the approval for starting new B.Tech and M.Tech Programmes and start the Programmes
- 4. Secure NBA Accreditation for all Programmes with higher score.
- 5. Establish one Industry supported Laboratory in the advanced Technology area like AI, IoT, ML, etc.
- 6. Develop a Research Laboratory in Artificial Intelligence and Machine Learning
- 7. Establish a Skill Development Laboratory in the area of Electric Vehicles and related Technologies with Industry support.
- 8. Start one Skill Development Workshop facility in Additive Manufacturing and 3D Printing technologies
- 9. Conduct External Peer evaluation for the academic and administrative processes apart from the regular Internal Audit
- 10. Conduct Training Programmes for students for placement and endeavour to secure 100% placement
- 11. Conduct one Faculty Development Programme per Semester per Department
- 12. Take measures to enhance admission so as to reach 100% level in all the Programmes.
- 13. Implement revised curriculum for the M.Tech Programmes
- 14. Strengthen Consultancy works to reach a turnover of Rs.20Lakhs
- 15. Strengthen International relations and collaborative research/ exchange programmes
- 16. Create Deanship for Alumni Matters and strengthen Alumni relations portfolio.
- 17. Create incubation space for startups and provide seed

fund.

- 18. Review the Examination system and bring in reforms to strengthen academic processes under autonomy.
- 19. Create a career guidance and Lifelong Learning centre for the Students.
- 20. Start the work on new initiatives under NEP 2020.