SELF STUDY REPORT

FOR

1ˢᵗ CYCLE OF ACCREDITATION

MAR BASELIOS INSTITUTE OF TECHNOLOGY AND SCIENCE

MAR BASELIOS INSTITUTE OF TECHNOLOGY AND SCIENCE,
NELLIMATTOM P.O., KOTHAMANGALAM, ERNAKULAM DISTRICT.
686693
www.mbits.edu.in

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

August 2019

1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Mar Baselios Institute of Technology and Science [MBITS], was established in 2009 as the 6th venture in the Educational field under the auspices of Mar Thoma Cheria Pally Kothamangalam, which is a 6th century old parish church & pilgrim centre with the profound and continued Blessings of Saint Eldho Mar Baselios.

The starting of MBITS has added one more golden feather to the Mar Basil Group of Institutions which was originated in 1936, with the establishment of Mar Basil School at Kothamangalam. The Institute is managed by Mar Baselios Educational and Charitable Trust led by committed stalwarts of the Church, Mar Thoma Cheria Pally. MBITS stands supreme in the field of technical education with a high level of excellence and quality in education along with good discipline and placement records. The atmosphere in the institute truly reflects the motto "Wisdom Crowns Knowledge", thanks to the abundant blessings of the patron saint.

The Institute is located at a scenic and serene place near Kothamangalam beside NH-85.

The Institute is approved by AICTE and is affiliated to APJ Abdul Kalam Technological University,Kerala.

The Institute has been started with full intensity to play a leading role in providing good quality education and careers, thereby helping the youth of rural and agricultural background to change with times and join the main stream of industrial growth. The Institute maintains excellence in teaching by eminent faculty members nurturing students to become professionally competent and ethically strong with good discipline, ensuring academic result and placement.

We have five undergraduate courses and two post graduate courses.

UG Courses

1. B.Tech Civil Engineering.
2. B.Tech Mechanical Engineering.
3. B.Tech Electrical and Electronics Engineering.
4. B.Tech Electronics and Communication Engineering.
5. B.Tech Computer Science and Engineering.

PG Courses

1. M.Tech Computer Aided Structural Engineering.
2. M.Tech Computer Integrated Manufacturing.

Our students are performing well in State and National level co-curricular and extra-curricular activities. MBITS was one among the two nodal centres in the State and 26 nodal centres across nation who have hosted the National level Smart India Hackathon(SIH), 2017. MBITS won first prize worth Rs. 1 lakh in Complex Hardware Edition, SIH 2019.

Vision

To nurture a positive campus culture and equip the younger generation to take our nation forward.

Mission

- To provide graduate level technical education in the existing or conventional branches as well as newly emerging fields.
- To build up a centre of technical excellence for post graduate studies and research in all fields of human endeavour.
- To help the youth of rural agriculture background to change with times, and join the mainstream of industrial growth and information technology.
- To impart ethical values of our Indian tradition to the future generation.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- Well established Management since 1936. They are highly efficient, supportive and service motivated.
- Senior academicians with excellent track records are heading the institute and departments.
- Committed and dedicated faculty and supporting staff ensure the quality in education.
- Good teamwork of Management, Principal, Dean, HODs and staff members leads to continuous improvement.
- Excellent infrastructure facilities with State-of-the-art Laboratories, Computer Centre and Library.
- Located beside National Highway NH-85 with round the clock transport facility for easy access.
- Positive campus culture for teaching and learning that upholds our motto "Wisdom Crowns Knowledge".
- Highly supportive personality development of students through various co-curricular and extra-curricular activities.
- Financial support to economically weak and meritorious students via highly popular scholarship schemes.
- Good staff retention ratio.
- Transparent admission procedure.
- Our students have been performing commendably well in State and National Level co-curricular and extra-curricular activities.
- The two active NSS units impart remarkable services.
- Institution promotes activities that focus on upliftment of the local community through various national programmes like UBA, PMKVY, DDU-GKY, ASAP, etc.
- All computer labs are used for various national level prestigious online examinations like GATE, CAT, JEE, AIIMS, IBPS, JIPMER, RRB, etc., since 2012 and received outstanding achievement award from TCS.
- Many MoUs with Industries and Foreign Organizations.
- Transportation facility provided by the college to all major locations in the region.
- Water harvesting facility is available with 6.5 lakhs tank capacity and water collected from an area of 4220 Square Meters.

- We promote and respect values of all religions. We provide bus to mosque for Jumu'ah (Friday prayer).

Institutional Weakness

- The affiliated system limits the academic freedom of the institution**.**
- Fewer number of faculty members with PhD.
- Majority of students are coming from rural background, lacking prominent communication skills.
- Consultancy and research activities need to be enhanced.
- Patents yet to be obtained.
- Yet to have full residential facilities for staff members inside the campus.

Institutional Opportunity

- Skill Based Certificate Courses and Add-on courses are promoted to enhance employability.
- Initiating 'Start-ups" within the Campus itself.
- Skill development programmes are conducted for staff and students in core areas.
- Participation of alumni for enhancing the employment opportunities of outgoing students.
- Exploring more opportunities for consultancy projects.

Institutional Challenge

- Placements in core companies to be enhanced.
- Making more projects suitable for industrial applications and fulfillment of the requirement of society.
- It is becoming difficult to adjust and adapt the dynamic requirement of the industry since the academic curriculum is prescribed by the affiliating University and it is revised only in a duration of four to six years..
- Attracting top ranked students to the Institute owing to the presence of a large number of engineering colleges in the State.
- Retaining a good position among all Engineering Colleges in the country.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

The institution is affiliated to APJ Abdul Kalam Technological University and the curriculum and syllabi prescribed by the University are strictly adhered to. The university follows Choice Based Credit System. Effective curriculum delivery is ensured through a process given below:

- Institute academic calendar is prepared in line with the University academic calendar for planning the academic, co-curricular and extra-curricular activities in advance.
- Course plan is prepared for all courses and is approved by HOD.
- Faculty members are encouraged to organize and attend refresher courses, workshops and seminars.
- Bridge courses are conducted for first year B Tech students.
- Adequate learning materials are made available to the students.

- Students' evaluation in academics are based on Bloom's Taxonomy.
- Performance of students are analyzed periodically and the progress report is given to parents.
- Remedial classes are arranged for slow learners periodically.
- Periodic review of teaching-learning process is done by HOD and Principal.
- Course/Class committee meetings with student representatives are held thrice in a semester.
- Programmes are organized based on feedback from different stakeholders.
- Guest lectures, seminars, workshops, training programmes, industrial visits and field projects are arranged.
- Institution offers courses on human values and professional ethics such as Sustainable Engineering, Disaster Management, Principles of Management etc.
- Various clubs are functioning for the overall development of students and staff members.
- Activity points are awarded for the co-curricular and extracurricular activities and it is mandatory for awarding the Degree.
- Students are motivated to do MOOC, Add-on courses and field projects.

Teaching-learning and Evaluation

- Admission process is based on the University, Government and AICTE regulations.
- Fully fledged facilities such as class rooms, laboratories, libraries, computer centre, etc. are available.
- Well defined recruitment procedure exists for the staff members and maintains the staff strength as per AICTE pattern.
- Academic calendar covers the academic, co-curricular and extra-curricular activities.
- Prepare course plans, before the commencement of classes, and review periodically by HODs.
- Routine tutorial classes and remedial classes, seminars, workshops, mini projects, main projects, etc. are conducted.
- Industrial visits, Industrial training, expert lectures, seminars, etc. enhance learning opportunities.
- IEDC promotes various activities.
- Various quality improvement programmes are conducted for staff members.
- Self appraisal of faculty and feedback by students are in place for improving teaching- learning process.
- Effective Mentor-Mentee system has been implemented.
- Counseling is done by mentors and external counselor.
- Motivate students to participate in various competitions conducted by institute, university, AICTE, organizations, clubs etc.
- Proficiency award and best student award exist for motivating the academic excellence and leadership.
- Outcome Based Education is implemented to attain COs, PSOs and POs.

Research, Innovations and Extension

- Our team participated in various National Level competitions like QuadTorc and won 7th and 10th positions in 2018 and 2017.
- Various workshops/seminars conducted on IPR and Industry Academia innovative practices.
- Principal Dr. P Sojan Lal received an award from "World Record India" for the most number of papers published in 2014 within a short duration of time. He is listed in Marquis "Who's Who in the World" since 2009 representing the world's most accomplished individuals.
- Four PhDs are awarded within last five years.
- 182 research papers are published in the journals during the last five years.

- 5 books and 145 conference papers are published.
- Institute has two NSS units and they organize various camps and awareness programs.
- The NSS units have undertaken "Punarjjani" (Project of Kerala Government for renovating equipment in Government institutions) by which hospital assets of more than 81 lakh rupees were recreated.
- The institute has participated in relief activities during the recent flood affected in various parts of Kerala state.
- Different extension activities are being conducted by the institute for the rural upliftment such as UBA, PMKVY, DDU-GKY, ASAP etc.
- During the last five years, we received 18 awards and recognitions for extension activities from government/recognized bodies.
- Progressively obtained various linkages with industries for internship, field trip etc.
- We have MoUs with various organizations for bridging the gap between Academia and Industry.

Infrastructure and Learning Resources

- The campus is spread over an area of 10.2 acres of land.
- 34 spacious class rooms with proper ventilation and lighting are provided with ergonomic seating, out of which 14 class rooms are with ICT facilities.
- Each department has seminar hall with ICT facilities.
- The college has well equipped labs for all branches that incorporates modern technology and facilitate interactions between faculty members and students.
- A two tier auditorium having a seating capacity of 850 is available.
- Basketball, badminton and football grounds and a cricket practicing net are available in the campus.
- An average of 23.34% of budget is allocated for infrastructure augmentation every year.
- Computerized central library is spread over an area of 632 sq m with a seating capacity of 150 and holds more than 18,800 books. Department libraries are also provided.
- An annual average expenditure of Rs 8 lakhs is allocated per year for the purchase of books and journals.
- The college is enabled with uninterrupted internet facility around the campus which contains leased line as well as broadband connection.
- Institute has more than 400 computers connected over LAN / WAN and are supported by UPS Back-up. Additionally we have 82.5 kVA generator back-up.
- Latest security software suits and firewall are used to guard internet security threats and controlling data.
- Full fledged campus ERP system (E-live) is used for governance and information management to all stakeholders.
- Computer center having 80 desktop computers with all required facilities is open to all staff members and students for browsing and printing.
- A student computer ratio of 2.6:1 is maintained.
- Periodical maintenance is done for equipment and other infrastructure facilities.
- Average Expenditure on maintenance of campus infrastructure is 12.64% and AMCs are retained for various facilities.

Student Support and Progression

- The institute is committed to excel in all spheres; therefore, every student is extended to academic, psychological, professional and financial assistance to make their stay in the college an enriching experience.
- The institute maintains a good teacher student relationship which helps in the planning of all academic, co-curricular and extra-curricular activities.
- Students with financial constraints are offered a wide variety of support with scholarships and free-ships from the management and Government funding agencies.
- The college provides access to all kinds of reinforcements that the students need to complete their education, such as remedial classes, bridge courses and development of their soft skills.
- Career counseling at various levels prepares them for progression to higher studies as well as finding suitable placements.
- Co-curricular activities are conducted which enables them to discover their true potential.
- The college has a democratically elected student council as per university norms and guided by faculty members.
- The students explore their talents and interests through creative and meaningful opportunities.
- Various intra and inter college platforms are provided to the students to showcase their talents.
- The college also has a strong grievance redressal system, a well-functioning Internal Complaints Committee and Anti-Ragging committee.
- The college has a registered Alumni Association and the alumni work closely with the students and the departments, providing guidance and mentorship as well as financial assistance.

Governance, Leadership and Management

- Under the auspices of the Church, Mar Thoma Cheriya Pally and the Saint 'Eldho Mar Baselios', this institute always foster a positive campus culture and equip the younger generation to take our nation forward.
- The institute has a well established management since 1936 and they are pioneer in various education sectors and health care.
- The Management, Principal, administrative team and the faculty work in consonance with the Mission and Vision of the Institution.
- Upholding the motto 'Wisdom Crowns Knowledge' we provide quality higher education at par with international standards.
- The institute has well defined strategic plans for continuous improvement which are formulated by the involvement of all the stakeholders.
- This is being materialized by the short term, mid term and long term plans.
- The organizational structure of the institution is of hierarchical type.
- E-governance has been implemented in various areas of operation with a campus ERP system.
- The institution has an effective systems for recruitment and professional development.
- Implemented performance appraisal system for teaching and non-teaching staff effectively.
- The institution follows established procedures and processes for planning and allocation of financial resources
- They include fund mobilization strategies, optimal fund utilization techniques and regular financial audits.
- The IQAC meets regularly to discuss and plan activities targeted for the academic growth of students and staff members.
- The cell constantly gives directions to the various departments for the conduct of FDPs, National/International conferences/workshops to get updated on the emerging trends in technological

advancements.

- The institute promotes interaction with premier institutions like IITs, NITs, ISRO, DRDO, DRJ Telecom USA etc.
- The institution reviews its teaching learning process, structures & methodologies along with learning outcomes at periodic intervals through the IQAC as per the prevailing norms.

Institutional Values and Best Practices

- Classes on every day starts with a prayer, jointly with the students and their faculty advisors.
- A common prayer hall is provided in the campus, for promoting spiritual values.
- We promote and respect values of all religions. As an example, a college bus is provided on every Friday to near by Mosque, for the students and staff to attend Jumu'ah(Friday prayer).
- Rain water harvesting tank of capacity of 6.5 lakh liters is made to enhance the availability of water in the campus.
- The green ambience of the campus is largely due to regular and massive plantation drives and its regular maintenance.
- The initiative to install solar panel, paperless work system (E-live) and incineration practices are noteworthy.
- ENCON club of the college jointly with BPCL, Cochin Refinery is very active to make the students aware of the carbon credits, carbon neutrality etc.
- Institute is situated beside NH-85, so that the staff and students can easily access it, 24 hours.
- Students of both genders are given equal opportunities to grow and develop into efficient and responsible citizens of the future.
- The Women cell and Internal Complaints Committee of the institute organize seminars by highly distinguished professionals on sensitive and critical gender issues like legal rights of women, women safety, self defense etc.
- There are counseling and common rooms for both male and female separately.
- Facilities for differently abled personalities like lift, ramps, wheel chair, toilet etc are provided in the campus.
- Core Values of the institute and Code of Conduct for staff and students are made available on the institutional website and displayed.
- Birth and death anniversaries of great personalities are observed.
- Institution maintains complete transparency in financial, academic and administrative functions.
- Institution indulge with a large number of projects related to community services (PMKVY, DDU-GKY, NSS, ASAP, UBA etc) for local community, especially in rural areas.
- Institute has taken the task of employability enhancement initiatives.
- Scholarship schemes are set up with the support of the management, staff and alumni.
- National Anthem is sung by all, at the end of the classes to enhance patriotism.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	MAR BASELIOS INSTITUTE OF TECHNOLOGY AND SCIENCE
Address	Mar Baselios Institute of Technology and Science, Nellimattom P.O., Kothamangalam, Ernakulam District.
City	Kothamangalam
State	Kerala
Pin	686693
Website	www.mbits.edu.in

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Professor	Leena Thomas	0485-2837803	9496827934	0485-2837801	principal@mbits.edu.in
Principal	P Sojan Lal	0485-2837807	9446869990	0485-2837830	dean.ac@mbits.edu.in

Status of the Institution	
Institution Status	Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minroity institution	Yes Minority Certificate.pdf
If Yes, Specify minority status	
Religious	Jacobite Syrian Christian
Linguistic	
Any Other	

Establishment Details	
Date of establishment of the college	28-07-2009

University to which the college is affiliated/ or which governs the college (if it is a constituent college)

State	University name	Document
Kerala	A.P.J. Abdul Kalam Technological University	View Document

Details of UGC recognition

Under Section	Date	View Document
2f of UGC		
12B of UGC		

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)

Statutory Regulatory Authority	Recognition/Approval details Institution/Department programme	Day,Month and year(dd-mm-yyyy)	Validity in months	Remarks
AICTE	View Document	30-04-2019	12	

Details of autonomy	
Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?	No

Recognitions	
Is the College recognized by UGC as a College with Potential for Excellence(CPE)?	No
Is the College recognized for its performance by any other governmental agency?	No

Location and Area of Campus				
Campus Type	**Address**	**Location***	**Campus Area in Acres**	**Built up Area in sq.mts.**
Main campus area	Mar Baselios Institute of Technology and Science, Nellimattom P.O., Kothamangalam, Ernakulam District.	Rural	10.2	29421.81

2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Programme/Course	Duration in Months	Entry Qualification	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BTech,Mechanical Engineering	48	Higher Secondary Education or Equivalent	English	480	334
UG	BTech,Civil Engineering	48	Higher Secondary Education or Equivalent	English	480	308
UG	BTech,Computer Science And Engineering	48	Higher Secondary Education or Equivalent	English	240	205
UG	BTech,Electronics And Communication Engineering	48	Higher Secondary Education or Equivalent	English	240	80
UG	BTech,Electrical And Electronics Engineering	48	Higher Secondary Education or Equivalent	English	240	90
PG	Mtech,Mechanical Engineering	24	BTech	English	48	0
PG	Mtech,Civil Engineering	24	BTech	English	48	34

Position Details of Faculty & Staff in the College

Teaching Faculty												
	Professor				**Associate Professor**				**Assistant Professor**			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				10				20				62
Recruited	6	4	0	10	1	0	0	1	29	33	0	62
Yet to Recruit				0				19				0
Sanctioned by the Management/Society or Other Authorized Bodies				10				1				86
Recruited	6	4	0	10	1	0	0	1	42	44	0	86
Yet to Recruit				0				0				0

Non-Teaching Staff				
	Male	**Female**	**Others**	**Total**
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				36
Recruited	16	20	0	36
Yet to Recruit				0

Technical Staff				
	Male	**Female**	**Others**	**Total**
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				27
Recruited	7	20	0	27
Yet to Recruit				0

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	**Professor**			**Associate Professor**			**Assistant Professor**			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	4	1	0	0	0	0	0	1	0	6
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	2	3	0	1	0	0	42	43	0	91

Temporary Teachers										
Highest Qualification	**Professor**			**Associate Professor**			**Assistant Professor**			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0

Part Time Teachers										
Highest Qualification	**Professor**			**Associate Professor**			**Assistant Professor**			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0

Details of Visting/Guest Faculties				
Number of Visiting/Guest Faculty engaged with the college?	**Male**	**Female**	**Others**	**Total**
	8	0	0	8

Provide the Following Details of Students Enrolled in the College During the Current Academic Year

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	195	3	2	1	201
	Female	108	1	0	0	109
	Others	0	0	0	0	0
PG	Male	1	0	0	0	1
	Female	14	0	0	0	14
	Others	0	0	0	0	0

Provide the Following Details of Students admitted to the College During the last four Academic Years						
Programme		**Year 1**	**Year 2**	**Year 3**	**Year 4**	
SC	Male	9	5	9	6	
	Female	1	2	3	5	
	Others	0	0	0	0	
ST	Male	0	0	1	0	
	Female	0	1	0	0	
	Others	0	0	0	0	
OBC	Male	52	55	43	51	
	Female	42	28	30	29	
	Others	0	0	0	0	
General	Male	141	93	128	167	
	Female	80	63	74	100	
	Others	0	0	0	0	
Others	Male	0	0	0	0	
	Female	0	0	0	0	
	Others	0	0	0	0	
Total		325	247	288	358	

3. Extended Profile

3.1 Program

Number of courses offered by the institution across all programs during the last five years

Response: 664

File Description	Document
Institutional Data in Prescribed Format	[View Document](#)

Number of programs offered year-wise for last five years

2018-19	2017-18	2016-17	2015-16	2014-15
7	8	9	9	9

3.2 Students

Number of students year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
1051	1138	1290	1397	1406

File Description	Document
Institutional Data in Prescribed Format	[View Document](#)

Number of seats earmarked for reserved category as per GOI/State Govt rule year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
24	24	26	26	26

File Description	Document
Institutional data in prescribed format	[View Document](#)

Number of outgoing / final year students year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
304	381	392	368	355

File Description	Document
Institutional Data in Prescribed Format	View Document

3.3 Teachers

Number of full time teachers year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
97	101	128	124	119

File Description	Document
Institutional Data in Prescribed Format	View Document

Number of sanctioned posts year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
92	96	128	124	118

File Description	Document
Institutional data in prescribed format	View Document

3.4 Institution

Total number of classrooms and seminar halls

Response: 39

Total Expenditure excluding salary year-wise during the last five years (INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
711.72	705.79	738.75	481.27	424.82

Number of computers

Response: 402

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curricular Planning and Implementation

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

Response:

The institute is affiliated to APJ Abdul Kalam Technological University, Kerala and follows the university designed curriculum. The university prepares an academic calendar that specifies the duration of the semester, date of commencement and end examination dates etc.

The effective curriculum delivery is ensured through the following procedure:

- **Academic Calendar**: Based on university academic calendar, the Dean(Academics) prepares a detailed academic calendar which includes internal test dates, remedial classes, extracurricular activities, etc. It is then approved in the HOD meetings and thereby published.
- **HOD Meeting**: Principal, HODs and Dean(Academics) meet twice in a week. The team discuss the action plans to arrive an optimal and effective way of implementation of curriculum delivery.

- **Department Staff Meeting:** Department wise staff meetings are conducted atleast once in a week. Decisions in the HOD meeting are conveyed to the faculty members. Action plans are formulated by incorporating the feedback from faculty members.

- **Course Plan:** Before the beginning of the semester a course plan is prepared for every course by the respective faculty and is approved by the HOD.

- **Course File:** Faculty members maintain a course file for all courses including laboratory courses which contains :
    - Course Diary containing course plan, subject coverage, academic calendar, students' attendance, result analysis etc.
    - Mapping of Course Outcomes (COs) with Programme Outcomes (POs) & Program Specific Outcomes (PSOs)
    - Tutorial / Assignment Questions
    - Sample Tutorial / Assignment Book
    - Question Papers & Scheme of Evaluation for Internal Exams
    - Sample Answer Sheets of Internal Exams
    - University Question Papers along with Scheme of Evaluation & Answer Key

- **Course Committee Meeting / Class Committee Meeting:** Periodic Course /Class Committee Meeting with student representatives are conducted for the effective implementation of Course plan. Suggestions from students are also considered.

- **Tutorials:** Tutorials are conducted regularly and effectively.

- **Result Analysis:** Proper evaluation of internal exams, tutorials and assignments are done by faculty members and are reviewed by the HODs and Principal.

- **Remedial Classes:** Remedial classes are arranged for weak students who show poor performance in internal examinations.

- **Progress Report:** Progress report of each student including internal exam marks and University results are available in E-live campus software.

- **PTA meeting:** PTA meeting is conducted in each semester and students' progress report is distributed to parents. Feedback from parents are collected and considered for the overall improvement.

- **Practical courses:** Laboratory manual is prepared for all the experiments and are given to students. Course plans and course files are maintained for each lab.

- **Bloom's Taxonomy:** Internal examination and assignment questions are prepared based on Blooms Taxonomy.

- **Feedback System:** Timely feedback is obtained from the students, staff, parents, training & placement cell and alumni. Measures are taken to do necessary changes by the IQAC

- **Management:** Management, meet Principal and HODs periodically and give guidance.

- **Course End Survey:** To assess the effectiveness of curriculum delivery, course end survey is being conducted for all the courses and feedback is considered for further improvements.

File Description	Document
Any additional information	[View Document](#)

1.1.2 Number of certificate/diploma program introduced during the last five years

Response: 36

1.1.2.1 **Number of certificate/diploma programs introduced year-wise during the last five years**

2018-19	2017-18	2016-17	2015-16	2014-15
5	18	4	4	5

File Description	Document
Details of the certificate/Diploma programs	View Document
Any additional information	View Document

1.1.3 Percentage of participation of full time teachers in various bodies of the Universities/ Autonomous Colleges/ Other Colleges, such as BoS and Academic Council during the last five years

Response: 0

1.1.3.1 Number of teachers participating in various bodies of the Institution, such as BoS and Academic Council year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
0	0	0	0	0

File Description	Document
Details of participation of teachers in various bodies	View Document
Any additional information	View Document

1.2 Academic Flexibility

1.2.1 Percentage of new Courses introduced out of the total number of courses across all Programs offered during last five years

Response: 5.72

1.2.1.1 How many new courses are introduced within the last five years

Response: 38

File Description	Document
Details of the new courses introduced	View Document
Any additional information	View Document

1.2.2 Percentage of programs in which Choice Based Credit System (CBCS)/Elective course system has been implemented

Response: 100

1.2.2.1 Number of programmes in which CBCS/ Elective course system implemented.

Response: 7

File Description	Document
Name of the programs in which CBCS is implemented	View Document
Any additional information	View Document

1.2.3 Average percentage of students enrolled in subject related Certificate/ Diploma programs/Add-on programs as against the total number of students during the last five years

Response: 7.21

1.2.3.1 Number of students enrolled in subject related Certificate or Diploma or Add-on programs year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
289	56	22	15	12

File Description	Document
Details of the students enrolled in Subjects related to certificate/Diploma/Add-on programs	View Document
Any additional information	View Document

1.3 Curriculum Enrichment

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

Response:

1. GENDER

- **Women Cell and Internal Complaints Committee (ICC)**
    - Women Cell plays an active role in empowering girl students.
    - ICC was formulated in the college according to the Sexual Harassment of Women at Workplace(prevention, prohibition & redressal) Act, 2013. It functions as a sub-committee of Women Cell.
    - Presiding officer of ICC is **Smt. Prameela Sunny,** Ex-Municipal Councilor Kothamangalam.
    - ICC provides a platform to women employees and girl students to air their grievances.
    - Women Cell and ICC are very active and conduct various lecturers and talks for the

students.

- ○ Women Cell was inaugurated by Senior Advocate of Kerala, Honorable High court, **Smt. V P Seemandini**. She had given an inspiring talk on the topic, "Legal Rights for Women and children"
- ○ International Women's day is celebrated every year.
- ○ **Women Hackathon (2018)**
  - ○ Deptartment association of CSE, CYBORGS, conducted Women Hackathon in association with International Centre for Free & Open Source Software on 11th & 12th October 2018, by Mr. Justin Joseph & Ms. Anupa Ann Joseph.
  - ○ Women Hackathon is a program that addresses the gender gap in the Free and Open Source Software (FOSS) community and technology. Mr. Justin Joseph enlighted the students by his talk on women in technology and why they are backward in technology.
  - ○ About 30 female students from Dept of Computer Science & Engineering participated in Women Hackathon held at MBITS. Certificates were also issued to them by International Centre for Free & Open Source Software.

2. ENVIRONMENT AND SUSTAINABILITY

Sl No	Core Course	Description	
1.	Sustainable Engineering First-Year	Sustainability- needs and concept, Environmental Acts and Prot local environmental issues, Natural resources pollution, Carbon waste concepts, Life Cycle Assessment, Environmental Assessr Sustainable habitat, Green material, Energy, Sustainable Industri	
2.	Disaster Management S8 Elective	Students gain idea about the nature, applications of disaster principles both natural and man-made disasters.	
3.	Energy Management and Auditing S8 Elective	Students learn energy auditing procedures and different meth economic analysis of energy projects. They understand the conc management and its opportunities.	
4.	Energy Conservation and Management S8 Elective	Students can analyze energy data of industries, energy ac balancing. They also learn energy audit and methodologies for e by utilization of available recourses in optimal ways.	

- **NSS units** of our college is organising several campaigns like Swachh Bharath Abhiyan, Suchithwa Mission programs, Clean Campus Green Campus, Planting of tree saplings etc.

3. HUMAN VALUES AND PROFESSIONAL ETHICS

Sl No.	Core Course	Description	
1.	Design and Engineering First-year	Planning and design based on the concept and er human psychology and culture design.	

2.	Life Skills Second-year	Human Values, Civic Rights, Engineering experimentation, Ethics, Global Issues, Code of Eth
3.	Principles of Management Third-year	Social Responsibility, Decision making under u and risks, Ethics in Management.
4.	Professional Ethics S8 BTech	Awareness on professional ethics for enginee values and integrity, Respect the rights for c develop global perspective.

- **Yoga club** is functioning in a regular basis.

File Description	Document
Any Additional Information	[View Document](#)
Link for Additional Information	[View Document](#)

1.3.2 Number of value added courses imparting transferable and life skills offered during the last five years

Response: 20

1.3.2.1 Number of value-added courses imparting transferable and life skills offered during the last five years

Response: 20

File Description	Document
Details of the value-added courses imparting transferable and life skills	[View Document](#)
Brochure or any other document relating to value added courses.	[View Document](#)
Any additional information	[View Document](#)

1.3.3 Percentage of students undertaking field projects / internships

Response: 29.12

1.3.3.1 Number of students undertaking field projects or internships

Response: 306

File Description	Document
List of students enrolled	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document

1.4 Feedback System

1.4.1 Structured feedback received from 1) Students, 2)Teachers, 3)Employers, 4)Alumni and 5)Parents for design and review of syllabus-Semester wise/ year-wise

A.Any 4 of the above

B.Any 3 of the above

C. Any 2 of the above

D. Any 1 of the above

Response: A.Any 4 of the above

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

1.4.2 Feedback processes of the institution may be classified as follows:
A. Feedback collected, analysed and action taken and feedback available on website

B. Feedback collected, analysed and action has been taken

C. Feedback collected and analysed

D. Feedback collected

Response: A. Feedback collected, analysed and action taken and feedback available on website

File Description	Document
Any additional information	View Document
URL for feedback report	View Document

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Average percentage of students from other States and Countries during the last five years

Response: 0.28

2.1.1.1 Number of students from other states and countries year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
7	5	1	1	2

File Description	Document
List of students (other states and countries)	[View Document](#)
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)

2.1.2 Average Enrollment percentage (Average of last five years)

Response: 61.01

2.1.2.1 Number of students admitted year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
325	247	288	358	364

2.1.2.2 Number of sanctioned seats year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
489	489	537	537	537

File Description	Document
Institutional data in prescribed format	[View Document](#)

2.1.3 Average percentage of seats filled against seats reserved for various categories as per

applicable reservation policy during the last five years

Response: 0

2.1.3.1 Number of actual students admitted from the reserved categories year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
0	0	0	0	0

File Description	Document
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)

2.2 Catering to Student Diversity

2.2.1 The institution assesses the learning levels of the students, after admission and organises special programs for advanced learners and slow learners

Response:

The institution collects the following information and analyses the newly admitted students:

1. The board examination result with due importance to Mathematics, Physics and Chemistry.
2. State level engineering entrance examination rank.
3. Their background, place of study, syllabus of study in class X and plus two
4. Parent's feedback

Slow learners and advanced learners can normally be categorized with the above details.

Induction programmes are being arranged for familiarizing them to engineering and technological fields. Hand books containing general instruction, salient features of the programmes and courses, examination, awarding of grades, activities etc. are being distributed and explained during the induction programme.

Orientation programme for imparting knowledge about various subjects is being conducted and the help of experts in these fields are being utilized. The refresher classes for mathematics, physics and chemistry are being taken by faculty to support all the students especially the slow learners to cope up with the curriculum.

In the subsequent semesters the advanced learners and slow learners are identified by

- Scholarly record
- Academic report

- Mentor report
- Faculty's feedback about the student
- Student behavior and attitude
- Class room involvement
- Parent's feed back

The Mentor finds slow learners problems and motivates them in a friendly way to reach particular academic goals. To improve on their academic performance, extra classes with separate time table are being organized to clarify the doubts and re-explaining of difficult topics. Advanced learners are motivated by the Principal and HoD to perform in exemplary manner in the University examinations and to maintain the performance and to bag good GATE score.

The institute promotes independent learning facilities that contribute to their academic and personal growth. For example, the institute encourages them to participate in various activities like seminars and workshops. The institute provides adequate weightage to curricular, co curricular and extra-curricular activities.

The above process brings out the following outcome:

- Student's understanding in their chosen domain
- Improved results and pass percentage.
- Improved quality of projects
- Improved placements and better opportunity for higher studies

Strategies for slow learners:

- Remedial classes are conducted after class hours to clarify doubts and re-explain the topics.
- Counseling and mentoring sessions are conducted in a friendly way to overcome their psychological problems and achieve their goals successfully.
- Providing learning materials and handouts.
- PTA meetings
- Bridge course

Strategies for Advanced Learners

- Extra reading materials are provided to widen their horizon.
- They are intellectually stimulated with various advanced projects and challenging assignment.
- They are encouraged to present/write research articles and assist in preparation of college newsletter, magazines etc.
- They are usually made the class representatives for proactive leadership through which classroom dynamics are positively influenced.
- They are given the lead to plan and organize departmental seminars/conferences giving them an opportunity to interface with the academia/industry experts.
- They are motivated for preparing competitive examinations like GATE, GRE etc. Typically in 2019, 124 (43.5% of total final year students) wrote GATE examination.
- Encourage to take-up Massive Open Online Course (MOOC)

File Description	Document
Any additional information	[View Document](#)

2.2.2 Student - Full time teacher ratio

Response: 10.84

File Description	Document
Any additional information	[View Document](#)

2.2.3 Percentage of differently abled students (Divyangjan) on rolls

Response: 0.1

2.2.3.1 Number of differently abled students on rolls

Response: 1

File Description	Document
List of students(differently abled)	[View Document](#)
Institutional data in prescribed format	[View Document](#)
Any other document submitted by the Institution to a Government agency giving this information	[View Document](#)
Any additional information	[View Document](#)

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

Response:

For focusing the learning towards student centric methods, our institute takes effective methodologies for the beneficial of the students. We have very well equipped state of the art laboratories for experiencing the theories the student has learned. Even though the affiliated university, APJ Abdul Kalam Technological University specify minimum number of laboratory experiments, our institution provides extra laboratory work.

Experiential Learning

- Students in a class are divided into small groups of 4/6 so as to get individual care in doing the

experiments. They have to prepare in advance before doing the experiment and while doing the experiment they can take the help of well experienced faculty members and professional technical staff in the laboratory. Within 3 hours they will get a clear idea of the experiment, since they have to complete all the procedures, calculations, graph plotting, inference making, etc. in the class itself. Individual viva practice related to the experiments is also conducted.

- Several industrialists are invited to the college to bridge the gap between academy and industry. In particular talks by Dr.D.R.Vaman(USA), pioneer patent holder having 52 international patents and guided 52 research scholars, Dr.S.Somanath, distinguished scientist and Director VSSC, Trivandrum etc, motivated the students to a higher level.
- The students are taken to industrial establishments to have first-hand information of the functioning of the industry.
- Students collectively organize IEI and other professional bodies programs and thereby achieving leadership qualities and professional advancement.
- Our institute gives much importance to learn Add-on courses like 'Swayam', *NPTEL* course and other Add-on courses beneficial to their co-curricular activities. In specific 42 students successfully completed NPTEL online certification during the year 2018-19 in various subjects.

Participative Learning

- Students are given chances to work together on project works-design project, mini project, main project, etc. Recently they developed a software for the Pothanicad Grama Panchayath as a part of their ISO Certification and deployed successfully.
- Solar and electric vehicle projects completed by the students of MBITS are an effective guideline for the progress of the nation.
- MBITS is the only successful college from Kerala in participating QuadTorc (Quad design National level competition) in 2017 and 2018.
- MBITS won first place in the Smart India Hackathon 2019 and secured rupees one Lakh.
- We promote utilization of our infrastructure and in-house man power for the development of indigenous products. In particular MBITS was one among the four colleges from Kerala that participated in the National level competition for design and fabrication of open wheeled race cars organized by SAE SUPRA.
- To enhance student competancy, we organize special programs like group discussion, mock interview etc. As a result 97% of final year B.Tech students from MBITS got placed in various companies in the year 2019.

Problem Solving Methodologies

- The first period of all the classes is scheduled as tutorial class for problem solving.
- Design project-(Develop one product by a group of four student)
- Main and mini project.
- Compressive strength test of concrete is done as consultancy project.
- Laboratory experiments(Around 20% of the credits for laboratory courses)

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

2.3.2 Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc.

Response: 71.13

2.3.2.1 Number of teachers using ICT

Response: 69

File Description	Document
List of teachers (using ICT for teaching)	[View Document](#)
Any additional information	[View Document](#)
Provide link for webpage describing the " LMS/ Academic management system"	[View Document](#)

2.3.3 Ratio of students to mentor for academic and stress related issues

Response: 14.01

2.3.3.1 Number of mentors

Response: 75

File Description	Document
Any additional information	[View Document](#)

2.3.4 Innovation and creativity in teaching-learning

Response:

MBITS aims at promoting interdisciplinary projects. This enabled us to win first prize in Smart India Hackathon 2019 among 2200 colleges participated including IITs and NITs. The team consists of male and female students of second, third and fourth year of Mechanical and Electronics Engineering. Pioneer patent holder Dr. D. R. Vaman was giving technical guidance through conference calls from USA and visiting MBITS.

MBITS promotes socially relevant projects. In 2019 MBITS jointly with Kerala Road Transport Cooperation (KSRTC) done a project titled "Pneumatic Jack and Wrench" which enabled to reduce maintenance time with less man power, first of its kind in Kerala.

Electric Vehicle (EV) Project- Electrically retrofitted SOLAR CAR made by students of MBITS was selected for the grand finale of KPIT SPARKLE (a National Level platform for showcasing innovative ideas). They have shortlisted 30 innovations from more than 22000 registrations, 1100+ colleges from 26 states, and MBITS was the only college selected from Kerala for KPIT SPARKLE-2019 along with 52+ premier IITs and other prestigious institutions in India.

MBITS won 7th position in QuadTorc-2018, the National event. It was a five day event in UP, India, in October 2018 testing various quality parameters of Quad Bike.41 teams from 14 different states were shortlisted and MBITS was the only team from Kerala.

Our institute follow pedagogical model based on Revised Bloom's Taxonomy (RBT) and creative learning process. The course outcomes and the corresponding Bloom's Taxonomy levels are being followed in setting up of question papers of internal examinations.

For helping the students in achieving knowledge through all levels of learning we follow creative learning process. All the faculty members prepare learning materials for class room teaching, question answer bank and teach with the aid of chalk and ICT facilities. Teachers use latest methods of   E-learning such as NPTEL videos, YouTube videos, etc.

Tutorial works are being conducted every day as per course plan for continuous monitoring of student progress. Innovative learning methods adopted for the betterment of teaching learning process are:

- Outcome Based Education (OBE)
- Main and mini projects in design aspects
- Invited talks by renowned industrialists and experts
- Hands on experience, workshops, seminars etc.
- Self-learning courses in Swayam, NPTEL etc.
- Industrial visit to gain onsite experience.
- Some projects are done exclusively in industry premises such as ISRO Thiruvananthapuram and Geodesic Bangalore.
- Progress card and SMS to parents after each internal examination
- Absentee message to parent
- Viva questions along with lab experiments
- More lab experiments beyond the specified no. of experiments in the lab
- Frequent follow up of faculty adviser/ mentor and HOD
- Organizing technical festivals in the campus
- Participation in seminars and conferences
- Tutorial classes and remedial classes
- Affiliation of all departments to professional societies to enhance critical thinking of students
- Department wise associations to organize various programs to develop leadership qualities
- IEDC cell organizes Entrepreneurship programs
- Industrial Training

File Description	Document
Any additional information	[View Document](#)

2.4 Teacher Profile and Quality

2.4.1 Average percentage of full time teachers against sanctioned posts during the last five years

Response: 102.3

File Description	Document
Year wise full time teachers and sanctioned posts for 5 years	View Document
List of the faculty members authenticated by the Head of HEI	View Document
Any additional information	View Document

2.4.2 Average percentage of full time teachers with Ph.D. during the last five years

Response: 5.6

2.4.2.1 Number of full time teachers with Ph.D. year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
6	5	9	7	5

File Description	Document
List of number of full time teachers with PhD and number of full time teachers for 5 years	View Document

2.4.3 Teaching experience per full time teacher in number of years

Response: 9.76

2.4.3.1 Total experience of full-time teachers

Response: 947

File Description	Document
Any additional information	View Document

2.4.4 Percentage of full time teachers who received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the last five years

Response: 14.06

2.4.4.1 Number of full time teachers receiving awards from state /national /international level from Government recognised bodies year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
03	5	5	1	2

File Description	Document
Institutional data in prescribed format	View Document
e-copies of award letters (scanned or soft copy)	View Document

2.4.5 Average percentage of full time teachers from other States against sanctioned posts during the last five years

Response: 34.49

2.4.5.1 Number of full time teachers from other states year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
40	39	39	35	35

File Description	Document
List of full time teachers from other state and state from which qualifying degree was obtained	View Document
Any additional information	View Document

2.5 Evaluation Process and Reforms

2.5.1 Reforms in Continuous Internal Evaluation(CIE) system at the institutional level

Response:

The institute is affiliated to the APJ Abdul Kalam Technological University, Kerala. The university regulations for conducting the internal evaluation are followed along with the rules and regulations of the institute.

UNIVERSITY SPECIFIED SCHEME OF INTERNAL EVALUATION

For theory course: 1/3 rd weightage is given for internal examinations and 2/3 rd weightage for end semester examination. The maximum marks for internal evaluation and end semester examination for theory courses are fixed as 50 and 100 respectively.

Scheme of evaluation for Theory Courses

THEORY COURSE			
INTERNAL TEST -1	INTERNAL TEST 2	ASSIGNMENTS	TOTAL
(20 MARKS)	(20 MARKS)	(10 MARKS)	(50 MARKS)

*End semester examination carrying 100 Marks (Conducted by the University)

Scheme of evaluation for Practical / Laboratory Courses

PRACTICAL / LABORATORY COURSE			
Practical Record / Output (60 MARKS)	Regular class viva (10 MARKS)	Final Lab Examination (30 MARKS)	TOTAL (100 MARKS)

*All the above assessments are done internally by the college as per the University guidelines.

REFORMS

- The **Examination Committee including each department coordinators** schedules, executes and strictly monitors the evaluation process.
- **CCTV cameras** are deployed at all class rooms and exam cells to ensure proper conduct of exam.
- **The question paper of each subject is evaluated by the department question paper scrutiny committee members**.
- **The results of both tests are declared** within a week after the examination and the **Result analysis** is done by staff advisers, HODs and Principal. The students can see their respective answer sheets and discuss their queries with concerned staff.
- Additionally, tutorial classes are conducted in compliance with academic calendar. Every day of the week, first hour is conducted as tutorial hour.
- **Remedial and doubt removal sessions, parent teacher meeting** and if required counseling by the college appointed **counselor are done periodically.**
- Remedial classes are conducted for weak students based on the marks achieved in the internal exam
- Seminars and workshops are generally attended by all students.
- **Collaborative group work, field work, industrial visits and student presentations** have been made an essential part of course. We promote inter disciplinary **project works** to enhance competency of students and faculties.
- **Comprehensive Examination and Project Viva** are conducted by an external academic/industrial expert to give an exposure to the students of various disciplines.

- Attendance is properly monitored and recorded in course diary and published in the classes.
- Question bank with answer key is given to students for reference.
- All the student data are collected and stored in digital format for administrative and academic purpose **(e-live)**
- Principal along with HODs and Dean (Academics) review and monitor various activities of college and departments. They meet twice in a week (Tuesday and Friday).

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

2.5.2 Mechanism of internal assessment is transparent and robust in terms of frequency and variety

Response:

- The orientation program held at the beginning of the each academic year apprises the students and their parents about the evaluation process and the schedule.
- Fully Fledged campus ERP system (e-live) is functioning in MBITS. All the information about students regarding attendance, results of internal and university exams, academic progress, disciplinary actions etc. are made available in this system and the parents will get notification through SMS facility about absenteeism, results and major events in the college. Parents and students are also provided with user ids and passwords to access this system.
- Monthly attendance report of each course is published in respective classes.
- A basic criterion for internal assessment is made known to students through university website, institute website, notice boards, class committee and through student handbook. This includes distribution of marks, schedule of internal evaluation and university evaluation.
- Dates of the tests are notified on the class room notice board and department notice board and announced by the faculty in respective classes.
- After internal exams, the students are provided with the answer-key and scheme of evaluation by the concerned faculty member.
- The corrected answer scripts of examinations are returned to the students after evaluation to bring out the discrepancies, if any, to the notice of teacher concerned, and the necessary corrections are carried out.
- If there is any tabulation related error in the assessment, corrections are duly made by the examiner and the corrected marks is officially posted against the name of the concerned student in course diary as well as in e-live.
- In laboratory courses, continuous assessment is done by considering day to day laboratory work, preparation of work book, regular class viva & end semester examination. Evaluation is recorded in the work book and in the course file.
- Project evaluation has two internal assessments. After each assessment the marks are entered in e-live, course diary and published in notice boards. The Guide's assessments are recorded weekly in the project diary maintained by the student.
- Students submit the assignments as per the scheduled date specified by faculty. After evaluation,

scripts are returned and marks are entered in course diary and e-live.

- Department meetings are conducted to review the results after each internal exam. The Principal and HOD verifies the internal marks of all classes.
- The result analysis reports for all the courses are available in e-live and displayed in notice boards immediately after each internal exam and are distributed to parents.
- Class/course committee meetings are conducted after each internal exam and results are analyzed in the meeting. Students can provide their suggestions during the meeting.
- Based on the feedback for each course from students, Principal and HOD advice the respective faculty for improvements and monitor the progress.
- We incorporate improvements in the system based on other stakeholder's feedbacks such as parents, faculties, non-teaching staff and management.

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

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

Response:

University level

1. Grievances during conduct of examination

Institute appoints **internal squad** during examination to avoid any type of misconduct. Any act of indiscipline and unfair practice in examinations will be referred to the Disciplinary Action Committee (DAC). Malpractices in examinations and any such incident observed or reported by an invigilator shall be reported to the Principal who in turn shall refer it to DAC. DAC shall initiate an enquiry on the basis of the report and evidence available, giving the concerned student a chance to explain his/her case. The committee shall recommend the course of action in line with the guidelines formulated for this by the Controller of Examination of the University and forward it to the Principal for action.

The student may appeal to the Grievances and Appeals Committee for a relook on the matter. Based on the committee's report, the Principal shall take a decision on the matter. In case of malpractices in end semester examinations, the report given by the college DAC and the action taken by the Principal shall be intimated to the Controller of Examination of the University. The University reviews the case and issue the final disciplinary action order.

2. Grievances related to out of syllabus in question paper, mistakes in question paper etc.

Such grievances are reported to the controller of examination through the class representative, staff in-charge of the subject, Head of the Department and the Principal.

3. Grievances after publication of result.

After the university results are published, the students can apply for photocopy of answer books for scrutiny and revaluation. The Principal shall forward all application of revaluation along with the amount of fees. The university examiners re-verify and re-assess the answer books and revised marks if any, are notified to the concerned students.

The revaluation fee will be fully returned to the students, if he/she has secured more than 15% mark variation based on revaluation.

4. **Grievances for postponement of project submission/examination, rejoining in the course etc. are to be dealt with the university and request for that are forwarded to the university through the Principal.**

Institute Level

1. The concerned faculty scrutinizes grievances with reference to evaluation at the institute level and all queries are responded by the staff advisors of each class.

The faculty discusses the marking scheme and answers with the students and resolves their queries. The regularity of attendance and performance of students are monitored by the staff advisers from e-live.

2. Grievances are also discussed in class/course committee

The grievances are discussed in the class/course committee. The committee consists of Department Head, class committee Chairman, Convener, staff members handling courses in the relevant classes and two student representatives as prescribed by the university. The venue, time and agenda of the meeting are published in the notice board prior to the meeting and informed the committee members. The committee reviews the grievances of the students and is solved by taking necessary steps.

3. All Grievances are handled by the faculty members, HODs and Principal

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

2.5.4 The institution adheres to the academic calendar for the conduct of CIE

Response:

Preparation of Academic Calendar

- The A P J Abdul Kalam Technological University publish academic calendar for the complete academic year

- University calendar is used as a reference point to prepare academic calendar of the institute.
- **Contents of Academic Calendar:**

  ○ Registration and Commencement of classes
  ○ Course selection, registration & mapping details
  ○ Tech fest details conducting by university
  ○ Exam registration details
  ○ Class committee and course committee meeting
  ○ Class test details
  ○ College arts fest details
  ○ Date for publishing attendance and internal marks for UG and PG.
  ○ Practical / Oral / Theory Examination dates
  ○ Last date for forwarding list of examiners to university by cluster convener(PG)
  ○ Last date for evaluation of practical's (PG)
  ○ Last date for project evaluation internal (s8 B. Tech)
  ○ Date for Project evaluation by Dept. Committee(PG) to be completed
  ○ Date for Submission of project report in the college(PG)
  ○ Date for project evaluation and viva voce (PG and UG) by external
  ○ Last date for uploading of viva voce (PG and UG) by external
  ○ Commencement of summer course.
  ○ Date for Summer course eligibility uploading
  ○ End of classes
  ○ Commencement of exams
  ○ Result declaration dates
  ○ Holidays

All faculty members prepare the course plan covering the syllabus, tutorial, remedial and revision classes are being approved by the HOD in the beginning of the semester. The subject coverage is also verified periodically by the HOD. Academic internal auditing and university level external academic auditing is being done in all the semesters. The detailed audit report by the auditor will be given to all the departments for further evaluation and correction.

- Academic calendar is prepared and circulated in advance to all concerned.

  E.g.: Such a calendar for Semester of 2017-18 is uploaded.

- **Additions in the Institute Academic Calendar:**
  ○ Schedule for Internal Examination I and Internal Examination II of each semester are included.
  ○ Schedule for remedial class of each semester are included.
  ○ Schedule of co-curricular and extra-curricular activities.
  ○ Local holidays and compensatory working days.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

2.6 Student Performance and Learning Outcomes

2.6.1 Program outcomes, program specific outcomes and course outcomes for all programs offered by the Institution are stated and displayed on website and communicated to teachers and students

Response:

Programme Outcomes(POs) for the UG and PG are specified by the AICTE and are set as it is.

Every department has its own Programme Specific Outcomes(PSOs) formulated with due importance to the core areas. Course Outcomes(COs) for each course have been defined as per the syllabus given by the university. PSOs are limited to 3 or 4 and COS are limited to a maximum of 6.

- Programme Outcomes (POs) are displayed on Notice board, Labs, Seminar Halls, Newsletters, website, etc.
- Programme Specific Outcomes (PSOs) and Course Outcomes (COs) are stated and displayed on notice boards ,class rooms, respective departments, laboratories , course file, tutorial book, Lab work book, website, etc.

The PSOs of all departments are attached herewith

CIVIL ENGINEERING DEPARTMENT

Graduate will be able to

PSO1. Analyze, design and construct various civil engineering structures

PSO2. Follow the economical, environmental and safety factors involved in the construction industry

PSO3. Apply the state of the art modern tools for planning, designing, scheduling, execution and management of civil engineering projects

MECHANICAL ENGINEERING DEPARTMENT

Graduate will be able to

PSO1. Apply fundamental principles to thermal, fluid, production and mechanical systems in a logical and discerning manner

PSO2. Model, analyze, design and realize thermal, fluid, mechanical, production and control systems to meet specifications.

PSO3. Identify, formulate and redesign to optimize existing mechanical systems by realizing   state of the art economic, social and environmental conditions.

ELECTRICAL AND ELECTRONICS ENGINEERING DEPARTMENT

Graduate will be able to

PSO1. Analyze and develop electrical and electronic circuits and systems to cater the   needs of industry and society.

PSO2. Design, implement and control cost effective and environmentally benign energy systems and electric drives.

PSO3.   Develop instrumentation, communication systems and algorithms to realize state of the art utilities

ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT

Graduate will be able to:

 PSO1. Understand fundamental knowledge of various electronic subjects in the analysis, design and development of analog and digital systems to support   the needs of industry and society.

 PSO2.   Demonstrate the knowledge of signal processing, communication and networking to solve the issues of modern communication systems.

  PSO3. Procure proficiency in specialized hardware and software packages useful for electronic engineering field.

COMPUTER SCIENCE AND ENGINEERING DEPARTMENT

Graduate will be able to:

 PSO1.   Apply the fundamentals and recent techniques to solve the industry specific   problems.

 PSO2.   Design and Deploy secured networked systems.

 PSO3.   Evolve advanced software technologies and tools to meet industrial standards.

PSO4.   Design and develop integrated and logic systems

File Description	Document
COs for all courses (exemplars from Glossary)	[View Document](#)
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

2.6.2 Attainment of program outcomes, program specific outcomes and course outcomes are evaluated by the institution

Response:

- The institute follows outcome based education system in which the focus is laid on what the students can reproduce at the end of a module or a course or the entire program after the learning period.
- Teaching Learning Process cycle starts from the preparation of course objectives. As per the course objectives specified by the university course outcomes are set and the course plan is designed. The course outcomes are prepared by the respective faculty members. Course plan also include method and schedule for the class assessments.
- As per the university norms two internal assessments are conducted with first one containing 1&2 modules and second one containing 3 and 4 modules and evaluation is done. Tutorials/assignments are also conducted for all the modules. The question papers for assessment are prepared based on course outcomes and incorporating Bloom's taxonomy.
- Measurement of attainment of outcomes includes direct method of assessment and indirect method of assessment. Direct method assessment is done based on the marks obtained by students of the whole class for a particular course.
- At the preliminary stage of attainment calculation the prepared COs for each course in the four year engineering degree program is mapped towards specified POs and PSOs with correlation levels ranges from 1 to 3

  (1- low correlation, 2- medium correlation and 3- high correlation.)

- In direct method marks obtained by students in class tests and tutorial tests are used to measure the respective COs using which PO, PSO attainments can be calculated.
- In indirect method a course end survey is being taken from students for each course. Based on the five point scale, attainment of each CO is calculated.

Attainment of PO and PSO:

- **List down CO**s for all courses
- **Prepare   CO-PO   and   CO-PSO   matrices**   for   all   courses   indicating   the correlation

1. Low 2. Medium 3.High

CO Attainment

- **Direct Method**
  - Calculate the marks of each student for all COs considering marks of internal tests, assignments and tutorials
  - Prepare a table containing marks (%) of all students for each CO in the course.

  - Measure CO attainment level based on Internal Assessment marks

    Sample rule for attainment level calculation:

% of Students having above 60% marks	Level
80%	3
70%	2
60%	1
Below 60%	0

- **Indirect Method**

  - In indirect method a course end survey has been conducted for each course regarding their course outcomes. Different grades A, B, C, D and E are given with the following weightages. A-5, B – 4, C – 3, D – 2, E - 1

Calculation of **PO and PSO attainment**

- From CO-PO matrix and CO-PSO matrix, the attainment level is calculated as follows for both direct and indirect methods. Attainment of each PO and PSO is calculated by multiplying the weight age of the CO attainment level with the corresponding correlation.
- Graduate survey is conducted for final year students for calculating PO attainment indirectly.
- Calculate final attainment of POs & PSOs from direct and indirect attainment levels.

- Final attainment = 80% direct method + 20% indirect method.

File Description	Document
Any additional information	<u>View Document</u>
Link for Additional Information	<u>View Document</u>

2.6.3 Average pass percentage of Students

Response: 74.02

2.6.3.1 Total number of final year students who passed the examination conducted by Institution.

Response: 282

2.6.3.2 Total number of final year students who appeared for the examination conducted by the institution

Response: 381

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response: 3.57

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

3.1.1 Grants for research projects sponsored by government/non government sources such as industry ,corporate houses, international bodies, endowment, chairs in the institution during the last five years (INR in Lakhs)

Response: 0

3.1.1.1 Total Grants for research projects sponsored by the non-government sources such as industry, corporate houses, international bodies, endowments, Chairs in the institution year-wise during the last five years(INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
0	0	0	0	0

File Description	Document
List of project and grant details	[View Document](#)

3.1.2 Percentage of teachers recognised as research guides at present

Response: 1.03

3.1.2.1 Number of teachers recognised as research guides

Response: 1

File Description	Document
Any additional information	[View Document](#)

3.1.3 Number of research projects per teacher funded, by government and non-government agencies, during the last five year

Response: 0.14

3.1.3.1 Number of research projects funded by government and non-government agencies during the last five years

Response: 2

3.1.3.2 Number of full time teachers worked in the institution during the last 5 years

Response: 73

File Description	Document
Supporting document from Funding Agency	[View Document](#)

3.2 Innovation Ecosystem

3.2.1 Institution has created an ecosystem for innovations including incubation centre and other initiatives for creation and transfer of knowledge

Response:

The Innovation and Entrepreneurship Development cell (IEDC) was constituted in the year 2013.

- IEDC incubated 8 companies so far.
- In the year 2015, IEDC cell received a fund of two Lakh from Kerala start-up mission for the promotion of entrepreneurship in the campus.
- Team FORBOTS won first prize (cash award of 1 lakh rupees) in the Hardware Section of Smart India Hackathon 2019.
- IEDC in association with Kerala Start-up Mission conducted Drone Robotics Workshop on 28/03/2018 handled by Grapes Infotech.
- Our team won 7th Position in a National Level competition, QuadTork, at UtharPradesh
- 4 students participated in the "Foundation Skills in Entrepreneurship" programme of Kerala Startup Mission conducted by ICT Academy of Kerala from 11/09/2018 to 12/09/2018 at Mar Athanasius College of Engineering, Kochi.
- Conducted Arduino workshop at MBITS handled by Pantech Solutions on 26/10/2018
- Campus was selected as one among the twenty six nodal centers across the nation, for conducting the event Smart India Hackathon'17 grand finale on 1/04/2017 and 2/04/2017
- A workshop on web development was organized from 3/01/2017 to 7/01/2017
- Six students participated in FOSS Young Professional Meet 2016 (FYPM 2016) conducted from 13/01/2017 to 14/01/2017 at Mascot Hotel, Thiruvananthapuram.
- The faculty representative of IEDC represented the institution at FAB Asia Network Conference conducted at Kochi from 17/01/2017 to 18/01/2017.
- On 17/01/2017, the IEDC tied up with FAB LAB for industrial visit and training. The first batch of students visited the lab on the month of February.
- Conducted an entrepreneurship awareness programme on 3/02/2017. The chief mentor for the program was Dr. K M H Iqbal, Master Trainer, HR Department, and Govt. of India. Seventy three students participated in the session.
- The IEDC team had participated in the start-up 2017 meet up held on 19/08/2017 at Adlux convention centre, Chalakkudy.
- An orientation class on "How to be a social entrepreneur and change maker" was organized on 29/03/2016 for the students. Mr.Jibin Joy, co-Founder, Bridge innovations handled the session.
- Two students had participated in the i3 workshop from 4/4/2016 to 6/4/2016 organized at Musaliar college and later had a session at MBITS by the same students.
- Organized a seminar on "Entrepreneurship Development" on 3/06/2016.Mr.Shahul Hameed, Fellow@startup mission handled the session.
- On 11/06/2016, the nodal officer had attended the precursor meeting at FISAT Kochi, organized by University.

- The IEDC team had participated in the startup 2016 meet up held on 23/08/2016 at Thiruvananthapuram.
- An orientation class on IEDC activities was conducted on 5/11/2016 and was presented by the company Ourea corp. Some of the modules of the program were personality Assessment and Development, Life skill training, Goal Setting, Team Jelling session etc.
- "Team Metal Heads", developed the prototype and working model of an off roader and won tenth position in the national level competition. They also won the first prize in model expo conducted at one of the reputed college in Kerala.
- The cell in association with the company wheebox and AICTE had conducted the wheebox eligibility skill test (WEST) for the final and pre final year students.

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

3.2.2 Number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the last five years

Response: 45

3.2.2.1 Number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
26	5	5	5	4

File Description	Document
Report of the event	[View Document](#)
List of workshops/seminars during the last 5 years	[View Document](#)

3.3 Research Publications and Awards

3.3.1 The institution has a stated Code of Ethics to check malpractices and plagiarism in Research

Response: Yes

File Description	Document
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)

3.3.2 The institution provides incentives to teachers who receive state, national and international recognition/awards

Response: Yes

File Description	Document
e- copies of the letters of awards	View Document
Any additional information	View Document

3.3.3 Number of Ph.D.s awarded per teacher during the last five years

Response: 4

3.3.3.1 How many Ph.Ds awarded within last five years

Response: 4

3.3.3.2 Number of teachers recognized as guides during the last five years

Response: 1

File Description	Document
URL to the research page on HEI web site	View Document
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc	View Document
Any additional information	View Document

3.3.4 Number of research papers per teacher in the Journals notified on UGC website during the last five years

Response: 1.6

3.3.4.1 Number of research papers in the Journals notified on UGC website during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
40	40	33	38	31

20-11-2019 11:09:51

File Description	Document
List of research papers by title, author, department, name and year of publication	[View Document](#)
Any additional information	[View Document](#)

3.3.5 Number of books and chapters in edited volumes/books published and papers in national/international conference proceedings per teacher during the last five years

Response: 1.32

3.3.5.1 Total number of books and chapters in edited volumes / books published, and papers in national/international conference-proceedings year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
42	13	23	47	25

File Description	Document
List books and chapters in edited volumes / books published	[View Document](#)
Any additional information	[View Document](#)

3.4 Extension Activities

3.4.1 Extension activities in the neighbourhood community in terms of impact and sensitising students to social issues and holistic development during the last five years

Response:

We at MBITS not only excel in academics but also in other extension activities. The college motivates the students' social participation and also drives to achieve its goal of providing higher technical education to create equitable society with ethical values. The Institute is conscious of its role in campus community connection, well-being of its neighborhood and has initiated a number of community development activities.

The college is continuously organizing a number of extensions and outreach activities which are directly connected with students academic, social, cultural, community services etc., and the college management with the help of many voluntary organizations and NGOs organizes the outreach programs. The various extension activities that the Institute organizes with active participation of its students serve two basic purposes.

- First, it help the institute to fulfill its own social obligation of empowering and helping socially

under-privileged groups by providing them with certain skills and knowledge that may be necessary for their social mobility in future.

- The second benefit of such activities is to create awareness among students about the social realities of our country and expose them to the real life challenges.

The Extension Activities are carried out through the following Units:

NSS: The institute has two active units(**Unit No:227 and Unit No:571**) undertaking several major projects. Some are listed below.

- **Ente Kulam Ernakulam project** (A project for cleaning fresh water ponds) in association with district collectorate.
- **Punarjjan**i (Program by Kerala Govt.and NSS technical unit for renovating equipments in Govt. Institutions) by which hospital assets of more than 81 lakhs rupees were recreated.
- The NSS student volunteers used to visit their adopted village and extend their services regularly.
- The NSS volunteers regularly organize blood donation camps, stem cell donation registry camp, general awareness camp, rally for social awareness, Swachh Bharat at nearby villages and government institutions.
- Most of the students have been registered with stem cell donation registry and 2 students of MBITS have successfully donated stem cells.
- About 44 programmes were conducted during last five years.

Emergency Services: The Staff, NSS volunteers and other students of MBITS have actively participated in relief activities during the recent flood that affected various parts of the state.

Live Projects: The students of MBITS continuously develop socially relevant technical projects. Data Entry Software for Pothanikkad Grama Panchayath, Pneumatic Jack and Wrench for KSRTC are some examples. The Research and Consultancy cell of MBITS is working throughout the year solving the technical issues of nearby offices and residents without any fee.

Rural Upliftment Programme: MBITS for the past 3 years is successfully hosting different central government programmes.

- Additional Skill Acquisition Programme (ASAP)
- Pradhan Manthri Kousal Vikas Yojan (PMKVY)
- Unnath Bharath Abhiyan (UBA)
- Deen Dayal Upadhyaya Grameen Kaushalya Yojana(DDU-GKY)
- e-Literacy programme for *Kudumbasree* members was also conducted successfully.

Department Social Initiatives: All departments of MBITS are very concerned about organizing various socially commendable projects and other social service activities. Solar Electrification, ground water surveying, Swachh Bharat are some examples.

File Description	Document
Any additional information	[View Document]()
Link for Additional Information	[View Document]()

3.4.2 Number of awards and recognition received for extension activities from Government /recognised bodies during the last five years

Response: 18

3.4.2.1 Total number of awards and recognition received for extension activities from Government /recognised bodies year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
8	3	4	1	2

File Description	Document
Number of awards for extension activities in last 5 years	[View Document]()
e-copy of the award letters	[View Document]()

3.4.3 Number of extension and outreach Programs conducted in collaboration with Industry, Community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the last five years

Response: 44

3.4.3.1 Number of extension and outreach Programs conducted in collaboration with Industry, Community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
12	12	14	4	2

File Description	Document
Reports of the event organized	View Document
Number of extension and outreach programs conducted with industry,community etc for the last five years	View Document
Any additional information	View Document

3.4.4 Average percentage of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the last five years

Response: 51.8

3.4.4.1 Total number of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
477	1038	858	615	167

File Description	Document
Report of the event	View Document
Average percentage of students participating in extension activities with Govt or NGO etc	View Document
Any additional information	View Document

3.5 Collaboration

3.5.1 Number of linkages for faculty exchange, student exchange, internship, field trip, on-the-job training, research, etc during the last five years

Response: 256

3.5.1.1 Number of linkages for faculty exchange, student exchange, internship, field trip, on-the-job training, research, etc year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
69	74	71	28	14

File Description	Document
Number of Collaborative activities for research, faculty etc	View Document
Copies of collaboration	View Document
Any additional information	View Document

3.5.2 Number of functional MoUs with institutions of National/ International importance, Other Institutions, Industries, Corporate houses etc., during the last five years (only functional MoUs with ongoing activities to be considered)

Response: 44

3.5.2.1 Number of functional MoUs with institutions of national, international importance, other universities, industries, corporate houses etc. year-wise during the last five years (only functional MoUs with ongoing activities to be considered)

2018-19	2017-18	2016-17	2015-16	2014-15
23	17	2	1	1

File Description	Document
e-copies of the MoUs with institution/ industry/ corporate house	View Document
Details of functional MoUs with institutions of national, international importance,other universities etc during the last five years	View Document
Any additional information	View Document

20-11-2019 11:09:55

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1 The institution has adequate facilities for teaching- learning. viz., classrooms, laboratories, computing equipment, etc.

Response:

The vision of the management is to nurture a positive campus culture and equip the younger generation to take our nation forward. The Institution has a systematic approach in improvising infrastructure and learning resources to enhance the quality of education by providing effective teaching and learning through the feedback from the students, parents and the alumni.

Campus Infrastructure

- The campus is spread over an area of 10.2 acres of land.
- All the departments are provided with adequate classrooms, tutorial halls, seminar halls and modern laboratories.
- The Institution helps in transforming the student in every level by providing resources such as internet facilities, library, gymnasium, facilities for sports related activities etc.
- Adequate facilities for teaching – learning are available throughout the campus in the Main Block and St.Thomas Block and other laboratory blocks.
- The Main block consists of the office administration that includes the Principal's and Management meeting rooms.

Departments

- Four departments, namely, Civil Engineering, Mechanical Engineering, Electrical and Electronics Engineering and Electronics and Communication Engineering are housed in the Main Block.
- The St.Thomas Block consists of Computer Science and Engineering, and the Science and Humanities Department.
- Both academic blocks consist of spacious class rooms with proper ventilation, lighting and are provided with ergonomic seating.
- Each department is provided with seminar halls that are equipped with modern facilities for seminar presentations, workshops and technical talks.
- The laboratories, equipped with state-of-the-art technology, which accommodate modern technologies and facilitate interactions between faculty members and students.
- A total of 34 classrooms, of which 14 are ICT enabled are available in the campus. Additionally five ICT enabled seminar halls are available.

Computer Facilities

- The institution has 6 computer labs with a total of 240 PCs and another 82 PCs in library, faculty rooms etc.
- The Computer Centre in the main block, spread over an area of 236 square meter, with 80 PCs provides internet and browsing facilities for staffs and students of all branches.
- All Computers and related IT facilities are supported by UPS Back-up. Additionally we have 82.5

kVA generator Back-up

- Free printing facility is also available for the students and staff members.
- Students are given basic trainings in computer education and are given access to the campus automation software, E-live, which allow the students, staff and parents to monitor the student's record daily.

Library

- The Central Library, spread over an area of 632 sq m has an excellent collection of 18,853 books, 66 journals & magazines, 200 eBooks and non-book materials, including rare book collection of 79 books.
- Students can enrich their knowledge through the digital library which access over many renowned digital databases which impart world class knowledge to the students.

Hostel

- Fully furnished separate hostels are provided for the boys and girls within the campus under the supervision of chief wardens, resident wardens and matron/manager.

- The men's hostel has 34 rooms which can accommodate a total of 132 inmates.

- The ladies hostel has 48 rooms which can accommodate a total of 144 inmates.

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

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

Response:

Mar Basil Group of Institutions always encourages and supports the co-curricular and extracurricular activities. Our Institute, one among the group, provides facilities not only for the academics but also for the overall improvement of the students. The Institute provides adequate facilities for indoor and outdoor games and encourages our college teams to be a part of the various sport activities organized in the state.

Cultural Activities

- Institution takes effort to encourage our students to participate in various social and cultural activities.
- RHYTHM, the Arts Fest of the college, encompasses a wide range of art genres including music,

dance, fine arts, literary events, poetry etc., highlights our students' creative ambition and give them a chance to showcase their talent and competency.

- Apart from the literary events, various other cultural single and group events are held during the Arts fest.
- The college also hosts TANDAV- an intercollegiate dance competition, in which teams from all over the state participate.
- Major cultural activities are hosted in our college auditorium with a floor space of 645 square meter with a seating capacity of 850 and a special stage is made in the central courtyard for arts day and for the inter-collegiate dance competition.

- The students with outstanding achievements are acknowledged by felicitating them at Institute level functions. The institute provides all support to students for promoting their cultural activities.

Sports and Games

- The college has enough space for various sports and games activities viz., cricket, football, tennis, volleyball and basketball.
- In addition to this, facilities for indoor games like table tennis, caroms, chess and similar board games are also available.
- A permanent sports ground, of 2700 square meter, in par with National standards is also there in the campus.
- Four badminton courts of a total area of 527 square meter are available in the campus.
- In addition to these, two volleyball courts and a basketball court with a total area of 360 square meter and 527 square meter respectively are provided in the campus.

Gymnasium and Yoga Centre

- The college is well equipped with a multi-gym and a range of free weights and aerobic equipment - including a treadmill.

- Yoga training is arranged for the interested staff and students, in the campus, every Wednesday and Friday. An experienced trainer is available in the campus.

Clubs

The college has an ENCON Club, Arts & Sports Club, Yoga Club etc., and the students are actively participating in the respective activities.

- The ENCON club conducts various programs and competitions in collaboration with companies like BPCL, Kochi Refinery, on topics related to energy conservation.

Professional Body Association and Chapters

- The Institution of Engineers (India), is having various active student chapters and they are conducting regular programmes.
- Some of our faculties are active members of ASME, IEEE, ISTE, IEI, CSI, etc.

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

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

Response: 51.28

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 20

File Description	Document
Number of classrooms and seminar halls with ICT enabled facilities	[View Document](#)
any additional information	[View Document](#)
Link for additional information which is optional	[View Document](#)

4.1.4 Average percentage of budget allocation, excluding salary for infrastructure augmentation during the last five years.

Response: 37.95

4.1.4.1 Budget allocation for infrastructure augmentation, excluding salary year-wise during the last five years (INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
95	547	577	100	0

File Description	Document
Details of budget allocation, excluding salary during the last five years	[View Document](#)
Audited utilization statements	[View Document](#)
Any additional information	[View Document](#)

4.2 Library as a Learning Resource

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

Response:

The college has a Central Library functioning in the first floor of the main building, housed in an area of 632 square meter, with more than 150 seating capacity.

Central Library was established in the year 2009 and has a collection of 18,853 books, 66 journals & magazines, 200 eBooks and non-book materials, including rare book collection of 79 books.

Central Library is partially automated in the year 2010 using Library Management System. Fully computerized library system with an OPAC search facility is functioning. It provides excellent learning resources catering to the ever growing intellectual requirements of the students, faculty, and researchers.

For library transactions, student's ID card with barcode is used with barcode scanner. Reprographic, document scanning, printing and internet facilities are available in library. Books are arranged in Dewey Decimal Classification (DDC) system. The library has access to e-resources like DELNET, IETE and National Digital Library (NDL). Departments maintain their libraries with essential books for their faculty references. Digital Library works with 10 computers. Library is open from 8.30 am to 5.30 pm on all working days. Four CCTV cameras are installed in the library.

At the entrance of the library there is a gate register for students and staff. At the entrance also a system is provided for checking the library account status of users, which helps to know all the details of their accounts. Book issue, return and renewal processes are done in separate systems.

Computerized issue, return and renewal processes are done using open source software KOHA.

In the LMS software, KOHA,

- A library circulation module provision is available to issue/return/renewal of book circulation, non-print material circulation (CD, DVD, etc.)
- In the setting module provision is available for holiday settings, Library rules setting, generating the barcodes, listing of books (by authors, publishers, and suppliers), printing of members, barcode, etc.

The Digital Library (DL) is equipped with a repository of learning materials of NPTEL, DELNET enabling access to various journals from several libraries in South Asia. The DL also provides access to e-journals, e books, question papers,, National Digital Library (NDL). Besides the Main Library, there are separate department libraries.

Reprographic facility is available in the library premises. The Library provides campus-wide IP- enabled access to on-line journals like IEEE digital library, Science Direct Information from National Program on Technology Enhanced Learning (NPTEL) and other Electronic Resources are also available for the user community. The Library reading space can accommodate more than 150 students.

Name of ILMS software	KOHA
Nature of automation (fully or partially)	Partially

| Version | 3.02.10.000 |
| Year of Automation | 2010 |

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

4.2.2 Collection of rare books, manuscripts, special reports or any other knowledge resources for library enrichment

Response:

Central Library was established in the year 2009 and has an excellent collection of 18,853 books, 66 journals & magazines, 200 eBooks and non-book materials, including rare book collection of 79 books.

In due consideration of the demand made by the students and faculty, the Librarian places orders for the required number of titles and volumes, which are regularly referred by the users. Further, the users use the facility of accessing e-journals as well as the reprographic facilities in order to meet their requirements. In regular interval, the librarian collects the recommendations of books for central library and department libraries as well from the HoDs and faculty members. Also, the librarian places orders for all required books as per the needs of the curriculum.

MBITS library has a collection of 79 rare books including Spiritual Books, Soft skill books, Encyclopedias, Psychology books, Quantitative aptitude texts, Guinness world records. Books on competitive exams like GATE, TOEFL, UPSC, thozihil vartha (Employment News) are also made available in the library. In addition to the above library have books on Introduction to Kerala study.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

4.2.3 Does the institution have the following:

1. e-journals
2. e-ShodhSindhu
3. Shodhganga Membership
4. e-books
5. Databases

A. Any 4 of the above

B. Any 3 of the above

C. Any 2 of the above

D. Any 1 of the above

Response: B. Any 3 of the above

File Description	Document
Details of subscriptions like e-journals,e-ShodhSindhu,Shodhganga Membership etc	View Document
Any additional information	View Document

4.2.4 Average annual expenditure for purchase of books and journals during the last five years (INR in Lakhs)

Response: 8.01

4.2.4.1 Annual expenditure for purchase of books and journals year-wise during the last five years (INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
1.62	5.98	8.8	17.22	6.41

File Description	Document
Details of annual expenditure for purchase of books and journals during the last five years	View Document
Audited statements of accounts	View Document
Any additional information	View Document

4.2.5 Availability of remote access to e-resources of the library

Response: No

4.2.6 Percentage per day usage of library by teachers and students

Response: 3.31

4.2.6.1 Average number of teachers and students using library per day over last one year

Response: 38

File Description	Document
Any additional information	[View Document](#)

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

Response:

- For the successful teaching-learning process, the college provides a good friendly atmosphere for both teachers and students. College need to ensure good infrastructure by utilizing those resources in high altitude.
- The college is enabled with uninterrupted internet facility around the campus which contains leased line as well as broadband. All computers are connected over LAN / WAN using Optical fibers and twisted pair cables networked over various buildings using latest networking devices.
- All Computers and related IT facilities are supported by UPS Back-up.
- Latest security software suits, Symantec Endpoint Protection which consists of anti-malware, intrusion prevention and firewall features for server and desktop computers.
- Sophos firewall is used to guard internet security threats and controlling data to the internet which includes deep packet inspection, threat management, wireless networking, virtual private networking, network content filtering, application control etc.
- Enrollment for Education Solutions (EES) from Microsoft is an easy cost-effective licensing, which offer the institution with assured coverage of education platform products with one annual user count. The flexibility to add products in any quantity and access to productivity tool and student benefits all under a single, subscription agreement.
- About 50% Classrooms are ICT enabled and laboratories are installed with computers accessible to the students for their academic and extracurricular activities. Computers are installed in various HoD rooms, staffrooms, office rooms, examination cells, Principal room, E-library, management room etc.
- Printers and Wi-Fi access points are also installed at the office, library, staffrooms, laboratories, exam cell, hostel etc. Scanners and Xerox machines are also available.
- Available Wi-Fi bandwidth is 140 Mbps.
- Wi-Fi access points are provided in the campus to access the network through personal laptops, gadgets, mobility devices etc.
- Laptops are readily available in departments and placement cell, for the conduct of various seminars and workshops.
- E-Live campus automation is used for monitoring the student activity continuously. E-Live Campus is complete online campus management software that extends campus information to teachers, staff members, parents, students and Management. E-Live Campus provides flexible access to users from within the campus, from home or over the public internet - with digital encryption connecting through college website. The E-Live Campus enables teachers to access students' information from anywhere and parents can access their ward's attendance and academic records.
- Students' feedback is recorded using an efficient online feedback system which is developed by our students.

- Fully responsive website of the college is maintained, which provide information and updates of events and functions happening within the campus visible to world. The website in updated regularly.
- Webinar sessions are conducted with various organizations, industry experts etc.
- Renewal of AMCs is done for the deployed PCs, software, firewall and website.
- The whole campus is monitored using CCTV surveillance.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

4.3.2 Student - Computer ratio

Response: 2.61

File Description	Document
Any additional information	View Document

4.3.3 Available bandwidth of internet connection in the Institution (Lease line)
>=50 MBPS

35-50 MBPS

20-35 MBPS

5-20 MBPS

Response: >=50 MBPS

File Description	Document
Any additional information	View Document

4.3.4 Facilities for e-content development such as Media Centre, Recording facility, Lecture Capturing System (LCS)

Response: Yes

File Description	Document
Facilities for e-content development such as Media Centre, Recording facility,LCS	View Document
Any additional information	View Document
Link to photographs	View Document

4.4 Maintenance of Campus Infrastructure

4.4.1 Average Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, as a percentage during the last five years

Response: 12.64

4.4.1.1 Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component year-wise during the last five years (INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
81.93	88.66	72.40	81.47	52.64

File Description	Document
Details about assigned budget and expenditure on physical facilities and academic facilities	View Document
Audited statements of accounts.	View Document
Any additional information	View Document

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

Response:

- The physical, academic and support facilities like classrooms, labs, seminar halls, auditorium, computer centre, gymnasium, buses etc., are well maintained.
- A budget is annually allocated for maintenance of the physical facilities of the institute.
- The maintenance and housekeeping of the classrooms, laboratories, library, and the institute as a whole are taken care by the non-teaching staff

- **Laboratory**

  - Optimum utilization of laboratory resources is ensured by the faculty and lab assistants.

- Access to internet is provided in the lab even after college working hours.
- Preventive maintenance and breakdown maintenance procedure is followed so as to ensure maximum availability of the systems in the lab.
- The lab staff collects the list of equipments for servicing at the end of every semester from the respective labs and a communication is sent to the respective companies and their consent is taken for servicing the equipments. An estimate is obtained which is then submitted for the approval of the department HOD and Principal; thereafter sent to the Management for final approval and the amount is settled with the company after servicing.

- **Computer Labs**

  - In order to avoid risk from viruses, spyware and other external threats, legal antivirus is installed in all the computers.
  - Further maintenance, cleanliness of lab and other problems of the computers and IT facilities are outsourced.
  - For proper functioning of the computers, air conditioners are installed.
  - Annual Maintenance Contract (AMC) is retained for items like UPS, Intercom, lift, copier, IBM server, Elive software etc.
  - All Computers and related IT facilities are supported by UPS Back-up.

- **Library**

  - Central Library was established in the year 2009 and has an excellent collection of 18,853 books, 66 journals & magazines, 200 eBooks and non-book materials, including rare book collection of 79 books.
  - In order to provide suitable atmosphere for reading, cleanliness is maintained inside and outside the library.
  - Proper maintenance of reading tables and chairs is taken care of. Dusting, shelving of reading materials and stock verification of library books is done on a regular basis by the library staff.
  - The maintenance and utilization of library includes maintenance and organization of collections, bar-coding, repair and rebinding of damaged books.
  - The librarian collects the list of books required by each department through the HODs during the beginning of each semester and submits it for the approval of the Principal.

- **Class rooms**

  - The availability and state of the classroom plays a key role in facilitating the teaching-learning process.
  - Institute provides a good physical environment in the form of desks, chairs, tables, space, instructional materials, proper lighting and ventilation as well as the latest Information and Communication Technology (ICT) equipment.
  - The benches and windows are cleaned and mopping of the class rooms is done every day.
  - Proper maintenance of the building, lawns and surroundings, minor repairs of furniture, painting, electrical and sanitary fittings are carried out on a regular basis.

- Maintaining of the security and safety requirements in the campus is also duly carried out.

- **Sports**

  - Regular maintenance of the play area including its cleaning, painting etc., is done a regular basis under the supervision of Physical education faculty.
  - Students are using these facilities during morning, evening and on holidays.
  - Students are permitted to utilize and take sports material with the permission of the concerned faculty.
  - A first aid box is always available for the students in case of any emergency.
  - Awards, Trophies and Certificates are issued to the individuals & teams after the completion of the events and published in the annual college magazine.

- **Canteen**

  - The Institution operates a fully fledged canteen under the supervision of faculty, to ensure quality and very low price.
  - Hygienic and nutritious food is provided to the students and staff of the Institution.
  - The surroundings of the canteen are also well taken care of and waste from the kitchen is properly disposed.
  - Proper maintenance of the facilities like refrigerator, freezer and other kitchen utilities are done.
  - The kitchen and the mess hall are cleaned regularly.

- **Transportation**

  - Transport in-charge is responsible for allotting the routes considering the number of students and faculty travelling from various locations to ensure safe and comfortable travel.
  - The transport in-charge also maintains college vehicles and obtains necessary clearance certificates, insurance, and permits from the RTA.
  - New bus routes are established by considering the demands from students and faculties.

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

Criterion 5 - Student Support and Progression

5.1 Student Support

5.1.1 Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years

Response: 16.81

5.1.1.1 Number of students benefited by scholarships and freeships provided by the Government year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
119	146	197	211	415

File Description	Document
Upload self attested letter with the list of students sanctioned scholarships	[View Document]
Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years	[View Document]
Any additional information	[View Document]

5.1.2 Average percentage of students benefited by scholarships, freeships, etc. provided by the institution besides government schemes during the last five years

Response: 37.09

5.1.2.1 Total number of students benefited by scholarships, freeships, etc provided by the institution besides government schemes year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
590	568	525	333	209

File Description	Document
Any additional information	[View Document]

5.1.3 Number of capability enhancement and development schemes –

     1.**For competitive examinations**

     2.**Career counselling**

     3.**Soft skill development**

     4.**Remedial coaching**

     5.**Language lab**

     6.**Bridge courses**

     7.**Yoga and meditation**

     8.**Personal Counselling**

A. 7 or more of the above

B. Any 6 of the above

C. Any 5 of the above

D. Any 4 of the above

Response: A. 7 or more of the above

File Description	Document
Details of capability enhancement and development schemes	[View Document](#)
Any additional information	[View Document](#)
Link to Institutional website	[View Document](#)

5.1.4 Average percentage of student benefited by guidance for competitive examinations and career counselling offered by the institution during the last five years

Response: 26.56

5.1.4.1 Number of students benefited by guidance for competitive examinations and career counselling offered by the institution year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
285	357	360	342	308

File Description	Document
Number of students benefited by guidance for competitive examinations and career counselling during the last five years	[View Document](#)
Any additional information	[View Document](#)

5.1.5 Average percentage of students benefited by Vocational Education and Training (VET) during the last five years

Response: 0.86

5.1.5.1 Number of students attending VET year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
0	49	0	0	0

File Description	Document
Details of the students benifitted by VET	[View Document](#)
Any additional information	[View Document](#)

5.1.6 The institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases

Response: Yes

File Description	Document
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	[View Document](#)
Details of student grievances including sexual harassment and ragging cases	[View Document](#)
Any additional information	[View Document](#)

5.2 Student Progression

5.2.1 Average percentage of placement of outgoing students during the last five years

Response: 37.3

5.2.1.1 Number of outgoing students placed year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
277	103	120	87	50

File Description	Document
Self attested list of students placed	View Document
Details of student placement during the last five years	View Document
Any additional information	View Document

5.2.2 Percentage of student progression to higher education (previous graduating batch)

Response: 10.53

5.2.2.1 Number of outgoing students progressing to higher education

Response: 32

File Description	Document
Upload supporting data for student/alumni	View Document
Details of student progression to higher education	View Document

5.2.3 Average percentage of students qualifying in State/ National/ International level examinations during the last five years (eg: NET/ SLET/ GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil Services/State government examinations)

Response: 40.13

5.2.3.1 Number of students qualifying in state/ national/ international level examinations (eg: NET/ SLET/ GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil services/ State government examinations) year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
2	12	8	4	5

5.2.3.2 Number of students who have appeared for the exams year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
124	21	16	11	9

File Description	Document
Upload supporting data for the same	View Document
Number of students qualifying in state/ national/ international level examinations during the last five years	View Document
Any additional information	View Document

5.3 Student Participation and Activities

5.3.1 Number of awards/medals for outstanding performance in sports/cultural activities at national / international level (award for a team event should be counted as one) during the last five years.

Response: 6

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

2018-19	2017-18	2016-17	2015-16	2014-15
4	1	0	1	0

File Description	Document
Number of awards/medals for outstanding performance in sports/cultural activities at national/international level during the last five years	View Document
e-copies of award letters and certificates	View Document
Any additional information	View Document

5.3.2 Presence of an active Student Council & representation of students on academic & administrative bodies/committees of the institution

Response:

- Students Representative (SR) is an indispensible part of Academic and Administrative bodies/committees of the institution such as
  - College union
  - IQAC
  - Alumni Association
  - Training & Placement Cell
  - Departmental associations

- Celebrations like Onam, Christmas etc.
- Various other academic committees such as class/course committees of the college.
- NSS
- Arts Club
- Sports Club
- Dance Club
- College Band
- Techfest Committee
- One boy representative and one girl representative are elected as Class Representatives (CR) from each class.
- Executive committee of the College Union is elected from Class Representatives through the conventional parliamentary election process
- The Student's Representative provides valuable feedback regarding curriculum, teaching-learning and evaluation process.
- Students Representative oversees the ready availability of teaching aids in class rooms and act as a point of contact in official communication process.
- Students Representative also co-ordinate various extension programmes such as departmental seminars, workshops, technical talks, quizzes etc.
- The Students Representative plays an important part in encouraging and motivating students to participate in various programmes of the college.
- Additionally, the Students Representative organizes the tech fest and exhibitions and is responsible for the smooth execution of the various aspects related to the intercollegiate arts fest TANDAV.
- The college Sports is an annual and an important event and the Students Representative has the responsibility to co-ordinate different sports activities and events and assist the teachers in making the event a success.
- Students Union also has the duty to recruit volunteers from the student's community for various purposes. Thus, Students Union contributes to a healthy interaction among students and teachers regarding academic, co-curricular and extra-curricular activities of the college.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

5.3.3 Average number of sports and cultural activities/ competitions organised at the institution level per year

Response: 6

5.3.3.1 Number of sports and cultural activities / competitions organised at the institution level year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
10	6	4	6	4

File Description	Document
Report of the event	View Document
Number of sports and cultural activities / competitions organised per year	View Document
Any additional information	View Document

5.4 Alumni Engagement

5.4.1 The Alumni Association/Chapters (registered and functional) contributes significantly to the development of the institution through financial and non financial means during the last five years

Response:

The college has a registered Alumni Association (MBITSAA) with registration number EKM/TC/408/2019. MBITS have identified 44 alumni in Canada and steps are being taken to start an Alumni Chapter.

Objectives of alumni association

- To make the alumni of MBITS stand together to achieve their goals.
- To utilize the experience, wisdom, ability and spare time of former students of MBITS for the benefit of the weaker section of the society.
- To enhance and develop various facilities inside the campus.

Features of Alumni Association

- The alumnus forms the major strength of an institution. MBITS started in the year 2009 and the first batch of students passed out in the month of May 2013.
- An executive committee was constituted in the year 2013 with Principal Dr. M M Paulose as the president and Asst Prof Nedheesh Eldho Baby as the secretary.
- Currently alumni association is functioning well under the guidance of Principal Dr. P Sojan Lal as President, Prof. Siju Jacob as Secretary and Asst. Professor Abin Sunny as Treasurer.
- Association meets twice in an academic year as it is the flag bearer of the developments in the institution.
- A bank account was opened to receive monetary contributions and do creative spending in a systematic way.
- The main focus is on acquiring a job and working in diverse job environments including working out of state, abroad and working in company handling different portfolios.

Contributions of Alumni Association

- The most important contribution of the alumni association is that the members share their experience to their junior students.

- The alumni identified that physical fitness and personality development were very important in addition to subject knowledge in performing well in a job. To fulfill this they came forward to start a gymnasium in the college.
- Alumni felt that the annual expenditure of 20% of the subscription amount, specified in the bye law, was less, and endorsed the increase to 40%.
- They contributed a sum of 1,50,000 rupees for the landscaping and completion of the college front area, which was a dream of alumni, and about 2 lakh rupees for buying chairs for college auditorium.
- Besides these financial contributions, alumni actively take part in the overall betterment of available facilities in the institution by giving feedback and taking part in various committees in college such as IQAC.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

5.4.2 Alumni contribution during the last five years(INR in Lakhs)

? 5 Lakhs

4 Lakhs - 5 Lakhs

3 Lakhs - 4 Lakhs

1 Lakh - 3 Lakhs

Response: ? 5 Lakhs

File Description	Document
Any additional information	View Document
Alumni association audited statements	View Document

5.4.3 Number of Alumni Association / Chapters meetings held during the last five years

Response: 16

5.4.3.1 Number of Alumni Association /Chapters meetings held year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
2	3	5	4	2

File Description	Document
Number of Alumni Association / Chapters meetings conducted during the last five years	View Document
Any additional information	View Document
Report of the event	View Document

20-11-2019 11:10:10

Criterion 6 - 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

Response:

Vision:

To nurture a positive campus culture and equip the younger generation to take our nation forward.

Mission:

- To provide graduate level technical education in the existing or conventional branches as well as newly emerging fields.
- To build up a centre of technical excellence for post graduate studies and research in all fields of human endeavor.
- To help the youth of rural agricultural back ground to change with times, and join the mainstream of industrial growth and information technology.
- To impart ethical values of our Indian tradition to the future generation

Under the auspices of the church, Mar Thoma Cheria Pally and the patron saint, 'Eldho Mar Baselios', this institute always foster a positive campus culture and equip the younger generation to take our nation forward. Upholding the motto, "Wisdom Crowns Knowledge" we provide quality higher education at par with international standards.

It was the combined effort of the Board of Directors, Principal, Heads of Departments, senior most faculty members and all other stake holders that led to the formation of our vision.

Our mission aims to provide graduate level technical education in the existing programmes as well as in the newly emerging fields. To materialize this, top level management along with the Principal, HODs and faculty members go hand in hand. By National/International Conferences, Seminars and Workshops, Smart India Hackathon etc. students conceive the idea about modern and emerging trends in Engineering and Technology.

The mission also aims to build up a centre of technical excellence for post graduate studies and research in all the fields of human endeavor. To achieve this, we empower the students to do research work in premier organizations like ISRO, DRDO, Geodesic etc. The management fulfills this mission by guiding the staff and students, providing funds for programmes in the college like technical festivals and exhibitions, etc.

As per the mission to help the youth from the rural agricultural back ground to change with times and to join the mainstream of industrial growth and information technology, the board of directors selected a rural area for this institution. Various central government programmes like PMKVY (Pradhan Mantri Kaushal Vikas Yojana), UBA (Unnath Bharath Abhiyan), DDU-GKY (Deen Dayal Upadhyaya Grameen Kaushalya Yojana),ASAP (Additional Skill Acquisition Programme) are being organized in this institute to help the youth in and around this locality in securing a better livelihood by imparting industry-relevant

skills. This creates transformational change in rural development. All these programmes are successfully being implemented by the participative effort of staff and management.

Our institute imparts ethical values of Indian tradition to the future generation. Activities like Community Service & emergency services in times of distress and technical backup for the needy are being provided by the institute. Recently we were actively involved in the rescue operations during the flood and landslides which struck our state. The Institute also arranges orientation seminars and motivation classes to transmit ethical values, of good morals and principles to staff and student community.

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

6.1.2 The institution practices decentralization and participative management

Response:

Decentralization is having a significant impact on policies, planning and management in achieving the programme outcomes. For this, the various committees and cells function at different levels contributed by the staff and students.

They provide a platform for students to take part in participative management. The student representatives shoulder the responsibility for maintaining discipline in the class and college.

Case study on Course Committee and Class Committee

Purpose

- To verify compliance with the academic calendar of the university in order to ensure proper content delivery to the students.
- To impart the suggestions regarding the course conduct
- To identify the weak students and to recommend them for remedial classes.
- To take feedbacks on academic and infrastructural improvements.
- To recommend the development, implementation, performance and resourcing of the ongoing courses.
- To suggest palatable teaching methodology as per student aspirations.

Functioning

- The course/class committees are formed for each class in the beginning of the semester.
- It is headed by a Chairman and a Convener who is selected from members of the faculty having sufficient experience in academics.
- Committee consists of staff members handling the courses and the student representatives.
- Three meetings are conducted in each semester, one at the beginning, the second and third ones

after the first and second internal examination respectively.

- The minutes are recorded along with actions to be taken as per the recommendations.
- The first meeting conducts discussions on academic calendar, course plan, tutorials/assignments, reference books etc.
- The second class committee meeting evaluates the student's performance in the first internal exam and identifies the weaker students
- They are further referred for the remedial class.
- Attendance of each student is evaluated and published in classes.
- PTA meeting is conducted to inform the parents about the progress of their wards.
- The difficulties faced by the students are identified and suitable remedial measure the taken.
- The committee submits the report to the HOD.
- HOD discusses the reports with faculty members and the possible improvements are implemented.
- The specific matters are discussed in the periodic HOD meetings with the Principal.
- The decisions are further implemented by the Principal through the HODs, faculty advisors and faculty members.
- In the faculty advisor system, students are assigned to a particular faculty member (mentor) till the completion of the graduate program.
- They act as foster fathers in grooming them up as committed engineers.
- In this way, the class committee and faculty advisor system work in tandem for achieving the above objectives.

Thus our institution maintains effective result-oriented practices in decentralization and participative management.

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

6.2 Strategy Development and Deployment

6.2.1 Perspective/Strategic plan and Deployment documents are available in the institution

Response:

- Development of the college is a continuous improvement process.
- At every step, the management strives for the same. This is made possible with the help of perspective/strategic plans that chalk out the actions to grow and develop.
- The first step is brainstorming the ideas.
- All stakeholders get involved in this process. Their suggestions are considered while developing the policies and strategic plans.
- The tasks are divided into short term, mid term and long term categories.
- Every department suggests plans for improving the quality of the institution. Upon approval by the higher authority, departments are instructed to work out their plans to achieve the goals. Constant support is rendered for the same.

- The Institute has the following Perspective/Strategic plans:

SHORT TERM

- Developing systems for practicing engineering & research through training, collaborations and programs
- Preparation of institute development plan for academic development
- Developing network with industry and institutions.
- Enhancing network with Stakeholders- Alumni, Parents & Academician/Industry experts.
- Initiate accreditation processes(NAAC) for quality enhancement
- The placement activities need to be improved.
- Development of platform for "self-made" multi-faceted professionals contributing to the national development.

MID TERM PLAN

- Introduce research programs in relevant streams.
- Development of digital platform for efficient & effective learning.
- Joint-collaborative research & development projects with the industry & research centres.
- 100% placement.
- Accreditation of the institute by NBA

LONG TERM

- Setting up activities in collaboration with industry & business.
- Setting up research Centre in each domain of engineering.
- Collaboration with National & International research institutes.
- Development of Technology search centre.
- Establishment of blended & digital platform for quality in education.

Case Study: Smart India Hackathon 2017 – NODAL CENTRE

- AICTE in association with MHRD had launched '**Smart India Hackathon 2017'**, in order to work towards our Honorable Prime Minister's vision of Digital India. The Hackathon which is a joint initiative of AICTE, UGC, NASSCOM, etc, aimed at identifying new and disruptive digital technology innovations for solving the challenges faced by our country. Smart India Hackathon is a 36 hour nonstop digital programming competition. The participating teams were to simultaneously compete across 26 Nodal centers in India to offer digital-sustainable innovative solutions for real time challenges faced by the nation.
- **MBITS** was selected as one of the nodal centres, hosting The Ministry of Tourism. Around 400 students from 48 teams participated at MBITS centre from various parts of the country. Students could seek the help from mentors working in IT field to refine their solutions.
- FDPs were conducted at MBITS for the awareness of Hackathon and to gain necessary skills and experience. Six teams from our college submitted proposals and two of the projects from MBITS were selected to compete in the final round. The Grand Finale of Smart India Hackathon was held on the 1st and 2nd of April 2017.
- In this academic year, Team 'FORBOTS' from MBITS had won first prize of Rs 100,000/- in Hardware edition of Smart India Hackathon 2019 at REVA University, Bangalore.

- SIH-2017 grand finale report sent to AICTE is attached herewith.

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)
Strategic Plan and deployment documents on the website	[View Document](#)

6.2.2 Organizational structure of the institution including governing body, administrative setup, and functions of various bodies, service rules, procedures, recruitment, promotional policies as well as grievance redressal mechanism

Response:

- Mar Baselios institute of technology and science (MBITS) is one among the seven ventures under Mar Basil Group of Institutions.
- The administrative management is controlled by the Board of Directors consisting of selected members from the Board of Trustees and the Managing Committee of the church comprising of 35 members of the parish who are elected periodically.
- The Board of Directors includes Chairman, Secretary and Treasurer in addition to other six board members.
- The Advisory Board consists of highly experienced academicians and professionals who act as guides and consultants for the growth and development of the institution.
- The body generally meets once in a week and a few more times on the basis of any ad-hoc needs. Decisions like introduction of new courses, development of infrastructure facilities and other initiatives for improvement of the institution are taken up by the governing body.
- Governing body is the ultimate authority for any decision in the institution. Administrative set up of the institution is as per the organization chart. Governing body of the institute is headed by the Chairman.
- Principal is the academic and administrative head of the institution. Dean academics reports to principal. Heads of the department report to Dean Academics and Principal. Staff members report to respective Heads of the department.
- Service rules have been formulated as per the guidelines of competent authorities like the affiliating university and AICTE.
- The selection of staff to all posts is done by a six-member selection board elected by the parish members from time to time. The representatives of the institution and subject experts are also included in the respective selection committee at the time of interview.
- Yearly appraisal policy exists for the staff.

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

6.2.3 Implementation of e-governance in areas of operation

1. Planning and Development
2. Administration
3. Finance and Accounts
4. Student Admission and Support
5. Examination

A. All 5 of the above

B. Any 4 of the above

C. Any 3 of the above

D. Any 2 of the above

Response: A. All 5 of the above

File Description	Document
Screen shots of user interfaces	[View Document](#)
ERP Document	[View Document](#)
Details of implementation of e-governance in areas of operation Planning and Development,Administration etc	[View Document](#)

6.2.4 Effectiveness of various bodies/cells/committees is evident through minutes of meetings and implementation of their resolutions

Response:

Various Committees for proper governance

- Academic Committee
- Internal Quality Assurance Cell
- Anti Ragging Committee
- Disciplinary Action Committee
- Library Committee
- Sports Committee

- Canteen Committee
- Transportation Committee
- Entrepreneurship Development Cell
- Internal Compliance Committee
- Women Cell
- Industry Institute Partnership Cell (IIPC)
- Students Welfare Committee
- Grievance Redressal Cell
- Internal Audit Cell
- Alumni Association
- Training and Placement Cell
- Minority Committee
- Committee for SC/ST
- Tech Fest Committee

As a case study we consider an activity (TECH OLYMPIAD) that was successfully executed by Tech Fest Committee.

TECH OLYMPIAD

- The institute conducted an Olympiad for students at the High School and Senior Secondary School levels.
- The programme is aimed to identify technically talented students and also the best school.
- The competitions held were in six items i.e., Quiz, Waste Craft, Project Expo, Lathe Master, Ideathon and Poster Design.
- A cash prize of Rs. 18,000 was given to the winners of each category and Rs. 50,000 for the best school.
- Thirty schools participated in the program and St.Mary's Public school,Kerala was selected as 'The Smart School'.
- A project exhibition named "Project Expo" was also conducted that showcased the projects of students from the Keralite Polytechnique Institutions. A total cash prize of Rs. 50,000 was given to the selected best projects.
- An exhibition was also arranged in which various government organizations like ISRO, CIAL, KEL, KSEB, ANERT, BSNL, KSRTC, ARMOURY, FIRE & RESCUE etc., have participated.
- LPSC, ISRO Director Dr. S Somanath and Dr. V P Gangadharan, the well known oncologist were the distinguished chief guests.
- Talks of eminent personalities like Er. Alex A (General Manager, LPSC, ISRO), Er. Sreenath Beevi (Execitive Engineer, KSEB), Er. Rajumon P C (Senior Manager (Electrical) CIAL), etc., were also arranged for the students.

TECH OLYMPIAD-COMMITTEE

General Convener: Dr. Meril George

Joint Convener: Mr. Nedheesh Eldho Baby

Programme Details

Event Coordinator: Mr. Thomas George

Joint Coordinator: Mr. Abhilash K V

Main Events

1. Exhibition, Light and Sound

- Coordinator: Mr. Arun Eldho
- Joint Coordinator: Mr. Basil Kumar N M

2. School competitions and Best School Award

- Coordinator: Mr. Anoop Sankar
- Joint Coordinator: Mr. Naveen B Parappattu

3. Polytechnique Project Expo

- Coordinator: Mr. Abin Sunny
- Joint Coordinator: Mr. Bibin K Tharian

Preparation Committees

1. School and Polytechnique College Visit

- Coordinator: Mr. Jimson Varghese
- Joint Coordinator: Mr. Eldhose Varghese

2. Registration

- Coordinator: Mr. Mahesh S
- Joint Coordinator: Mr. Eldhose Lomy

3. Documentation and Invitation

- Coordinator: Ms. Mercy George
- Joint Coordinator: Ms. Bonia Jose

4. Publicity Committee

- Coordinator: Mr. Tinku Soman Jacob
- Joint Coordinator: Mr. Aby Chummar

5. Fun Rides

- Coordinator: Mr. Mahesh K M
- Joint Coordinator: Mr. Eldho A G

6. Programme Committee

- Coordinator: Ms. Manju George
- Joint Coordinator: Mr. Paul Mathews

7. Food and Transportation

- Coordinator: Mr. Siju Jacob
- Joint Coordinator: Mr. Chethan Roy

8. Finance Committee

- Coordinator: Mr. Munna Basil Mathai
- Joint Coordinator: Mr. Shijo Varghese

9. Advisory Committee

- Prof. Johny Joseph & Prof. Roy N Mathews- School Competitions
- Prof. Aleyas M V- Finance Committee
- Prof. Leena Thomas & Prof. Shiney Varghese- Programme Committee
- Asst. Prof. Midhun Mathew- Polytechnique Competitions

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

6.3 Faculty Empowerment Strategies

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

Response:

Welfare measures for the employees include the provision for various facilities and amenities in and around the work place for the betterment of their lives. Employees are the most important assets of an organization and the institution always gives importance and support to them. The purpose of welfare measures is to bring out the development of the whole personality of the workers to make a better workforce.

The various welfare measures practiced for teaching and non teaching staffs are as follows:

For teaching staff

- As motivation, financial aids and duty leaves are provided to attend National / International conferences, workshops, FDPs etc.

- Encourage faculties to pursue for PhD by giving adequate support. Currently seven faculty members are pursuing PhD.
- Personal accident insurance schemes are taken for all employees of the institution. Presently every employee is insured for Rupees 10 lakh.
- Treatment aids are provided for those staff who cannot afford the treatment expenses.
- Festival allowance is given to all staff members in the month of October for celebrating the Mar Basil Day (rememberance of our patron Saint Eldho Mar Baselios).
- Transportation facilities are provided for those who are living in the outskirts of the town.
- Yearly increment in salary is provided.
- Maternity leave is provided.
- Compensatory off is provided for all extra duties taken by employees.
- After completion of an academic year, employees can avail one month vacation leave with pay.

For non teaching staff

- Employee Provident Fund (EPF) and ESI are provided.
- Personal accident insurance schemes are taken for all employees of the institution. Presently every employees insured for rupees 10 lakh.
- Treatment aids are provided for those staff who cannot afford the treatment expenses.
- Festival allowance is given to all staff members in the month of October for celebrating the Mar Basil Day (rememberance of our patron Saint Eldho Mar Baselios).
- Transportation facilities are provided for those who are living in the outskirts of the town.
- Yearly increment in salary is provided.
- Maternity leave is provided.
- Compensatory off is provided for all extra duties taken by employees.
- After completion of an academic year, employees can avail one month vacation leave with pay.

File Description	Document
Any additional information	[View Document](#)

6.3.2 Average percentage of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the last five years

Response: 3.79

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

2018-19	2017-18	2016-17	2015-16	2014-15
10	4	6	0	0

File Description	Document
Details of teachers provided with financial support to attend conferences,workshops etc during the last five years	<u>View Document</u>
Any additional information	<u>View Document</u>

6.3.3 Average number of professional development /administrative training programs organized by the institution for teaching and non teaching staff during the last five years

Response: 7.8

6.3.3.1 Total number of professional development / administrative training programs organized by the Institution for teaching and non teaching staff year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
15	6	4	7	7

File Description	Document
Details of professional development / administrative training programs organized by the Institution for teaching and non teaching staff	<u>View Document</u>
Any additional information	<u>View Document</u>

6.3.4 Average percentage of teachers attending professional development programs viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Program during the last five years

Response: 49.61

6.3.4.1 Total number of teachers attending professional development programs, viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Programs year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
87	53	91	40	3

File Description	Document
IQAC report summary	[View Document](#)
Details of teachers attending professional development programs during the last five years	[View Document](#)
Any additional information	[View Document](#)

6.3.5 Institution has Performance Appraisal System for teaching and non-teaching staff

Response:

The institute has a very transparent self-appraisal system. It covers all aspects of academics, administrative and research activities of staff. This helps to figure out strengths and weaknesses of the staff member. It is a process of self-evaluation to determine the level of efficiency. It is a part of continuing professional development or career advancement. The performance of staff is evaluated and conduct review meeting by the Principal and HOD to give suitable suggestions and remedial measures for overall performance.

APPRAISAL FORMAT FOR TEACHING STAFF

Performance index of faculty is evaluated by considering the following 3 categories

- Teaching, learning & evaluation related Strategies
- Co-Curricular and Extension Activities/ Professional Development
- Research and Academic Contributions.

To evaluate the different categories following points are considered.

1. The teaching, learning & evaluation related Strategies

- Lectures, Lab, Contact Hours/University results

- Reading/Instructional materials provided. Use of additional knowledge resources for subject enrichment
- Use of participatory and innovative teaching learning methodologies (use of ICT, E Library, Remedial courses & Skill modules)
- Examination duties (Invigilation, Paper setting, evaluation of students at theory/practical examination)

1. Co-Curricular and Extension Activities/ Professional Development

- Co-Curricular Activities and Extension Activities /Institutional Responsibilities and Contribution to Corporate Life
- Departmental Responsibilities/Professional Responsibilities/ Training Programmes

1. Research and Academic Contributions

* Papers published in Journals and Conferences
* FDPs attended
* Papers presented in Conferences/Seminars

Considering the marks secured in all the categories an Academic Performance Index (API) score is calculated. It is then reviewed by HOD and Principal.

APPRAISAL FORMAT FOR NON-TEACHING STAFF

Evaluation of non teaching staff is done for 5 categories

* Assistance in regular Laboratory Classes
* Assistance in Value Added Courses organized
* Assistance in Project works
* Administrative Support

* Academic Upgradation

Considering the marks secured in all the categories an Academic Performance Index (API) score is calculated. It is then reviewed by HOD and Principal.

File Description	Document
Any additional information	[View Document](#)

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

* The Institute is managed by Mar Baselios Educational and Charitable Trust (MBECT), which is functioning under the auspices of Mar Thoma Cheria Pally, Kothamangalam.
* The financial accounts of the institute are audited by a statutory auditor regularly on an annual basis since its inception in the year 2009.
* The anomalies; if any; pointed out by the auditor are attended to and rectified during the course of the auditing itself.
* Besides the statutory audit, the Management conducts internal audit from their side on an annual basis
* Reports are placed before the annual general meeting of the church, Mar Thoma Cheria Pally and deliberated extensively.
* Corrective actions are taken as per the directions issued from the Managing Committee of the Church.
* Internal Audit of various cells including NSS, EDC etc. is done by the staff in charge of internal audit periodically.

- Reports are submitted to the corresponding authorities before the external audit.
- The copy of internal audit report covering all matters related to maintenance of account is preserved.
- External audit is conducted. Audit report and its findings are submitted to the management
- The audit report is consolidated and the annual return is submitted to the Income Tax department.
- It is pertinent to state that the Trust (MBECT) has been granted registration under section 10(23C) and section 12A of the Income Tax Act.

File Description	Document
Any additional information	[View Document](#)

6.4.2 Funds / Grants received from non-government bodies, individuals, Philanthropists during the last five years (not covered in Criterion III) (INR in Lakhs)

Response: 1092.2

6.4.2.1 Total Grants received from non-government bodies, individuals, philanthropists year-wise during the last five years (INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
309.2294	208.12765	54.31500	386.61750	133.91000

File Description	Document
Details of Funds / Grants received from non-government bodies during the last five years	[View Document](#)
Annual statements of accounts	[View Document](#)

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

Response:

- **Mobilization:**

- **Fee collections :**

  - 50% of sanctioned intake will be allotted by the Commissioner for Entrance Examination. Remaining 50% seats will be filled up by the management, under management quota from the application received at the college office. Tuition fees collected from students constitutes our major source of income.

- **Term Loan and Hire Purchase Loans:**

    - Institute is availing Loans from banks at reduced rate of interest by maintaining the liquidity, sound DSCR and Debt Equity Ratios. The Loans are availed through Mar Baselios Educational and Charitable Trust (MBECT).

- **Government grants and sponsorship receipts** :
    - Institute is receiving grants from the various government programmes like UBA, ASAP, PMKVY, DDU-GKY etc. and the grants are judiciously utilized to meet the recurring and non-recurring expenses.
- **Online Examinations :**

    - Our institution has been identified as a centre for various online examinations like GRE, NEET, GATE, CAT and JEE etc. Payments are received for conducting the same.

- **Corpus Donation of Trust and Trust Contribution:**

    - MBCET gets corpus donations from well-wishers, corporates and philanthropists.

- **Alumni Contributions**

    - Contributions of the Alumni are utilized for student development and welfare activities.

- **Consultancy Services :**

    - Research & Consultancy cell of our institute receives payments for providing consultancy services to public and private undertakings.

    OPTIMAL UTILIZATION

- **Recurring Expenses**

    - The fee collected is utilized to meet the recurring expenses such as Salary, Academic activities, loan repayments etc.

- **Infrastructural Development and Facility Enhancement**

    - Management allocates budget for infrastructural development and to create and upgrade the facilities in tune with the modern trends to meet our requirements. Bank Loans and corpus donations received from well-wishers and philanthropists are judiciously utilized for the same.

- **Maintenance**

  - Maintenance works are carried to keep the infrastructure facilities in good condition as per AICTE norms.

- **Upgradation of Lab facilities**

  - Laboratories are upgraded according to the norms of AICTE and University.

  - We also provide updated software and hardware to the students for excelling in academics and latest innovative projects.

- **Enhancement of Transportation facilities**

  - College purchases new vehicles as per student strength, through hire purchase loans from banks and loans are repaid at reduced rates of interest. Transport facility is enhanced by providing more number of buses to various routes as per the requirement.

- **Conducting Seminars, Conferences and Faculty Development Programmes**

  - The institute conducts the above said activities and programmes regularly and in tune with the latest trends & technologies, innovations and research to meet the needs of the society.

- **Purchase of Text books and Subscription of journals for Library**

  - Library has a wide collection of 18,853 books and various journals, magazines and non-book materials. Number of books in library is enhanced every year.

- **Enhance Extra-curricular activities :**
  - Maintenance of Modern Gym facilities provide ample opportunities for the students to keep the body fit
  - To conduct sports/game events.
  - We take every effort to encourage our students to participate in various social and cultural activities.
  - The college has various clubs such as Arts and Sports club, Media club, Yoga club, etc. The students are actively participating in the respective domains.

File Description	Document
Any additional information	[View Document](#)

6.5 Internal Quality Assurance System

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

Response:

The IQAC of MBITS regularly meets up to discuss and plan activities targeted for the academic growth of students and faculty.

As a result, all departments have conducted Conferences, seminars and workshops in the relevant disciplines and papers have been published in national /International Journals.

The cell monitors the progress of the activities to make sure that the quality of the program is not compromised.

This is accomplished by appointing an internal evaluator who will be monitoring the process of selection of papers, transparency in fund management etc.

CASE I: National Conference

- IQAC initiates various departments to conduct National Conferences to provide opportunities to students and Faulty from all over India to meet and to discuss current research on a broad range of subjects.

As a Case study we submit the details of "National Conference on Recent Advances in Electrical and Electronics Engineering, 2015"

- The conference was organized and conducted as per schedule on 26th and 27th of March 2015.
- The program was co-sponsored by Kerala State Council for Science, Technology and Environment (KSCSTE).
- Forty six papers were accepted for presentation, out of which 33 papers from UG/PG students of other colleges, 5 from the faculty of MBITS and 8 from the final year UG students of EEE department of MBITS.
- The Chief Guest at the opening ceremony was Dr. Devassia V P, Principal, Model Engineering College, Thrikkakara. His talk gaves an insight into the importance of interaction of academia and the outcome based evaluation based on the Washington accord.
- The association with IJAREEIE (International Journal for Advanced Research in Electrical Electronics and Instrumentation Engineering) was fruitful.

CASE II: **Faculty Development Programme**

- IQAC initiates various departments to conduct Faculty development programmes for improving teaching skills in higher education

As a Case study we submit the details of the Faculty Development Programme on Emerging Technologies in Infrastructure Development.

- FDP was conducted for 3 days (06/06/'18-09/06/'18) by the Civil Engineering department of MBITS.
- Principal, Dr. P. Sojan Lal presided over the inaugural function. Er. Srinidhi Anantharaman, CEO and Founder MD of Geodesic Techniques, Bangalore delivered the inaugural address.
- In his inaugural address, he stressed that Civil engineering is the oldest branch of engineering after military engineering and all other branches had evolved from it. Civil engineer has to address all types of problems related to the community. He also stressed the importance of civil engineers getting updated to the latest technological developments.
- Thirty faculties from various reputed colleges were delegates of the programme.

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

6.5.2 The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms

Response:

Teaching method comprises of principles and methods used by teachers to enable student learning.

For a particular teaching method to be appropriate and efficient it has to be in relation with the characteristic of the learner and the type of learning it is supposed to bring about.

CASE I: Outcome Based Education.

- IQAC initiated a step to implement Outcome Based Education (OBE) in the teaching learning process.
- OBE is an approach that focuses on what the students learn and are able to apply after the completion of each course and the program.
- The objective is to build competencies in learning that makes the graduate to cope up with rapid changes in the society.
- The quality of the content delivery of a course can be accessed by the following steps.
    - Program Outcomes (POs) based on graduate attributes are specified by AICTE and are set as it is.
    - Each department defined its own Program Specific outcomes (PSOs) with due importance to core areas.
    - Course outcomes (COs) are framed for each course based on revised Blooms Taxonomy.
    - CO-PO and CO-PSO matrices are prepared for each course indicating correlation levels.
    - In the Internal Examination Question papers corresponding COs and Blooms Taxonomy levels are indicated against each question.
    - Mark scored by each student in each question is mapped to the corresponding CO for attainment level calculation.
    - Institution conducts Course End Survey for each course and Graduate Survey for final year

students.

- CO attainment level for each course is calculated at the end of the semester using direct and indirect assessment tools.
- Using CO-PO and CO-PSO matrices PO and PSO attainments are also calculated.

CASE II: Performance Analysis of the Students and the Improvement Process.

- IQAC recommended for conducting detailed performance analysis of each student for each course so that suitable remedial measures can be taken for improvement.
- Monthly attendance of all courses for each student is published and remedial steps are taken by HOD and faculty advisors.
- Class/Course committee meetings are conducted three times in a semester to monitor subject coverage, effectiveness of classes, percentage of attendance, result analysis of internal examinations etc. Suggestions from students are taken for improvements.
- Results of internal exam are analyzed in the department meeting and class/course committee meetings for identifying the weaker students.
- Remedial classes are conducted effectively for the needy students.
- Feedbacks from students are taken for each course in every semester and improvement measures are suggested to the respective faculty members by the Principal and HOD.
- University examination results of all courses are analyzed in detailed by an expert committee consisting of representatives of management, Principal and HOD, and directions are given for further improvement.

File Description	Document
Any additional information	[View Document](#)

6.5.3 Average number of quality initiatives by IQAC for promoting quality culture per year

Response: 12.4

6.5.3.1 Number of quality initiatives by IQAC for promoting quality year-wise for the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
18	15	5	12	12

File Description	Document
Number of quality initiatives by IQAC per year for promoting quality culture	[View Document](#)
Any additional information	[View Document](#)
IQAC link	[View Document](#)

6.5.4 Quality assurance initiatives of the institution include:

1. Regular meeting of Internal Quality Assurance Cell (IQAC); timely submission of Annual Quality Assurance Report (AQAR) to NAAC; Feedback collected, analysed and used for improvements
2. Academic Administrative Audit (AAA) and initiation of follow up action
3. Participation in NIRF
4. ISO Certification
5. NBA or any other quality audit

A. Any 4 of the above

B. Any 3 of the above

C. Any 2 of the above

D. Any 1 of the above

Response: B. Any 3 of the above

File Description	Document
Details of Quality assurance initiatives of the institution	[View Document](#)
Any additional information	[View Document](#)
Annual reports of institution	[View Document](#)

6.5.5 Incremental improvements made during the preceding five years *(in case of first cycle)* **Post accreditation quality initiatives** *(second and subsequent cycles)*

Response:

Academic and Administrative audits are conducted internally and externally. Workshops and Training sessions are organized to improve various quality metrics.

Placements and results are reviewed periodically and statistics reports are generated. Student and stakeholder feedbacks are collected regularly and distributed among the departments for necessary actions.

Standard monitoring procedures like daily, monthly reports on the activities of the individual faculty, departments and sections are carried out. Periodic meetings and steps are taken by IQAC to enhance the research interest and publications in terms of quality and quantity.

Typically two case studies of quality enhancement initiatives are given below.

Case I : Smart India Hackathon (SIH)

- Ministry of HRD and All India Council for Technical Education (AICTE) proposed the Smart India Hackathon 2017, which harness the creativity and technical expertise of more than three million students for direct benefit of our nation.
- The thirty six hours nonstop Hackathon'17 is considered to be the world's biggest computer programming competition and is jointly organized for resolving IT problems of more than thirty central ministries such as Defense, Tourism, Telecommunication, Civil Aviation and departments like ISRO.
- MBITS is selected as one of the 26 nodel centres across nation to conduct SIH 2017 Grand Finale.
- Every year our students participate in SIH.
- Our team 'FORBOTS' had won first prize and cash award of Rs 100,000/- in Hardware edition competition for Smart India Hackathon 2019 at REVA University, Bangalore, for its unmanned ground vehicle that is a "Constant Gardener" for remote area reforestation.

Case II : Tech Olympiad 2018

- Inorder to encourage the technically talented students of schools, the institution constantly conducted technology familiarization programs like REACH OUT from the year 2015 onwards.
- As an incremental improvement made for the preceding years, Tech Olympiad was conducted on 2018 January.
- Thirty schools participated in the program and St.Mary's Public school, Kerala was selected as 'The Smart School' and won a cash award of Rs. 50000/-, sponsored by Mar Baselios Charitable Trust.
- Various government organizations like ISRO, CIAL, KEL, Indian navy, KSEB etc had participated in the exhibition.
- Poly Expo, Poster Design, Ideathon, Lathe Competition and Quiz Competitions were lso part of Tech Olympiad.

File Description	Document
Any additional information	[View Document](#)

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1 Number of gender equity promotion programs organized by the institution during the last five years

Response: 30

7.1.1.1 Number of gender equity promotion programs organized by the institution year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
10	8	5	4	3

File Description	Document
Report of the event	[View Document](#)
List of gender equity promotion programs organized by the institution	[View Document](#)
Any additional information	[View Document](#)

7.1.2

1. Institution shows gender sensitivity in providing facilities such as:
  1. Safety and Security
  2. Counselling
  3. Common Room

Response:

Institution shows gender sensitivity in providing facilities such as:

1. **Safety and Social Security:**

The institution is committed to provide a safe and secure environment that nurtures the academic and societal growth of all students. This is achieved by the joint effort of students, staff and management.

- Precautions have been taken in the campus, canteen, library, sports area and college bus to monitor the movement of students and ensure safety of the students.
- The institute provides the CCTV Surveillance throughout the campus for safety and security purpose.
- Students wear ID cards at all times, and are strictly monitored.
- Faculty members ensure that all girl students leave the campus safely after remedial classes and the

cultural events arranged at night. Hostel facility is provided for the students in such situations.

- Wearing of the helmet and seat belts are made obligatory to all the students and employees.
- Students are not allowed to drive vehicles inside campus and have allocated parking space.
- College provides separate hostels for girls and boys within the campus. The hostels have resident wardens and chief warden. The students are required to get out-passes for leaving the hostel. For inmates when they need to go home, their parents should take prior permission from the warden. The discipline and security in the hostel is maintained by chief warden, resident wardens and matron/ manager. Full time security is also provided.
- As a part of enhancing the activities for girl students the college constituted women cell on 26th Feb 2019.
- The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 mandates that all the workplace having more than 10 workers to constitute Internal Complaints Committee (ICC) for receiving complaints of sexual harassment. College has constituted an Internal Complaints Committee for handling complaints regarding sexual harassment on 20th August 2014 as per the law. The students are made aware of the committee every year through awareness programs and they are told to approach the committee without any hesitation in case of any difficulty.

2. Counseling

2.1 Academic Counseling:

- The faculty members in all the departments monitor the academic progress of students throughout the year.
- Interactions with students help to identify their strengths and weaknesses and to provide guidance accordingly.
- Each class has two faculty advisors and they are serving as mentors. If the student strength is more, additional mentors are allotted as per the direction of AICTE.

- Heads of Departments and mentors were looking after the welfare of the students by providing necessary guidance and assistance.
- The parents meet the faculty members periodically to understand and analyze their ward's problems and help in providing solutions.

2.2 Professional Counselor:

- A professional counselor is available in the campus.
- Students in need of counseling are identified by mentors and directed to the counselor through respective HOD.

4. Common Room

- Separate spacious common waiting rooms and sick rooms are available for boys and girls.
- Various indoor and outdoor games & sports facilities are available in the campus.
- Gymnasium is available in the campus.
- There is common prayer room for staff and students.
- Cafeteria and stationery stores are functioning in the campus.

File Description	Document
Any additional information	[View Document](#)

7.1.3 Alternate Energy initiatives such as:

1. Percentage of annual power requirement of the Institution met by the renewable energy sources

Response: 0.01

7.1.3.1 Annual power requirement met by the renewable energy sources (in KWH)

Response: 14.4

7.1.3.2 Total annual power requirement (in KWH)

Response: 161750

File Description	Document
Details of power requirement of the Institution met by renewable energy sources	[View Document](#)
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

7.1.4 Percentage of annual lighting power requirements met through LED bulbs

Response: 33.33

7.1.4.1 Annual lighting power requirement met through LED bulbs (in KWH)

Response: 12000

7.1.4.2 Annual lighting power requirement (in KWH)

Response: 36000

File Description	Document
Details of lighting power requirements met through LED bulbs	[View Document](#)
Any additional information	[View Document](#)

7.1.5 Waste Management steps including:
- **Solid waste management**
- **Liquid waste management**

- **E-waste management**

Response:

Solid Waste Management

- Provided separate dust bins for biodegradable and plastic wastes.
- Single sided papers are reused for taking photocopies in a large scale.
- Plastic waste is collected and given to vendors in a regular basis.
- Metal and wooden waste from laboratories is stored and is being sold to authorized scrap agents.
- Incinerator is installed for burning non hazardous waste.

Liquid Waste Management

- Rain water in the initial rainy period collected over the roof top having 4220 square meter seems to be contaminated and hence it is directed to a pit for well charging which further improves the ground water level.
- Ensure to avoid water leakage in taps and pipes. Physical presence of pumping technician is assured round the clock.
- Waste water is used for horticulture.
- Various awareness programmes are conducted regarding preservation of water and its optimization, inline with World Water Day (22nd March) guidelines.

E-Waste Management

- E-waste from labs is properly collected and the posible parts are reused. The rest is given to a licensed recycler.
- Students are encouraged to dispose the e-waste at the collection centre, operated by the NSS unit.
- Display boards for awareness of waste management are placed in various parts in the campus.
- We also participate in local community requirements periodically by NSS unit.

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

7.1.6 Rain water harvesting structures and utilization in the campus

Response:

- Our institution is located in an area where the average rainfall is greater compared to the Kerala state rainfall level.

- The average use of water is one lakh litre per day in the campus.
- Institution utilizes the rain fall pattern by the execution of roof top water harvesting structures.
- The rain water collected from the roof top is directed to a storage tank via pipes.
- Rain water harvesting is implemented in the campus in an exemplary manner.
- Water harvesting tank capacity is 6.5 lakh litres.
- Water collecting area of roof top is 4220 square meters.
- Chlorination of rain water is being done and is used for laboratories, cleaning, toilets, horticulture, drip irrigation, sprinklers etc.
- Rain water in the initial rainy period collected over the roof top seems to be a contaminated and it is directed to a pit for well charging which further improves the ground water level, thereby supports the future water needs.
- The rain water harvesting system reduces the dependence on water tankers, thereby saves lakhs of rupees every year.
- The institute emphasis on the significance of water conservation and explains to the students, the importance of preserving and saving it.

File Description	Document
Any additional information	[View Document](#)

7.1.7 Green Practices
- **Students, staff using**
a) **Bicycles**
b) **Public Transport**
c) **Pedestrian friendly roads**
- **Plastic-free campus**
- **Paperless office**
- **Green landscaping with trees and plants**

Response:

- Our campus is located in a village which is quite far from the town and is comparatively free from the noise and pollution and gives a smoke free environment.
- Solar powered utility vehicle and electric vehicle, manufactured as a part of final year project by our students is used for transportation within the campus.
- The students and faculty members are encouraged to plant trees and make the campus a garbage free and plastic free zone.
- There are dedicated staff members who maintain the lawn, plants and trees.
- The campus is planted with lots of trees and bushes which enhances its beauty and thus keeps the campus green and clean.
- Tree plantation programme help in encouraging eco friendly environment, which provides pure oxygen within the institute.
- The natural illumination and ventilation in classrooms are adequate for a better environment.
- The noise level in the campus is well within the limits.
- The installation of solar panel, paperless work system (campus ERP system, e-mail, digital storage and library, ICT enabled class rooms, digital signage system, e-transactions, e-payslip etc.),

composting and incineration practices are noteworthy.

* The institute is situated beside NH-85 and 24 hours public transportation facility is available so that the staff and students can easily access it.
* Around 340 students and 40 staff members use the college bus facility.
* The ENCON club of the college is very active to make the students aware of the carbon credits, carbon neutrality etc.
* Emission test certificates are mandatory for the vehicles in the campus.
* Usage of paper in the campus is minimized by reusing one sided printed papers. Maximum communication to departments, staff and students is made through e-live system.
* The college has a solar panel that can generate energy of 1.2 kWh per month.
* The lighting in the front area of the campus, boys' hostel and garden is done completely by LED bulbs.
* As part of maintenance, all the faulty fluorescent lamps are being replaced by LED lamps.
* Save energy board are displayed in various places.
* Pedestrian friendly roads promote the students and staff members for healthy movements.
* Reduced plastic usage considerably and aiming for plastic free campus.

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

7.1.8 Average percentage expenditure on green initiatives and waste management excluding salary component during the last five years

Response: 0.43

7.1.8.1 Total expenditure on green initiatives and waste management excluding salary component year-wise during the last five years(INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
13.08	0	1.72	0.21	0.18

File Description	Document
Details of expenditure on green initiatives and waste management during the last five years	[View Document](#)
Any additional information	[View Document](#)

7.1.9 Differently abled (Divyangjan) Friendliness Resources available in the institution:

1.Physical facilities

2. **Provision for lift**
3. **Ramp / Rails**
4. **Braille Software/facilities**
5. **Rest Rooms**
6. **Scribes for examination**
7. **Special skill development for differently abled students**
8. **Any other similar facility (Specify)**

A. 7 and more of the above

B. At least 6 of the above

C. At least 4 of the above

D. At least 2 of the above

Response: A. 7 and more of the above

File Description	Document
Resources available in the institution for Divyangjan	[View Document](#)
Any additional information	[View Document](#)
link to photos and videos of facilities for Divyangjan	[View Document](#)

7.1.10 Number of Specific initiatives to address locational advantages and disadvantages during the last five years

Response: 29

7.1.10.1 Number of specific initiatives to address locational advantages and disadvantages year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
4	10	8	4	3

File Description	Document
Number of Specific initiatives to address locational advantages and disadvantages	[View Document](#)
Any additional information	[View Document](#)

7.1.11 Number of initiatives taken to engage with and contribute to local community during the last five years (Not addressed elsewhere)

Response: 11

7.1.11.1 Number of initiatives taken to engage with and contribute to local community year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
5	3	1	1	1

File Description	Document
Report of the event	[View Document](#)
Any additional information	[View Document](#)

7.1.12
Code of conduct handbook exists for students, teachers, governing body, administration including Vice Chancellor / Director / Principal /Officials and support staff

Response: Yes

File Description	Document
Any additional information	[View Document](#)
URL to Handbook on code of conduct for students and teachers , manuals and brochures on human values and professional ethics	[View Document](#)

7.1.13 Display of core values in the institution and on its website

Response: Yes

File Description	Document
Any additional information	[View Document](#)
Provide URL of website that displays core values	[View Document](#)

7.1.14 The institution plans and organizes appropriate activities to increase consciousness about national identities and symbols; Fundamental Duties and Rights of Indian citizens and other constitutional obligations

Response: Yes

File Description	Document
Details of activities organized to increase consciousness about national identities and symbols	<u>View Document</u>
Any additional information	<u>View Document</u>

7.1.15 The institution offers a course on Human Values and professional ethics

Response: Yes

File Description	Document
Any additional information	<u>View Document</u>
Provide link to Courses on Human Values and professional ethics on Institutional website	<u>View Document</u>

7.1.16 The institution functioning is as per professional code of prescribed / suggested by statutory bodies / regulatory authorities for different professions

Response: Yes

File Description	Document
Any additional information	<u>View Document</u>

7.1.17 Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties during the last five years

Response: 57

7.1.17.1 Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
15	17	8	5	12

File Description	Document
List of activities conducted for promotion of universal values	[View Document](#)
Any additional information	[View Document](#)

7.1.18 Institution organizes national festivals and birth / death anniversaries of the great Indian personalities

Response:

Our institution organizes various events to commemorate the national festivals and birth /death anniversaries of great personalities.

Every year we hoist National Flag and take oath in connection with Independence day and Republic day.

Festivals like Onam, Holi and Christmas are celebrated every year.

National Anthem is sung every day to inculcate the spirit of nationalism.

Great personalities like APJ Abdul Kalam, KPJ Reddy, Aryabhatta, Visweshwarayya, Ramanujan, VikramSarabhai, C.V Raman, J.C Bose are remembered by giving their names to our Seminar halls and Placement cell cabins .

On 30th January, **Martyr's Day** is celebrated by observing two minutes silence at 11 AM to pay homage to Mahatma Gandhi and the freedom fighters who sacrificed their lives.

National Science Day is celebrated on February 28th in memory of Dr .C.V Raman's invention of Raman Effect. Science Day Rally, Poster presentations and Quiz competitions are conducted to motivate the students

International Women's Day is celebrated on March 8th every year. It is a focal point in the movement for women's rights. The Women's cell of MBITS organized talk on 'Legal Rights for Women and Children". Elocution competitions, quiz competitions and film shows are also organized.

IEI student chapters take initiative in observing **World Water Day** on March 22nd. This year we celebrated the day by hanging water pots in and around the campus for the birds and by displaying posters showing the importance of saving water.

National Technological Day is observed on 14th May. Departments organize various technical competitions and achievers are honoured with certificates.

World Environment Day is celebrated on 5th June every year with a plantation drive. Students and faculty members of the institute planted saplings on the premises in order to send the message of environmental consciousness and Indian philosophy of coexistence with nature to others.

International Day of Yoga, referred to as **Yoga Day is** celebrated annually on 21st June since its inception

in 2015. Besides this, the college also conducts yoga class on every Wednesday and Friday from 7:30AM to 8:15AM.

Teacher's Day is celebrated on 5th September, every year, which is the birthday of former president, teacher, educator and scholar Dr.Sarvepali Radhakrishnan. The NSS volunteers of MBITS takes the initiative in honouring the teachers by organizing meetings, mentioning the special contributions made by teachers and also distributing sweets.

15th September, birthday of Dr. Mokshagundam Visheshwaraih is observed as **Engineer's Day**. Distinguished guests are invited to inspire the students and faculty.

MBITS celebrates **Gandhi Jayanti** on 2nd October to commemorate the birthday of Mohandas Karamchand Gandhi, a pioneer of truth and nonviolence by undertaking mass cleanliness initiatives. The NSS Volunteers conducts cleaning drives and awareness campaigns in near by places.

31st October, birth anniversary of Sardhar Vallabhai Patel is observed as **National Unity Day** (Rashtriya Ekta Diwas) and take oath to foster and reinforce our dedication to preserve and strengthen the unity, integrity and security of our nation.

File Description	Document
Any additional information	[View Document](#)

7.1.19 The institution maintains complete transparency in its financial, academic, administrative and auxiliary functions

Response:

Transparency in Financial Functions:

- Fee structure is transparent, distributed at the time of admission,and is available in the website.
- Salary of employees are paid through bank accounts and e-payslip is provided through email and ERP system to maintain transparency.
- Monthy income tax and professional tax are deducted from employee's salary.
- Financial audit is done regularly by internal corporate auditor and government approved agency.

Fee collected from students is the major source of income. In addition, the management is funding capital expenses like building constructions and other infrastructure development. The audited account statements are available with accounts section. Excess fund required for the development is contributed by the management. The financial resources of the institute are managed in an efficient manner. The accounts section is fully computerized.

Transparency in Academic Functions

- Regular Internal academic audit is done by IQAC. External academic audit is done in each semester by the auditor appointed by the University.
- Students are informed about their academic progress like attendance, internal marks, university results and other relevant information through online monitoring system, e-live and are published in classes.
- Parents are also duly informed about their wards academic progress through SMS and e-live system and during PTA meetings.

- Relevant information like rules & regulations of the institute, academic regulations of the university, curriculum etc explained in detail during B.Tech First Year Induction Programme and are provided in the handbook and published in the website.

Transparency in Administrative Functions

Transparency in administrative functions is ensured by

- Assigning specific duties to everyone
- Delegation of power at various hierarchical levels

- Formation of committees for planning and enacting of proposed tasks at various levels

Transparency in Auxiliary Functions

The following procedure is adopted for the conduct of workshops, training programs, seminars, FDPs, Conferences etc.

- Proposal submission to Head of the Institution

- Budget approval by the management

- Scheduling the program
- Conduct of the program
- Account settling and auditing
- Submission of the report
- Verification and documentation of the proofs.

Transparency is maintained by the college all the time

File Description	Document
Any additional information	[View Document](#)

7.2 Best Practices

7.2.1 Describe at least two institutional best practices (as per NAAC Format)

Response:

Best Practice – 1

1. Title of the Practice: Employability Enhancement

2. Objectives of the Practice

The objectives are inline with one of our Mission statement as noted below.

"To help the youth of rural agriculture background to change with times, and join the mainstream of industrial growth and information technology."

Objectives are:

- Minimize the gap between academy and industry.
- Technical competency enhancement.
- Personality Development.
- Enhancement of communication skills.
- Career guidance, mentoring and counseling.

3. The Context

Majority of the students are from rural agricultural background, needs considerable transformation process, to become competent engineers.

4. The Practice

To impart the requisite technical knowledge the following practices are adopted:

- An active Add-on Course and Higher Studies Committee headed by Principal with representation from all departments is functioning well with an objective to enhance the employability.
  - An organizational structure is formed for the effective implementation with delegated roles and responsibilities.
  - Representative faculty from each department prepares existing job opportunities periodically and try to map with the curriculum, to identify strength and gap.
  - SWOC analysis is done with the curriculum and job opportunities.
  - In every Programme the courses are divided into different streams like Power Systems, Drives and Control, Production Engineering, Thermal Engineering, Communication Systems, Analog & Digital Systems, Advanced Software Technologies & Tools etc.
  - Initially, a detailed presentation is prepared with the available job opportunities and mapping to the different streams. This is presented to all students periodically for fine tuning their objectives, based on the dynamic aspirations of the employer.
  - The team also identifies proficiency gap and organizes programmes with internal or external resources, including Online Courses/ materials.
  - An effective system of monitoring is in place under the direct leadership of the Principal, and its deliverables are delegated to HoDs/ Department Coordinators.
  - The team frequently takes feedback from stakeholders and implement possible suggestions,

for improving the system.

- **Guidance for competitive examination**

Numerous competitive exams are conducted as an eligibility to join post graduate professional courses as well as for securing jobs in the government sector. The subjects and patterns are varying according to the level of the test. Most are objective type and followed by a personality test. Qualifying exams are competitive, since lakhs of aspirants are appearing for limited number of opportunities. Institute arranges various seminars and guest lecturers to prepare for the same.

Activities to promote and to guide the students to appear for competitive examinations are conducted internally by the faculty members. Additionally training by external professionals are also provided. Some are listed below.

Sl No	Date	Organization	Training/workshop/seminar
1	21/03/2018	Armstech Engineers Pvt ltd, Palarivattom, Kochi	scholarship test
2	02/02/2018	IIT, Madras	Mock gate exam
3	03/02/2017	IIT, Madras	Mock gate exam
4	24/1/2016	Time Pvt ltd, Palarivattom, Kochi	Mock gate exam
5	7/9/2018 & 10/9/2018	Konfidence, Vennala P. O, Kochi	TCS Ninja Training

- **Career counseling**

Career guidance and counseling programmes help individuals to acquire the knowledge, skills, and experience necessary to identify options, explore alternatives and succeed in society.

An active Career Guidance Cell is functioning to empower the budding engineers from the schools. We conduct Career Guidance Programmes in nearby schools for the same.

To help our students to prepare and adapt for the workspace of the 21st century, we organize various career guidance programmes. Some are listed below.

Sl no:	Date	Firm	Counseling provided
1	23-3-18	Santa Monica Study Abroad Pvt ltd, Kochi	Overseas education and career guidance
2	10-10-2015	CADD Centre Kothamangalam	Employability skill development
3	31/03/2015	Armstech Engineers Pvt ltd, Palarivattom, Kochi	Career guidance
4	14/08/2014	Kites Softwares, Pvt ltd, Palarivattom, Kochi	Career guidance

- **Soft Skill development**

As the numbers of graduates are increasing every year, employers are becoming critical and strategic in their recruitments. Nowadays the engineering industry looks for technical skills as well as overall personality. To bridge the gap between requirements of the industry and the skills of the students, Soft Skill Development Programmes are being organized.

Various programmes are listed below.

Sl no	Date	Firm	Training provided	No. Of Students
1	1/8/18-30/11/18	Six Phrase Finishing School, P. N. Palayam, Coimbatore	Aptitude and soft skill development	251
2	13/3/18	Malayala Manorama, Panampilly Nagar, KochiManorama	soft skill development	290
3	17/6/17-21/6/17	Insite Job Guru, Enchakkal, Trivandrum	soft skill development	260
4	30/1/17	Black Swan Finishing School, Valanjambalam, Ernakulam	Interview Skills	251
5	6/2/17-10/2/17	Black Swan Finishing School, Valanjambalam, Ernakulam	Mock Interview	251
6	13/9/17	Black Swan Finishing School, Valanjambalam, Ernakulam	Interview Skills	263
7	09/10/17-27/10/17	Black Swan Finishing School, Valanjambalam, Ernakulam	Mock Interview	263
6	8/8/16-12/8/16	Insite Job Guru, Enchakkal, Trivandrum	Aptitude and soft skill development	311
7	12/1/15-15/1/15	Insite Job Guru, Enchakkal, Trivandrum	Aptitude and soft skill development	292
8	12/9/15-13/9/15	Insite Job Guru, Enchakkal, Trivandrum	Aptitude and soft skill development, Special IBS Trainng	25
9	30/6/14-4/7/14	Insite Job Guru, Enchakkal, Trivandrum	Aptitude and soft skill development	322

- **Mentoring and Personal Counseling**

Efficient Mentor- Mentee system is existing in our campus to build the professionalism in the students and to prepare them to face the real world challenges. The system also identifies advanced and slow learners.

Confidential personal counseling can help the students to understand and confront the challenges. The counseling provides an opportunity to explore the concerns in a supportive and non-judgmental environment.

Additionally, an expert external Couselor is arranged from 2014 onwards. Ms. Shiji Shanty, MSW, is doing the counseling and a lot of students have benefitted from it.

Slow learners are given regular remedial classes and special care. Advanced learners are promoted for leading various co-curricular and extra-curricular activities.

5. Evidence of Success

- **Numbers of students placed have been increased**.

As a result of the continuous training given to students, number of placements have increased.

Year	2014 -2015	2015 -2016	2016 -2017	2017 -2018	2018 -2019
No of Students	354	374	392	381	304
No: of students placed	50	87	120	103	277
Percentage of students placed	14.12	23.2	30.61	27.03	91.11

- **Qualifying exams**

As a result of the continuous training given to the students**,** number of students appearing in state/ national/ international level examinations has also increased. The exams include GATE/IELTS, State government examinations, etc. A session was conducted for the Civil Service aspirants by Dr Alexander Jacob IPS.

Typically in 2019, 124(43.5% of total final year students) wrote GATE examination

6. Problems Encountered and Resources Required

- Lack of availability of domain experts in the dynamically changing technology, having adequate industrial experience and proper attitude to develop younger generation.
- Some industries are not capable of releasing their employees for knowledge and skill exchange programme due to their busy schedule.
- Employment enhancement initiative need further refinement for having wider popularity among all stake holders

7. Notes (Optional)

- Employability enhancement initiatives in our institute can be adoptable and was presented during All Kerala Engineering Colleges Principal Meet in Thiruvananthapuram, Kerala by Dr. P Sojan Lal, Principal of MBITS. Higher Education Principal Secretary Dr. Usha Titus IAS, Director (ASAP) Ms. Haritha V Kumar IAS and The DTE Goverment of Kerala Dr. Indira were also present during the meeting. Queries were answered from the audience. The principal of MBITS was invited to explain the implementation details more precisely during the exclusive lunch with Higher Education Principal Secretary and other three senior delegates.

Best Practice – 2

1. Title of the Practice: The Institute Level Scholarship Schemes

2. Objectives of the practice

The objectives are inline with our Mission statements as noted below.

- *"To provide graduate level technical education in the existing or conventional branches as well as newly emerging fields."*
- *"To help the youth of rural agriculture background to change with times, and join the mainstream of industrial growth and information technology."*

Objectives are:

- Provide opportunities for engineering education for economically weak aspirants and from agricultural background.
- Encourage meritorious students.

3. The Context

Annual cost of professional and technical education has increased over last years. Our scholarship is a support for those who are not eligible for the sponsorship provided by the central and state governments. The scholarship are setup with the support of Management, Faculty and Alumni of our college.

4. The Practice

- Our college provides scholarship for economically weak and meritorious students.
- The institute offers scholarship upto 90% of the Tuition fee based on their Kerala Engineering Entrance Rank or Qualifying Examination marks.
- An additional scholarship of 10% is given to students from rural areas. Typically, 168 students got benefited during the last three years.

Year	Number of students benefitted	Total number of students	Percentage
2018 -2019	590	1051	56.13%
2017 -2018	568	1138	49.99%
2016 -2017	525	1290	40.69%
2015-2016	333	1397	23.83%
2014 -2015	209	1406	14.86%

5. Evidence of Success

The scholarship system has been functional for a long period of time and has been a motivational factor for many students for joining Engineering and excelling in academics and actively participating in curricular and co-curricular activities. Our students showcase their talents and bagged numerous achievements during last few years. Some of them are listed here.

Academic results:

- MBITS secured 17th position in Kerala state with 84.56 pass % among 143 engineering colleges in 2019 University final year results
- In 2019 University final year results, Mechanical engineering department with a number of 106

students won 6th position in Kerala securing 92.5 % pass

- 2014-2018 batch students secure 88.5% results in the final Mahatma Gandhi University, Kerala exams.

Other achievements

- Our electrically retrofitted SOLAR CAR is selected for grand finale KPIT SPARKLE, MBITS is the only college selected from Kerala for KPIT SPARKLE. 1100+colleges from 26 states registered and only 30 teams were shortlisted.
- Mechanical students team METAL HEADS won 6th position in 2015 and 7th position in 2018 in the supra motor racing event.
- Mechanical final year students bagged 7th position, in QuadTorc - 2018, the National event. it was a 5 day event in UP, India in October 2018
- Hosted Smart India Hackathon in 2017 and actively participated in 2017, 2018, 2019.
- In Smart India Hackathon, 2019 hosted by MHRD at REVA University, FORBOTS team from MBITS won First position with a cash prize of one Lakh in Complex Hardware section.

6. Problems Encountered and Resources Required

- Some students from the schools of remote areas, who are eligible for scholarship, but are not aware of it and never get a chance to join for Engineering.
- By organizing campaigns we can make aware every eligible candidate about the scholarship.
- Lack of guidance to prepare for competitive exams makes student ineligible for scholarships
- Enhancement of Career guidance programmes for school students.

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

7.3 Institutional Distinctiveness

7.3.1 Describe/Explain the performance of the institution in one area distinctive to its vision, priority and thrust

Response:

Response: RURAL UPLIFTMENT PROGRAMME

The programme has been launched in various sectors for providing employment opportunities and to develop their skills so as to improve their living conditions.

Objective of the Rural Upliftment Program

The objectives are inline with Vision and Mission of the Institute.

VISION: "To nurture a positive campus culture and equip the younger generation to take our nation forward."

One of the MISSION statements: "To help the youth of rural agriculture background to change with times, and join the mainstream of industrial growth and information technology."

Implementation of Rural Upliftment Programme

A committee is actively involved in realizing the objectives of rural upliftment programmes.

Various programmes are planned and implemented as noted below.

- Additional Skill Acquisition Programme (ASAP)
- Pradhan Mantri Koushal Vikas Yojana (PMKVY)
- Unnath Bharath Abhiyan (UBA)
- Deen Dayal Upadhyaya Grameen Kaushalya Yojana(DDU-GKY)
- Local initiatives
- Upliftment of differently abled students from rural areas.
- Free mega Medical Camp
- Scholarship for the students from rural areas

ADDITIONAL SKILL ACQUISITION PROGRAMME (ASAP)

ASAP is a joint initiative of the General Education Department and Higher Education Department, Government of Kerala developed to impart sector specific skills to create a 'labour market' ready work force. This has been accomplished by providing additional skill sets to students along with their regular courses. MBITS hosted a 50 days programme starting from 16th April 2018 to 16th June 2018. The programme, for pre-matriculates, covered 150 hours of theory and practical classes put together and an another 150 hours of internships at selected industries.

PRADHAN MANTRI KOUSHAL VIKAS YOJANA (PMKVY)

PMKVY is a scheme which has been launched to empower the Indian Youths. The scheme will be implemented through the National Skill Development Corporation (NSDC). The training under PMKVY includes soft skills, personal grooming, behavioural change for cleanliness, good ethics work and domain expertise. Our college offers Lathe operator course by Mechanical Engineering Department, Assistant Surveyor course by Civil Engineering Department, Domestic Data Entry Operator course by Computer Science & Engineering Department, Field Technician course (UPS and Inverter) by Electronics and Communication Engineering Department, Solar PV Installer course by Electrical & Electronics Engineering Department at free of cost.

UNNATH BHARATH ABHIYAN (UBA)

UBA, under Ministry of Human Resource Development (MHRD), Government of India, is a programme to uplift rural Indian in collaboration with the Indian Institutes of Technology , Delhi (IITD). The programme aims for the upliftment of the neighbouring communities with their cooperation. As a part of this

technological movement MBITS made MoUs with five Grama Panchayats. UBA was inaugurated at MBITS by Mr. K. Mohammed Y. Safirulla IAS, District Collector, Ernakulam on July 4th 2018.

As part of UBA, Kudumbasree members (a group of female workers) were given Digital Literacy. It is a two months training programme from 19th March 2018 to 18th May 2018. 40 female participants from different Grama Panchayats attended the training programme. A well equipped computer lab was provided for the training. Those candidates who have passed 10th are included in this program. The main aim was to spread the knowledge of computer awareness to different Grama Panchayaths.

Six outstanding performers were given meritorious awards by Mr. K. Mohammed Y. Safirulla IAS, District Collector, Ernakulam. All the 40 participants successfully completed the course and certificates were distributed.

DEEN DAYAL UPADHYAYA GRAMEEN KAUSHALYA YOJANA (DDU-GKY)

DDU-GKY is a skill development and placement initiative programme of the Ministry of Rural Development (MoRD), Government of India. The scheme focuses on catering the occupational aspirations of rural youth and enhancing their skills for employment.

In this project our college offers the following course and they receive a certificate issued by NCVT.

1. **Accounts Executive**
2. **Accounts Assistant Using Tally**

Two batches have successfully completed the course and most of the got placed. Another two batches are in progress.

LOCAL INITIATIVES

Besides the above mentioned government sponsored programmes several activities are initiated and conducted by the college on a regular basis. Some of them are mentioned below.

- **Data Processing Software**: Research and Consultancy (R&C) Cell of MBITS successfully developed and implemented data processing software in the Pothanicad Grama Pachanyath, as a part of their ISO Certification. The software was demonstrated on 13th September 2017 before the officials of Pothanicad Grama Panchayath and latterly it is modified and finalized according to their suggestions. Final Software was handed over to Pothanicad Grama Panchayath on 17th October 2017 and installed at their official. This software is developed to process and store the details of all inmates of the panchayath under a single database, which helps in sorting or searching peoples by some criteria. The project helps to improve the activities of the Panchayath.

- **IT Lab Setting for Karingazha GOVT. LP SCHOOL**: The NSS volunteers took the initiative to set up an IT lab for the GOVT. LP School, Karingazha on 18th March 2018. The program was inaugurated by Ward Councilor Ms. Sindhu Jijo. It was a one day program aimed for setting a play ground, a new IT lab and for cleaning the premises. Successfully the volunteers managed to complete all the tasks.
- Other main extension activities are listed below:

- Flood relief and cleaning programmes
- Blood Donation Camp.
- Cancer Awareness programmes
- "Ente kulam Ernakulam" Project (Cleaning fresh water ponds).
- Stem Cell Donation Registration Camp
- Home for Homeless.
- Kuttampuzha Panchayath cleaning

Upliftment of differently abled students from rural areas.

UPLIFTMENT OF DIFFERENTLY ABLED STUDENTS FROM RURAL AREAS

MBITS jointly with YMCA, Pothanicad Unit and Lions Club International, Kothamangalam town conducted a cultural programme, **Filafire 2k19**, for differently abled students of Ernakulam and Idukki Districts to promote their talents. Students from nine special schools participated and presented variety of exciting cultural events during the one day programme.

FREE MEGA MEDICAL CAMP

MBITS has made valuable contributions for the free mega Medical Camp conducted at Pothanicad Grama Panchayath by YMCA, Public Library and St. Thomas Hospital, Pothanicad.

SCHOLARSHIP FOR THE STUDENTS FROM RURAL AREA

- The institution offers scholarships up to 90% of the tuition fees to meritorious students. Additional scholarship of 10% is given to students from rural areas.

File Description	Document
Any additional information	[View Document](#)
Link for Additional Information	[View Document](#)

5. CONCLUSION

Additional Information :

- Our students have been performing commendably well in State and National level co-curricular and extra-curricular activities.
- The Institute was one among the two nodal centres in Kerala State who have hosted the National level Smart India Hackathon, 2017.
- Our team FORBOTS won first prize with cash 1 lakh rupees in the Complex Hardware section of National level Competition, Smart India Hackathon, 2019. More than 2200 colleges participated in the event.
- Every year our students participate in Smart India Hackathon and are appreciated by the Judging panel.
- Our team won First prize with cash 1 lakh rupees in Kerala State Level Short Film Competition in 2019 among all colleges (Engineering, Medical, Arts and Science, etc.).
- Our team won 7th Position in a National Level Quad Design Competition competition, QuadTorc, at UtharPradesh.

Concluding Remarks :

Overall functioning of the institution is guided by the motto "Wisdom Crowns Knowledge" supported by the abundant blessing of the patron Saint. This gives us atmosphere of freedom and opportunity to improve by analyzing and developing various ideas and proposals contributed by students and faculty. Staff members, parents, alumni and well-wishers from student's union to the top management, support the progress of the institution by analyzing academic standards, university results, placement records, national level competitions, etc.

In the process of preparing this Self Study Report, we are able to do critically a SWOC analysis for the progressive and sustainable improvement and we are grateful to NAAC for providing this opportunity for self assessment, in a systematic order.

The institution is taking another significant step towards realizing the Vision with more professionalism, by taking the decision to go for accreditation by NAAC.

We are looking forward for the visit of NAAC peer team, not only to showcase our excellence, but also to seek suggestions and advices for making further improvements.

6.ANNEXURE

1.Metrics Level Deviations

Metric ID	Sub Questions and Answers before and after DVV Verification
1.1.3	Percentage of participation of full time teachers in various bodies of the Universities/ Autonomous Colleges/ Other Colleges, such as BoS and Academic Council during the last five years 1.1.3.1. Number of teachers participating in various bodies of the Institution, such as BoS and Academic Council year-wise during the last five years Answer before DVV Verification: <table><tr><td>2018-19</td><td>2017-18</td><td>2016-17</td><td>2015-16</td><td>2014-15</td></tr><tr><td>25</td><td>32</td><td>27</td><td>28</td><td>1</td></tr></table> Answer After DVV Verification : <table><tr><td>2018-19</td><td>2017-18</td><td>2016-17</td><td>2015-16</td><td>2014-15</td></tr><tr><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr></table>
1.3.2	Number of value added courses imparting transferable and life skills offered during the last five years 1.3.2.1. Number of value-added courses imparting transferable and life skills offered during the last five years Answer before DVV Verification : 29 Answer after DVV Verification: 20
2.1.2	Average Enrollment percentage (Average of last five years) 2.1.2.1. Number of students admitted year-wise during the last five years Answer before DVV Verification: <table><tr><td>2018-19</td><td>2017-18</td><td>2016-17</td><td>2015-16</td><td>2014-15</td></tr></table> 2.1.2.2. Number of sanctioned seats year-wise during the last five years Answer before DVV Verification: <table><tr><td>2018-19</td><td>2017-18</td><td>2016-17</td><td>2015-16</td><td>2014-15</td></tr><tr><td>489</td><td>489</td><td>537</td><td>537</td><td>537</td></tr></table> Answer After DVV Verification : <table><tr><td>2018-19</td><td>2017-18</td><td>2016-17</td><td>2015-16</td><td>2014-15</td></tr><tr><td>489</td><td>489</td><td>537</td><td>537</td><td>537</td></tr></table>
2.1.3	Average percentage of seats filled against seats reserved for various categories as per applicable reservation policy during the last five years

2.1.3.1. Number of actual students admitted from the reserved categories year-wise during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
10	8	13	11	12

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
0	0	0	0	0

2.4.4	Percentage of full time teachers who received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the last five years 2.4.4.1. Number of full time teachers receiving awards from state /national /international level from Government recognised bodies year-wise during the last five years Answer before DVV Verification: `<table>` Answer After DVV Verification : `<table>` Remark : HEI input editted because appreciation letter and awards from parent institution not considered here.

For 2.4.4 before DVV:

2018-19	2017-18	2016-17	2015-16	2014-15
46	5	5	1	2

After DVV:

2018-19	2017-18	2016-17	2015-16	2014-15
03	5	5	1	2

Remark : HEI input editted because appreciation letter and awards from parent institution not considered here.

3.4.3	Number of extension and outreach Programs conducted in collaboration with Industry, Community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the last five years

3.4.3.1. Number of extension and outreach Programs conducted in collaboration with Industry, Community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., year-wise during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
12	12	14	4	2

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
12	12	14	4	2

3.4.4	Average percentage of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the last five years

3.4.4.1. Total number of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. year-wise during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
349	878	781	710	625

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
477	1038	858	615	167

4.4.1	Average Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, as a percentage during the last five years

4.4.1.1. Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component year-wise during the last five years (INR in Lakhs)

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
82	89	72	81	53

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
81.93	88.66	72.40	81.47	52.64

5.3.1	Number of awards/medals for outstanding performance in sports/cultural activities at national / international level (award for a team event should be counted as one) during the last five years.

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

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
5	1	0	1	0

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15

4	1	0	1	0

6.3.3	Average number of professional development /administrative training programs organized by the institution for teaching and non teaching staff during the last five years
	6.3.3.1. Total number of professional development / administrative training programs organized by the Institution for teaching and non teaching staff year-wise during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
19	6	4	7	7

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
15	6	4	7	7

Remark : HEI input editted according to provided information.

6.3.4	Average percentage of teachers attending professional development programs viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Program during the last five years
	6.3.4.1. Total number of teachers attending professional development programs, viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Programs year-wise during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
90	53	91	40	36

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
87	53	91	40	3

Remark : HEI input editted because programmes of duration more than five 5 working days only to be considered.

6.5.3	Average number of quality initiatives by IQAC for promoting quality culture per year
	6.5.3.1. Number of quality initiatives by IQAC for promoting quality year-wise for the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15

| 19 | 11 | 3 | 10 | 12 |

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
18	15	5	12	12

Remark : HEI input editted because the listed programmes are not initiatives of IQAC in respect to quality culture.hence editted.

7.1.1	Number of gender equity promotion programs organized by the institution during the last five years

7.1.1.1. Number of gender equity promotion programs organized by the institution year-wise during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
11	8	5	4	3

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
10	8	5	4	3

7.1.10	Number of Specific initiatives to address locational advantages and disadvantages during the last five years 7.1.10.1. Number of specific initiatives to address locational advantages and disadvantages year-wise during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
5	10	12	4	3

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
4	10	8	4	3

7.1.11	Number of initiatives taken to engage with and contribute to local community during the last five years (Not addressed elsewhere)

7.1.11.1. Number of initiatives taken to engage with and contribute to local community year-wise during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15

| 5 | 3 | 1 | 1 | 1 |

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
5	3	1	1	1

2.Extended Profile Deviations

Extended Profile Deviations
No Deviations