



SELF STUDY REPORT

FOR

2nd CYCLE OF ACCREDITATION

BALLARI INSTITUTE OF TECHNOLOGY AND MANAGEMENT, BALLARI

**JNANA GANGOTRI CAMPUS, NO.873/2, BALLARI-HOSAPETE ROAD, NEAR
ALLIPURA, BALLARI**

583104

www.bitm.edu.in

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

(Draft)

1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Ballari is located in the backward district of Hyderabad-Karnataka (article 371j) Region as per Dr. DM Nanjundappa Committee Report. Ballari Institute of Technology & Management, Ballari was established in the year 1997 with a sole objective to provide quality & affordable education in this backward district of Karnataka. The campus is spread over 11 acres of greenery, with eco-friendly surroundings, has facilities that are a class apart, combining aesthetics with modernity. Institution has a separate hostel facility for boys & girls, a recreational area, a dedicated internet connectivity with high-speed Wi-Fi facility together with latest computers and software's complemented with well-equipped laboratories. A spacious library, rich in collection of books e-resources and journals speaks volumes about State- of-the-art infrastructure that has come a long way, in terms of providing the very best facilities and imparting technical and management education with highly acclaimed academic delivery.

The Governing Body of BITM has shown its mettle, as its members are pooled in from various professions such as academicians, Industrialists, Medical, Software professionals and Chartered Accountants. To adhere to quality, institution is ISO certified since 2005 & currently follows & adheres to the best practices as stipulated by the ISO 9001:2015. Institution conforms to the demanding international standards by creating and implementing a Quality Management System. Institution has actionized outcome based education across the institute & has successfully obtained accreditation for three under graduate programs.

The institute's USP is its unfathomable student-teacher rapport, proctoring and a student centric learning. Feedbacks from the stakeholders namely Students, Parents, Faculty & Industry are regularly taken to improve the systems at the institution.

Workshops, Personality Development, Industry-Institute Interactions are routine in the campus. Institution has plethora of MoU's from reputed industries & has taken the big leap for skill development through in-house training, projects, soft skills, R&D & certifications essential for the student development. This has yielded in consistently placing an average 320 students every year. Institution initially started with 93 students & 20 employees institution has grown to 412 employees & 3535 students. This is an indication of the overwhelming trust on the institution by the stakeholders.

Vision

To contribute valuable graduates for industry and society through excellence in technical & management education and research.

Mission

- To offer state-of-the-art undergraduate, postgraduate and doctoral programmes.
- To empower the students with Technical, Managerial Skills and professional ethics.
- To collaborate with academia and industries for skill development.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- State of the art-Infrastructure.
- Green Campus with best environmental conservation practices.
- Rated AAA by Careers360 & ranked 89th Best private Engineering College in India by the 'THE WEEK' Magazine.
- Quicker Decision Making through Open & Decentralized Management System.
- Good Participative Management & Faculty Coordination.
- Good Faculty Retention Ratio.
- Good Student Gender Male: Female 55:45 ratio.
- Experienced Faculty across all UG & PG Programs.
- Good Brand Presence in Hyderabad-Karnataka Region & Border District Areas of Andhra Pradesh.
- Established Quality Systems through ISO since 2005.
- NBA accreditation for CSE, ECE & Mechanical.
- Top Placements in Hyderabad-Karnataka Region at an average 320 Students getting placed with 20+ companies visiting the Campus for placements.
- MoU with Top Multi-National Companies for Certifications & Skill development.
- Effective Proctoring mechanism.
- Continuous improvement of Faculty Publications in reputed journals.
- Investments made for Startups & Entrepreneurship.
- More Faculty have obtained Ph.D. in last five years.
- Good Connect with Alumni & Alumni are in Top Positions across different domains of the Industry.
- Better Student enrollment in spite being in the backward region.
- Good Teaching learning process with a strong audit mechanism.
- Skill upgradation facilities for both students and faculties as per changing need of technology.
- Scope for all-round development with room for sports/cultural activities.
- Better coordination between staff and management establishing a good work culture.

Institutional Weakness

- Lack of Basic communication skills from the students.
- Only Few R&D grants obtained from external agencies.
- Lack of Patents & copyrights.
- Publications in Scopus Indexed Journals to be improved.
- Reliance on Hyderabad Karnataka Districts & Border Areas of Andhra Pradesh for Admissions.
- Lack of Diversification of Engineering Programs.
- Lack of Diversification of Skills of the Faculty.
- Lack of Quicker Adaptation to Industry oriented Courses.
- Lack of product based & manufacturing companies for Placements.
- Less number of admissions for M.Tech Programs.
- Need to have paid internships for students from Industries.

Institutional Opportunity

- NBA Accreditation for EEE, Civil & MBA & Get NAAC Accredited with a better score.
- Institute has the potential to become an Autonomous Institute.
- Start UG & PG Programs in Emerging areas.
- Scaling up the placement activity with a planned training plan & continuous monitoring.
- Establishing more Centre of Excellence in EEE,Civil,ME & MBA.
- More outreach programs to schools & colleges to be carried out.
- Leveraging Alumni in Top Positions of the Industry for Industry connect.
- Re-skilling the faculty & students through skill oriented courses & certifications.
- Transitioning the teaching learning process from teacher centric to student centric learning.
- Reduce the operational expenses by Automating manual processes.

Institutional Challenge

- Lack of Interest among the prospective Students for Engineering Studies.
- Affordability of the engineering education.
- Increased Competition & pricing pressure from the Private Universities.
- Excess migration of students to metropolitan cities for education.
- Increased expectation of Industry on Graduates.
- Syllabus of the University not flexible & not meeting the industry expectations due to excess emphasis on theoretical subjects.
- Lack of Job Opportunities in Manufacturing Industry.
- Challenging Job Prospects due to internal & external factors.
- Socio-economic condition of students getting enrolled is poor.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

Institution has strong focus on OBE and courses have well-defined objectives and learning outcomes aligned with mission of the Institution. The UG and PG programmes offered by the institution caters the industrial needs of the engineering fraternity.

The Institution takes utmost care in developing the Programme chart for the effective implementation of the curriculum. Being affiliated to VTU, the syllabus and the overall guidelines are followed as laid down by the University. The Principal of the institute conducts meetings with HODs to explore the strategies for the effective implementation of the curriculum. The institution designs and develops action plan for effective implementation of the syllabus. The presence of experienced faculty at various bodies as members of Board of Studies and Academic Council helps the institute to plan and execute the curriculum effectively. As per prevailing industry trend & by identifying the gap, special skills and aptitudes as topics beyond curriculum are inculcated to the students from time to time. The institute conducts certification/ Add-on programs to impart technical and life skills. This would make the students industry ready. Timely feedback from the different stake holders provides valuable inputs for designing value added courses and review of syllabus. Feedback system is formulated and practiced for effective implementation of the prescribed syllabus.

The Institute is guided by its strategic plan concentrating on teaching-learning and research activities to ensure employability of our graduates, catering to the needs of the Society, providing the capacity to impact, transform society, and inculcating values and ethics.

Teaching-learning and Evaluation

The enrolment of students to the Institution is based on regulations and guidelines of AICTE, Government of Karnataka, VTU Belagavi. The teaching and learning process is deciding factor for the student's career. The teachers play vital role in this process, the institute has well qualified and experienced faculty to enrich the process effectively through ICT tools, in addition to traditional pedagogical teaching. The faculty identifies slow and advanced learners to impart the knowledge. To analyze strength and area of improvement, feedback is taken from the students, which helps to take necessary measures for strengthening the teaching - learning process.

The continuous internal evaluation is in practice, the academic calendar is notified well in advance, which includes the conduction of Internal Assessment examinations. The Internal Assessment tests are conducted in fair and transparent manner by Internal Assessment coordinators, invigilators, squad along with seating arrangement and hall ticket. The students are informed about the portion of the syllabus well in advance and Internal Assessment question paper is prepared by indicating CO's and Bloom's taxonomy. Evaluation of the Internal Assessment blue book is in accordance with scheme of evaluation prepared for respective course and the evaluated blue books are distributed to students in the classroom within one week for any discrepancy in the evaluation.

The institution provides various knowledge enhancing & Self Learning programs, such as e-learning, digital library, incubation center, value added certificate courses, technical quiz, cultural and techno fest, national and international conferences enabling them to succeed in the competitive world.

Research, Innovations and Extension

Institution encourages the active involvement of teachers in research. The institution has eight research and 72 research scholars are pursuing research activities. In the last five years, faculty have published more than 250 publications. In association with Karnataka Council for Technological Upgradation, the Mechanical engineering department R&D Centre has set up a Flexible manufacturing system (FMS) at a cost of 1.08 crore. Many workshops have been conducted on research methodology, IPR, and entrepreneurship.

Entrepreneurship cell and start-up incubation centers are established for the career enhancement of students. To bridge the gap between industries and academia, MOUs are signed with various industries such as IBM, Infosys Campus Connect, e-Yantra IIT-Bombay robotics lab, etc. Certification courses are conducted in association with these industries which make the students' industry-ready. The college, in association with WIPRO, has set up WIPRO-MTLC Centre of excellence, where students of EEE, CSE and ECE department carry out interdisciplinary projects. Experts from the industry are invited regularly to deliver lectures on various topics to enhance the knowledge of students.

For sensitizing the students to social issues, institution has conducted various extension activities. The Institution has registered the NSS unit which organizes various events such as awareness programs on

AIDS prevention, Environmental Pollution, Electoral Literacy Program, etc. Blood donation camps are conducted every year. Indian Red Cross Society has acknowledged the highest contribution. Our students have developed academic projects to address societal problems. Bore-well rescue project developed by our students is an example of such projects.

Infrastructure and Learning Resources

The Institution is spread on an 11.00 acres campus with state of the art facilities. The infrastructure comprises of Academic Buildings, Incubation Centres, Auditorium with seating capacity of 650 with central AC and HD Projector with 3 LED TV's, Seminar Halls/Digital Classrooms, power supply systems, RO Water supply etc. The Administrative area comprising Administrative office, Principals office, Placement Cell, Housekeeping, Store, Exam Control Office, Security, Board Room. The area of amenities consists of Boys & Girls common room, Cafeteria, Dispensary, Stationery Store & etc. Separate Hostels for Boys and Girls in the campus with all necessary facilities.

Library has 1100 sq.m area with a seating capacity of around 500.

- Titles -11,754 & Volumes-99,793.
- National & International journals: 48.
- VTU-NPTEL-NMEICT project e-learning.
- On-line access to E-Journals & E-Resources.
- Member of National Digital Library (NDL) & VTU e-Resource Consortia for e-books.
- Library has 11,111 E-books and 1681 e-Journals.
- 5TB of offline video lecturers and 3556 CD's & DVD's.
- Reprographic/Scanning/Printing facilities.

Institute has high end IT facility including Wi-Fi. The institution has 44 licensed legal system software's and 6 legal application software's, an internet leased line connectivity Band width of 200 Mbps, 45 Reliance Jio Hotspots at Strategic Locations. Institution provides top facilities for sports and cultural activities. The maintenance section is in-charge of civil and electrical works. Adequate firefighting facilities, extensive parking space are some of the other facilities provided. Adequate budgetary provision has ensured the proper maintenance of infrastructure and academic support facilities.

Student Support and Progression

The College supports students to apply for scholarships from Government and also freeships provided to the needful by the institution. Since 2014, an average of 58.22% and 6.75% of students have availed scholarships from government and freeships by the institution respectively. Soft skills, Language and communication skills, Life skills and ICT/computing skills are provided to the students for overall development of the students. 45.75% of students are benefited by Competitive examinations and career counseling by the college. Institution has a transparent mechanism for timely Redressal of student grievances including sexual harassment and ragging. The menace of ragging is viewed very seriously and Anti-Ragging Cell takes all necessary measures to curb the ragging within the campus. The Placement Cell is proactive and has organized several skill developments, career guidance and campus drives to facilitate the placement of the students. The average placement for last five years is 40.74%. Average 3.65% of the students have opted for higher studies. Since last five years, 96.44% students have qualified

in state/national/ international level examinations. Students are represented in various administrative bodies and academic committees. National Social Service, BRICS-ED Cell for startups & Bhoomika College Magazine, Sports & Cultural both at the College and Inter collegiate levels are held annually. A total of 108 sports and culture events were organized in the last five years. Alumni have contributed to their Alma Mater financially and non-financially such as interacting with present students, arranging guest lectures, Campus Placements and industrial visits.

Governance, Leadership and Management

- The Governing Council of the institute is constituted as per the guidelines of AICTE. It consists of members from Management, Academic Institutions, Industry, Statutory bodies, and representatives from faculty with Principal. Institute functions with decentralize administration that has complete transparency in decision-making process. Institution has participative management at all levels. Management takes the important decision based on the input from the Principal, Vice Principal, HOD's and committees' coordinators. All the academic and administrative issues like, Budget, Recruitment, Purchases, Admissions, Promotions, Conferences, Training & Placement, variation in intake are discussed transparently and appropriate decisions are taken for implementation.
- The Principal and HODs meet periodically to discuss the academic issues for appropriate decision making. In addition, members of management, Principal and HODs interact with staff and students regularly to take stock of the progress and deliberate on challenges and give proper direction to the institute in line with the Vision & Mission. The principal, HODs and staff constitutes the following important committees for smooth, transparent, and effective functioning of the institute like
 - Anti-ragging
 - Prevention of Sexual Harassment,
 - Accreditation
 - IQAC
 - R & D
 - Women Safety
 - Grievance Redressal Cell
- ED Cell was constituted on 10/08/2015 with a 10-member committee and subsequently a start-up incubation centre was established. The IQAC of the institution was constituted with a 25-member committee. Internal Quality Assurance Cell (IQAC) conducts the Academic Audit of the Departments and its sole objective is to improve and sustain the academic and administrative performance of the Institution.

Institutional Values and Best Practices

The Institution has adopted certain Best Practices like “INFOSYS Soft Skills Training Program” & “Proctoring System” etc. The Institution always strives to uphold human values and adopts good practices to maintain the integrity of its Stakeholders. Separate common room for both boys and girl

students are provided. The entire campus and hostels are installed with CCTV to monitor the movements by professional Security personnel. Every year the institute organizes national festivals and birth / death anniversaries of the great Indian personalities viz., social reformers and freedom fighters. Also Institution conducts multiple extension activities like tree plantation, Swaach Bharath Abhiyaan etc. in the Institution Campus and nearby villages. Green Audit and Energy Audit of the campus are done by respective departments and steps towards disposal of e-waste & Chemical waste is done periodically by external agencies.

Management augmented production of electricity through non-conventional source and saving electricity for eco- social aspect. Institution has setup 350 Kwp Rooftop Solar Energy to save electricity. Rain water harvesting has been implemented to assure an independent water supply during water restrictions. NSS along with Youth Red Cross have become institutional distinctiveness in terms of their contribution and the number of awards they have received. Management has adopted government school and has been regularly supporting the cause. The Institution provides wheel chair, ramps, Lifts, toilets & scribes for physically challenged .Code of conduct for staff and students is made available online in the college portal. Alumni achievements is an indication of institutional progress & quality.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	BALLARI INSTITUTE OF TECHNOLOGY AND MANAGEMENT, BALLARI
Address	Jnana Gangotri Campus, No.873/2, Ballari-Hosapete Road, Near Allipura, Ballari
City	BALLARI
State	Karnataka
Pin	583104
Website	www.bitm.edu.in

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	V.C. PATIL	08392-237100	9448695476	08392-237197	bitmiqac@gmail.com
Associate Professor	N. Gururaj	08392-237182	9448006862	08392-237169	gururajn135@gmail.com

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 minority institution	No

Establishment Details	
Date of establishment of the college	04-08-1997

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

State	University name	Document
Karnataka	Visvesvaraya Technological University	View Document

Details of UGC recognition

Under Section	Date	View Document
2f of UGC	05-09-2016	View Document
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	29-04-2019	12	

Details of autonomy

Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?	No
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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	Jnana Gangotri Campus, No.873/2, Ballari-Hosapete Road, Near Allipura, Ballari	Urban	11	45718.46

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	BE,Computer Science And Engineering	48	PUC	English	189	183
UG	BE,Electronics And Communication Engineering	48	PUC	English	189	159
UG	BE,Mechanical Engineering	48	PUC	English	252	84
UG	BE,Electrical And Electronics Engineering	48	PUC	English	126	100
UG	BE,Civil Engineering	48	PUC	English	126	82
PG	Mtech,Computer Science And Engineering	24	B.E.	English	18	5
PG	Mtech,Electronics And Communication Engineering	24	B.E.	English	18	6

PG	Mtech,Electrical And Electronics Engineering	24	B.E.	English	24	16
PG	MBA,Masters Of Business Administration	24	ANY DEGREE	English	180	171
Doctoral (Ph.D)	PhD or DPhil,Computer Science And Engineering	72	M.E. OR M.TECH	English	10	5
Doctoral (Ph.D)	PhD or DPhil,Electronics And Communication Engineering	72	M.E. OR M.TECH	English	6	2
Doctoral (Ph.D)	PhD or DPhil,Mechanical Engineering	72	M.E. OR M.TECH	English	25	4
Doctoral (Ph.D)	PhD or DPhil,Electrical And Electronics Engineering	72	M.E. OR M.TECH	English	2	0
Doctoral (Ph.D)	PhD or DPhil,Masters Of Business Administration	72	POST GRADUATE	English	6	1
Doctoral (Ph.D)	PhD or DPhil,Physics	72	POST GRADUATE	English	5	0
Doctoral (Ph.D)	PhD or DPhil,Chemistry	72	POST GRADUATE	English	2	0
Doctoral (Ph.D)	PhD or DPhil,Mathematics	72	POST GRADUATE	English	4	0

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	0				0				0			
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit	0				0				0			
Sanctioned by the Management/Society or Other Authorized Bodies	25				45				134			
Recruited	18	4	0	22	9	2	0	11	88	46	0	134
Yet to Recruit	3				34				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				67
Recruited	60	7	0	67
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				108
Recruited	74	34	0	108
Yet to Recruit				0

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	18	4	0	9	2	0	2	0	0	35
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	115	56	0	171

Temporary Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
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			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
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	2	2	0	4

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

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
Doctoral (Ph.D)	Male	7	0	0	0	7
	Female	1	0	0	0	1
	Others	0	0	0	0	0
UG	Male	303	30	0	0	333
	Female	253	20	0	0	273
	Others	0	0	0	0	0
PG	Male	102	8	0	0	110
	Female	88	8	0	0	96
	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	52	44	41	55
	Female	31	52	37	22
	Others	0	0	0	0
ST	Male	24	32	32	34
	Female	19	27	14	13
	Others	0	0	0	0
OBC	Male	293	344	322	398
	Female	235	259	265	303
	Others	0	0	0	0
General	Male	70	108	86	92
	Female	88	98	85	76
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total		812	964	882	993

3. Extended Profile

3.1 Program

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

2018-19	2017-18	2016-17	2015-16	2014-15
400	462	459	482	475
File Description		Document		
Institutional data prescribed format		View Document		

Number of programs offered year-wise for last five years?

2018-19	2017-18	2016-17	2015-16	2014-15
11	11	11	13	14

3.2 Students

Number of students year-wise during last five years

2018-19	2017-18	2016-17	2015-16	2014-15
3495	3689	3608	3466	3192
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 last five years

2018-19	2017-18	2016-17	2015-16	2014-15
379	498	378	378	405
File Description		Document		
Institutional data in prescribed format		View Document		

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

2018-19	2017-18	2016-17	2015-16	2014-15
815	1047	897	770	604
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
206	217	216	227	217
File Description		Document		
Institutional data in prescribed format		View Document		

Number of sanctioned posts year-wise during last five years

2018-19	2017-18	2016-17	2015-16	2014-15
204	274	272	254	228
File Description		Document		
Institutional data in prescribed format		View Document		

3.4 Institution

Total number of classrooms and seminar halls

Response: 67

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

2018-19	2017-18	2016-17	2015-16	2014-15
575.82	731.62	575.71	589.22	461.47

Number of Computers

Response: 1044

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:

BITM is an affiliated college under VTU, Belagavi. College does not have autonomy in setting up its own curriculum. The faculty will analyze the syllabus in depth and prepare a lesson plan according to the available number of working days. The college systematically designs and develops action plans for effective implementation of the curriculum. At the outset, the Principal of the college conducts meetings regularly with the Heads of Departments to develop various strategies for effective implementation of the curriculum. The academic calendar issued by the affiliating university forms the basis for designing the college semester plan. The college semester plan is meticulously designed prioritizing academics with action plans, commencement date and last working date, dates for conduction of the three internal assessment tests. Further, the Student feedback is collected, analysis and corrective action is taken in each semester as a part of continuous improvement. The same is disseminated across the stake holders. The above process is in concurrence with the activities approved by the Internal Quality Assurance Cell (IQAC).

Department wise calendar of events is prepared. Thereafter, the faculty members of various departments conduct their internal meeting for subject allotment based on expertise and develop academic plans such as timetables, lesson plans, and course files for the current semester. The course outcomes (CO's) are framed in coordination with course co-ordinator, respective faculty based on prescribed syllabus which is mapped with the programme outcomes (PO's). Course files, manuals with design based experiments are also prepared well in advance for laboratory courses.

The curriculum encompasses the pedagogy of innovative methods such as presentations, assignments, handouts, e-lectures, discussions, workshops, seminars, industrial visits apart from regular lecture sessions and the same is taken for approval from their Head of Department and in turn the Principal. Lesson plans and subject course files containing syllabus, old question papers, Internal Assessment question papers with scheme of evaluation, Internal Assessment consolidated marks and CO – PO attainment sheets are maintained by each faculty for their respective subjects allotted, which is reviewed on continuous basis by the department review committee.

Tutorial classes, Case study presentation, Guest Lectures, workshop hours to enhance the capability of students in presenting the distinctive topics related to the various courses of the curriculum are designed apart from regular classes. Remedial classes and motivational sessions are arranged for necessary students towards their academic excellence. In the proctor system, the respective proctors conduct periodic meetings to review the grievances of student fraternity. Career guidance, placement training, industry-academic interface sessions, orientation courses for both staff and students are organized on a regular basis.

File Description	Document
Upload Additional information	View Document

1.1.2 The institution adheres to the academic calendar including for the conduct of CIE

Response:

The college has a well structured academic calendar in-line with VTU academic calendar for each semester. The calendar encompasses the vision and mission statements, events, departmental specific programmes to be conducted for the current semester.

The entire schedule for the semester month and week- wise is planned. Further the Graduation day, College Cultural meet along with Blood Donation Camp, NSS activities, Alumni events and feedback week are programmed for the academic semester.

The schedule for the continuous internal examination (CIE) is disseminated well in advance for the convenience of both students and staff. Academic coordinator will in-turn prepares the subject wise schedule along with seating arrangement, appointment of room superintendents and squad teams. The students are issued admission/Hall ticket to attend the CIE.

The CIE is conducted in accordance with the university end examination pattern. The system comprises

1. Preparation of Question paper and Scheme: is based on percentage of syllabus coverage, CO's and Bloom Taxonomy levels by the respective faculty in conjunction with course co-ordinator.
2. Scrutiny and Approval of Question paper: is done by the Head of the Department.
3. Printed question papers in a sealed cover are handed over to the CIE co-ordinator for the smooth conduction of CIE.

A computer integrated report generation comprises the dissipation of Internal Assessment marks and attendance system namely (EDUWIZE) is adopted to reach the parent/office immediately facilitating for necessary action plan. The departments strictly adhere to the meetings such as parent's meet, departmental meets, term commencement and closing dates during all the semesters.

File Description	Document
Upload Additional information	View Document

1.1.3 Teachers of the Institution participate in following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the last five years

1. Academic council/BoS of Affiliating university
2. Setting of question papers for UG/PG programs
3. Design and Development of Curriculum for Add on/ certificate/ Diploma Courses

4. Assessment /evaluation process of the affiliating University**E. None of the above****D. Any 1 of the above****C. Any 2 of the above****B. Any 3 of the above****Response:** A. All of the above

File Description	Document
Institutional data in prescribed format	View Document
Details of participation of teachers in various bodies/activities provided as a response to the metric	View Document
Any additional information	View Document

1.2 Academic Flexibility**1.2.1 Percentage of Programmes in which Choice Based Credit System (CBCS)/ elective course system has been implemented****Response:** 100**1.2.1.1 Number of Programmes in which CBCS / Elective course system implemented.****Response:** 11

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document

1.2.2 Number of Add on /Certificate programs offered during the last five years**Response:** 20**1.2.2.1 How many Add on /Certificate programs are added within the last 5 years.**

2018-19	2017-18	2016-17	2015-16	2014-15
2	2	6	5	5

File Description	Document
List of Add on /Certificate programs	View Document
Brochure or any other document relating to Add on /Certificate programs	View Document
Any additional information	View Document

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

Response: 10.45

1.2.3.1 Number of students enrolled in value added courses (beyond the curriculum) offered year-wise during last five years.

2018-19	2017-18	2016-17	2015-16	2014-15
385	408	532	180	326

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

1.3 Curriculum Enrichment

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

Response:

The university curriculum itself includes these aspects as courses across various semesters in both UG and PG programmes. The courses prescribed by VTU are Environmental Studies (10CIV18/28), Constitution of India & Professional Ethics (10CIP18/28, 18CPC39/49) for Engineering at UG level, Business Law and Policy (16MBA24), and Entrepreneurship Development (16MBA26) with respect to sustainability and human values for MBA programme at PG level. The detailed discussion of these courses along with usefulness to the student fraternity is as follows:

- The environmental issues like economic productivity, national security, pollution in terms of water, land, noise, global warming, depletion of ozone layer, loss of biodiversity along with eco system

and the impact of these on human beings is addressed through the curriculum. The study of natural resources like water, minerals, forest, its importance, preservation and exploitation is also incorporated in the curriculum in order to develop an idea towards sustainability. Environmental studies can address to improve the social, economic, and environmental well-being of present and future generations. The inclusion of the course is due to the fact that these natural resources are known to support as an important social safety net and for sustainable future.

- The knowledge about Indian constitution, human rights, Directive principles, Fundamental duties and its implication to develop interaction between society and the educational institutions is of prime importance. The engineers are given an exposure towards Election process, Legal Environment, State and Union executives along with Corporate Social Responsibilities to be possessed as a professional. Inculcation of Honesty, Integrity, Reliability and enlighten towards human rights and duties is also fundamental concern of an individual and society as well. The professional and engineering ethics, towards professional responsibilities, identify the individual roles towards society and to provide insights on entrepreneurship is directed as a module. This will yield to inter/intra personal growth of the student community.
- The renewable energy provides an in-depth knowledge towards addressing green house aspects, design and development of energy systems for sustainable engineering environment. This will contribute to gain technical skills of solar power utilization, wind power, fossil fuels, alternate fuels, bio-gas, bio-fuel, fuel cell technologies and their applications. Such optional modules enact specialization in project engineering, risk management, design and development, CFD and other software tools for modeling and product design not limited to issues like climate change, public health and safety. Renewable energy projects were carried out.
- The college has a Woman grievance cell, prevention of sexual harassment committee, self-defense, woman faculty- girl student interactions on a day to day basis to ensure safety and security round the clock. Above facility is in line with the guidelines of university, AICTE and UGC. The college conducts several programmes on woman empowerment and celebration of International Woman's Day.
- The programmes like Swatch-Bharath Abhiyan, Tree plantation, Blood donation programmes, health awareness camps, and cancer awareness programmes are organized on a regular basis apart from curriculum course to sensitize on environment and society.

First year students are enlightened on universal human values during the induction program

File Description	Document
Upload the list and description of courses which address the Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum.	View Document
Any additional information	View Document

1.3.2 Average percentage of courses that include experiential learning through project work/field work/internship during last five years

Response: 25

1.3.2.1 Number of courses that include experiential learning through project work/field work/internship year-wise during last five years

2018-19	2017-18	2016-17	2015-16	2014-15
99	111	113	121	126

File Description	Document
Programme / Curriculum/ Syllabus of the courses	View Document
MoU's with relevant organizations for these courses, if any Average percentage of courses that include experiential learning through project work/field work/internship	View Document

1.3.3 Percentage of students undertaking project work/field work/ internships (Data for the latest completed academic year)**Response:** 43.66**1.3.3.1 Number of students undertaking project work/field work / internships****Response:** 1526

File Description	Document
List of programmes and number of students undertaking project work/field work/ /internships	View Document

1.4 Feedback System**1.4.1 Institution obtains feedback on the syllabus and its transaction at the institution from the following stakeholders 1) Students 2)Teachers 3)Employers 4)Alumni****E. None of the above****D. Any 1 of the above****C. Any 2 of the above****B. Any 3 of the above****Response:** A. All of the above

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

1.4.2 Feedback process of the Institution may be classified as follows: Options:

- 1. Feedback collected, analysed and action taken and feedback available on website**
- 2. Feedback collected, analysed and action has been taken**
- 3. Feedback collected and analysed**
- 4. Feedback collected**
- 5. Feedback not collected**

E. Feedback not collected

D. Feedback collected

C. Feedback collected and analysed

B. Feedback collected, analysed and action has been taken

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

File Description	Document
Upload 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 Enrolment percentage (Average of last five years)

Response: 77.86

2.1.1.1 Number of students admitted year-wise during last five years

2018-19	2017-18	2016-17	2015-16	2014-15
812	964	882	993	1092

2.1.1.2 Number of sanctioned seats year wise during last five years

2018-19	2017-18	2016-17	2015-16	2014-15
1170	1170	1170	1254	1317

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document

2.1.2 Average percentage of seats filled against seats reserved for various categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy) during the last five years (exclusive of supernumerary seats)

Response: 86.47

2.1.2.1 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
282	422	329	350	379

File Description	Document
Average percentage of seats filled against seats reserved	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 and organises special Programmes for advanced learners and slow learners

Response:

Every year, the Institute organizes orientation program for both parents and students in the beginning of the Academic Year. This orientation program will help students to get familiarized with the Institution, curricular and co-curricular activities, Faculty rooms, Department Labs, Sports facilities, recreation clubs, rules and regulations etc. all the students are familiarized with basic computer knowledge and skills through practical computer sessions. This is mainly done for first year students from rural background. This program also helps the Institution to identify the various skills and talent in the student so that it is appropriately utilized to promote and sponsor the students to attend the VTU fest and other Technical events. The students are even trained from the third party on soft skills and communication skills from second year level. In order to motivate **slow learners**, Workshops and Guest Lecturers are organized to enhance their skills and knowledge. The Institute practices a robust student academic counseling process. During the time of admission the faculty and HOD of the departments interact with the parents and students to assess the need and aspirations. They will inform about the need of Proctoring and mentoring to all the admitted students and their parents. Each faculty is assigned around 20 students for proctoring. The proctors monitor the academic performance and interact frequently to understand and assist any student with issues that affect their ability to learn or hamper their academic success. The institute has a system to communicate performance and attendance of students to parents regularly. Care is taken by faculty in monitoring the performance of slow learners. Faculty members do periodic interaction with parents about the performance of slow learners. Departments conduct extra classes; provide course notes for students who are slow learners and those students who are in the verge of dropping out due to arrear subjects. Further faculty members revise the tough topics as per the students requisition and provide university question bank and discuss the way of presenting the answers in the exam to score marks. Extra and remedial classes are conducted to clarify doubts, re-explaining of critical topics for improving performance. Appropriate counseling with additional teaching, eventually helps to attend classes regularly.

The students having good academic background (**Advanced Learners**) in both Internals and University examination, the Institute:

- Encourages them to become Member of professional bodies like IEEE, ISTE, CSI, IETE etc. Motivates them to participate in group discussions, technical quizzes to develop analytical and problem solving abilities and to improve their presentation skills.
- Motivating them to do mini projects to inculcate research orientation and practical awareness in the 2nd year apart from major projects. Providing opportunities to develop their creativity by participating and organizing intercollegiate as well as national level technical symposiums.

Encouraging them with extra care to obtain University ranks. Take up competitive exams like GATE, GRE, TOEFL, PGCET etc. Encourages the Toppers of Semester and University rank holders by providing certificates and momentous by the Management.

File Description	Document
Upload any additional information	View Document
Past link for additional Information	View Document

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

Response: 16.97

File Description	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:

The various Student centric methods to enhance Teaching- Learning are:

Course Delivery Methods:

- Lectures & Class presentations
- Tutorials
- Lab experimental work
- Simulations and experimental exercises
- Assignments
- Case Studies
- Industry visits / Technical reports
- Flipped class rooms

Course Delivery Tools:

- Google class rooms - Online Platform Tool.
- E-Learning - Blended Learning Tool.

The institute encourages teachers to use the latest pedagogical teaching methods by using ICT. The faculty members are encouraged to participate in Workshops, Seminars, Conferences, Industry visits to enhance the knowledge and network helping the individuals and the institute for carrying out the student centric

methods supported by industry supported labs.

Problem Solving Methodologies:

Student learning is enhanced by adopting various approaches such as seminars, Group discussions, Technical Talks, Departmental forum activities, and special lectures. Assignments and projects are given to the students to sharpen their intellectual caliber and curiosity. Study material and periodic assignments are also made available to the students.

Invited talks by experts from the industry and academia, Laboratory courses, Training programs on New Technologies such as Cloud Computing, Mobility, Data Analytics and soft Skills are organized by the departments to cover the content beyond the syllabus and design based experiments. MoUs are signed with leading industries to enrich the course contents of the Program. Programming and design contests are conducted at the department level such as Cryptic and other design contests. This will help the students to get placement in the reputed companies and Industries.

Interactive Learning Environment:

Facilities are provided in the institute to make use of NPTEL courses to learn and get certified on the new courses. Case studies are given to the management students to enhance their understanding capability, interaction and involvement in learning process. Regular workshops in the institute help the students to interact with the Resource persons from reputed educational institutions and industries. Another mode of learning experience is conducting guest lectures, Quiz contests, Programming contests, invited talks and student's seminars from the Department Associations.

Collaborative Learning:

Mini and major projects carried out by the students in a team. Students are participating in the development of inter disciplinary projects such as technology learning center projects viz. MTLC, e-Yantra Robotics, FMS Lab. Etc., and external project competitions.

Independent Learning:

Wi-Fi facility is available in the campus to allow students to access technical resource such as NPTEL Lectures, VTU E-Shiksha, E-Books, video clips at E-Resource center etc. The E-learning facilitates to the students for independent learning wherein students can access MOOC course contents online. Student-centric learning is provided in the practical sessions.

- **Participative learning:**

- The students actively participate in teaching and learning process and the faculty facilitates the class room sessions for participative learning,

Example: Flipped classrooms, Seminars.

- **Experiential learning:**

- Experiential learning is ensured through individual or group projects and industrial visits. Competitive and Team Spirits are developed,

Example: Group discussions, debates and presentations, Additional Laboratory and design based experiments beyond the syllabus is conducted and students write and present the Technical papers.

File Description	Document
Link for additional information	View Document

2.3.2 Teachers use ICT enabled tools for effective teaching-learning process.

Response:

- The faculty adopts various innovative Teaching & Learning pedagogical methodologies to create best learning experience for the student with the help of ICT Tools such as projectors, smart boards, smart televisions and other online tools for the preparation of presentations and demonstrations. These methodologies include traditional black board teaching, PPT presentations, video lectures, collaborative learning methods using google class rooms, flipped class rooms etc., where the relevant concepts are demonstrated with the real world's illustrations, which enable students to grasp the concepts more easily.
- Entire campus is augmented with 200 MBPS internet leased line and Wi-Fi. The innovative methods to be used to deliver a course are also included in the course file. The faculty members leverage online certification courses in order to enrich the knowledge and the same is disseminated to the students and encourage them to take online certification courses.
- Institute has all the resource required for online training and certification such as NPTEL and other MOOC courses. In addition to that the institute is NPTEL Local Chapter center to facilitate students and faculty to get certified on new online courses. Open source tools such as MOODLE is used to conduct Web learning and Web Test.
- The Institute is a member of VTU e-consortium which supports all the e-resource such as e-Shiksha, e-books, e-journals etc. In addition to that the library also has online videos, CDs & DVDs, project and thesis reports to cater the need of the students.

File Description	Document
Provide link for webpage describing the ICT enabled tools for effective teaching-learning process	View Document

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

Response: 16.97

2.3.3.1 Number of mentors

Response: 206

File Description	Document
Upload year wise, number of students enrolled and full time teachers on roll.	View Document
mentor/mentee ratio	View Document
Circulars pertaining to assigning mentors to mentees	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: 88.83

File Description	Document
Year wise full time teachers and sanctioned posts for 5years(Data Template)	View Document
List of the faculty members authenticated by the Head of HEI	View Document

2.4.2 Average percentage of full time teachers with Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. during the last five years (consider only highest degree for count)

Response: 12.16

2.4.2.1 Number of full time teachers with *Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt.* year wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
33	30	26	22	20

File Description	Document
List of number of full time teachers with Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. and number of full time teachers for 5 years (Data Template)	View Document
Any additional information	View Document

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

Response: 6.62

2.4.3.1 Total experience of full-time teachers

Response: 1364

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

2.5 Evaluation Process and Reforms

2.5.1 Mechanism of internal assessment is transparent and robust in terms of frequency and mode

Response:

Our Institute is affiliated to Visvesvaraya Technological University (VTU), Belagavi and approved by AICTE, New Delhi. The Institute follows the guidelines given by the affiliated university for the conduction and evaluation of internal assessment tests.

- The Institute prepares its own Academic Calendar well in advance before the start of the semester, considering Govt. /University holidays and university academic calendar. It includes specific dates for class work, lab work and Internal Assessments schedule, co-curricular & extracurricular activities.
- According to the calendar of events of the semester, Three Internal Assessment Tests are conducted for each subject and centrally assisted by the Academic Co-ordinator.

I Internal test– Conducted after 4-5 weeks of commencement of teaching of every semester.

II Internal test- Conducted after 8-9 weeks of commencement of teaching of every semester.

III Internal test- Conducted after 12-13 weeks of commencement of teaching of every semester.

The respective Course faculty in consultation with course co-ordinator and stream leader sets the question paper for the individual course by keeping in view about course outcomes and blooms taxonomy levels. Each question is mapped to CO's and knowledge levels. The Question paper and scheme of evaluation is prepared by the course faculty and approved by the stream co-ordinator.

- The academic co-ordinator designates Internal Exam Co-ordinators, Invigilators and internal squad members for the smooth conduction of the test.
- Seating arrangements for the students is prepared and notified by the academic co-ordinator to avoid any untoward incidence during the test.
- Each student is provided with an internal examination hall ticket, in which invigilator verifies, and put signature on the hall ticket for each theory course. The attendance of the students is taken during the test by the room invigilators.

- After the evaluation of Internal Assessment books, the course faculty discusses with the students in the class about the expected answer and the marking scheme followed for the evaluation of Internal Assessment books. The Internal Assessment books are given to the students for verification of marks and answers as per the scheme of evaluation. In case of any discrepancies the course faculty addresses issues.

The Internal Assessment marks and students' attendance is intimated to their parents after each Internal Assessment test. Marks list is prepared after the evaluation and documented for the further clarification.

File Description	Document
Link for additional information	View Document

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

Response:

The institute strictly follows all the guidelines and rules defined by the affiliating university for the conduction of internal assessment and external examinations.

Internal Examination

- The program coordinator will inform the course coordinator to set the question paper as per university norms.
- Each test covers one third of the syllabus.
- The duration of the test is one hour 15 minutes.
- The students will write the internal assessment test in bluebooks, which shall be maintained by the department for at least one year after the announcement of result and available for verification.
- The internal assessment marks will be sent well in advance to the university before the commencement of theory examination and also to the Parents.
- The Evaluated Answer scripts are given to the students for clarifying the doubts and grievances, if any can be clarified by the concern faculty member.
- Once the I.A books have been evaluated, they are distributed back to the students by the faculty. The faculty will discuss the entire length of the question paper and their subsequent correct answers in the following classes. This will help the students to understand their mistakes, thus students are allowed to assess their own work and any modifications to the marks are reflected. Suggestions are given to the students who need to improve and the one who performed well are appreciated.
- The answer sheets are shown to the students after evaluation for their information which provides transparency and accountability in the evaluation process, students' grievance are taken care off and addressed in a timely manner. Finalized marks are verified by the faculty and signed off by the students. Online internal marks are submitted to the university through faculty's login account on the university internal examination portal.

External Examination

- The schedule of the external examination is intimated by the university to the institute well in advance and the same is brought to all the stake holders, if any discrepancies with respect to the schedule in the time tables and the same is intimated to the university.
- Each student has to register for the examination by paying the prescribed fees as per the circular issued by the university.
- Any student who is not able to get the hall ticket/result/photocopy of answer scripts / discrepancy in the marks is conveyed to the university's authority by the examination section of the institute to address their grievance.

In case of any of the grievance which is not addressed by the university, the examination section takes all the necessary measures and follows up the matter with the university by proper correspondence in a timely manner.

File Description	Document
Any additional information	View Document

2.6 Student Performance and Learning Outcomes

2.6.1 Programme and course outcomes for all Programmes offered by the institution are stated and displayed on website and communicated to teachers and students.

Response:

The Institution is adopting well structured outcome based education (OBE) system by actively involving all the stakeholders (students, faculty members, parents, Employers and alumni). The Institute offers a number of courses/programmes, both at undergraduate and postgraduate levels which are affiliated to Visvesvaraya Technological University, Belagavi. The Institute uses different mechanism and practices to communicate course outcomes, program outcomes and program specific outcomes to all stakeholders. The programme outcome (PO), programme specific outcome (PSO) and course outcome (CO) of all programmes and courses are made available explicitly in the institute's website.

The institution follows Program Outcomes 12 Graduate attributes defined by the NBA, such as:

- 1.Engineering knowledge
- 2.Problem analysis
- 3.Design / development of solutions
- 4.Conduct investigations of complex problems
- 5.Modern tool usage
- 6.The engineer and society
- 7.Environment and sustainability
- 8.Ethics
- 9.Individual and team work
- 10.Communication
- 11.Project management and finance
12. Life-long learning

Each programme defines 2 to 4 Program specific outcomes and are framed in consultation with Department Advisory Board (DAB) and Program Assessment Committee (PAC) in line with NBA Graduate attributes.

The sample PSOs of ECE, CSE and ME Programmes are given below:

PSO's of CSE

PSO 1: Demonstrate the principles, architectures and Organization of Computers, Embedded systems and Computer Networks

PSO 2: To develop software applications using advanced technologies to cater the growing needs of Industry

PSO's of ECE

PSO1: To understand the principles, processes, techniques and design aspects of electronic devices, circuits and communication systems.

PSO2: To apply, analyze and design electronic circuits, communication systems, embedded systems by using higher engineering mathematical foundations, computational principles and network modeling skills.

PSO3: To develop electronic hardware and software systems for universal requirements using sensors, embedded controllers, signal processors, analog and digitally integrated chips.

PSO's of ME

PSO1: Ability to utilize their knowledge in Mechanical Engineering Sciences on an applied basis.

PSO2: Ability to apply learned principles to the analysis, design, development and implementation to more advanced mechanical systems or processes.

Course outcomes (4 - 6) for each course are formed by the department faculty (Course Co-coordinator) in consultation with Program Co-ordinator/Stream Co-ordinator and senior staff members of the department and COs are to be mapped with PSOs and POs.

Description of Mechanism of Communication

Awareness about POs/PSOs & COs is made to students by the department by conducting an event called "Department Day" in the beginning of the semester besides displaying them in the respective departments, and on the college website.

- POs and PSOs for all programs offered by the Institution are well disseminated through the following:
 - Prominent locations in the campus, which can be viewed by Students, parents, faculty members and other stakeholders (Display Board at the entrance of HOD chamber, Department Laboratories, Class rooms etc.)
 - Institutional website (www.bitm.edu.in).
 - Course files of each course.

- COs are given to the students and explained on the commencement of classes in each semester and also well disseminated in Course files of each course.

File Description	Document
Upload COs for all Programmes (exemplars from Glossary)	View Document
Past link for Additional information	View Document

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

Response:

In the Outcome Based Education (OBE), the evaluation of attainment of CO, PO and PSO is primarily made on the basis of the students' performance in the Internal tests and the semester end examinations. The knowledge and the skills of the learner are evaluated through the semester examination, internal tests, seminar presentations, assignments, quiz, etc throughout the semester.

The process of attainment of COs, POs, and PSOs starts from writing appropriate COs for each course in the program and a correlation is established between COs and POs, PSOs on the scale of 0 to 3.

0 indicates no correlation

1 indicates a low correlation

2 indicates a medium correlation

3 indicates high correlation

The assessment process is carried out by the institution using one or more processes that identify, Collect and prepare data to evaluate the attainment of the course outcomes (COs). For each course 4 to 6 Course outcomes are defined by the faculty, and the articulation matrix is prepared to map the Course Outcomes to the Program Outcomes (POs) and the Program Specific Outcomes (PSOs). From the articulation matrix, the expected PO and PSO attainment level is calculated. The assessment process for the attainment of outcome is carried out by using Direct and Indirect Assessment tools.

The direct Assessment tools used are:

- Internal Tests
- Semester End Examinations
- Quiz
- Assignments
- Seminars
- Main and Mini Projects

The Indirect Assessment tools used are:

- Employer Survey
- Alumni Survey
- Graduate Exit Survey
- Course End Survey

Target levels for each Course Outcomes (COs) are set by the respective course faculty, attainment of COs is assessed using any or all of the above direct assessment tools. The attainment of the COs is compared with the target value which is fixed initially. If the total attainment is greater than or equal to the target value, then we can conclude that the attainment of the course outcome is successfully achieved. The POs and PSOs are correlated with COs by the Course faculty. The attainment values are compared with the correlated values to determine the attainment of POs and PSOs.

Appropriate weightage is defined for Direct attainment and Indirect Attainment. In our Institution 80% weightage is given to Direct attainment and 20% weightage for Indirect attainment.

The loop is closed by planning suitable improvements in the teaching / learning process to increase the actual attainment to reach the target.

The respective course faculty for the course based on the past students' performance may fix the threshold and target levels of the COs.

File Description	Document
Upload any additional information	View Document

2.6.3 Average pass percentage of Students during last five years

Response: 91.54

2.6.3.1 Number of final year students who passed the university examination year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
772	937	827	682	560

2.6.3.2 Number of final year students who appeared for the university examination year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
815	1047	897	770	604

File Description	Document
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	View Document
Upload any additional information	View Document
Paste link for the annual report	View Document

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response:

File Description	Document
Upload database of all currently enrolled students (Data Template)	View Document

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

3.1.1 Grants received from Government and non-governmental agencies for research projects, endowments, Chairs in the institution during the last five years (INR in Lakhs)

Response: 69.75

3.1.1.1 Total Grants from Government and non-governmental agencies for research projects , endowments, Chairs in the institution during the last five years (INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
0	0	0	20	49.75

File Description	Document
List of endowments / projects with details of grants	View Document
e-copies of the grant award letters for sponsored research projects / endowments	View Document

3.1.2 Percentage of teachers recognized as research guides (latest completed academic year)

Response: 10.19

3.1.2.1 Number of teachers recognized as research guides

Response: 21

File Description	Document
Institutional data in prescribed format	View Document

3.1.3 Percentage of departments having Research projects funded by government and non government agencies during the last five years

Response: 5.26

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

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

3.1.3.2 Number of departments offering academic programmes

2018-19	2017-18	2016-17	2015-16	2014-15
6	8	8	8	8

File Description	Document
Supporting document from Funding Agency	View Document
List of research projects and funding details	View Document
Paste link to funding agency website	View Document

3.2 Innovation Ecosystem

3.2.1 Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge

Response:

Many initiatives have been taken by the institution to establish an eco-system for creation & transfer of knowledge, which are explained below:

1. Establishing Entrepreneurship -Cell and start-up incubation centre.

Entrepreneur Development Cell(EDC) has taken up start-up initiatives for the career enhancement of students. Boot camps for Start-up Karnataka/India was held on 11/12/2018. Ideathon 2019 was held on 16/02/2019 in which 42 teams participated for Idea Pitching. E-Step Boot Camp was held on 30/08/2019 in which more than 200 students participated. Interaction of students with resource persons from various reputed organizations have provided the details of Ideation, Product Development, Business Model, Exhibition of their Idea. On account of these initiatives Mr. Ansh Agarwal, student of ECE first year, participated in the start-up program at IIT-Kanpur and received funding of Rs. 25Lakhs. Mr. Kaushik of 3rd year CSE dept. was successful in tie-up with Aries solution Pvt. Ltd.–Hyd. for his drone project namely “VAJRAYUDA” for the women safety.

2.MOUs & Centres of Excellence

MOUs are signed with various industries to bridge the gap with industries, namely IBM, Harita Tech Serv, Infosys Campus Connect, e-Yantra IIT-Bombay robotics lab, NI Lab-view, etc.

MOU with IBM India private Ltd to train our faculty members and certify students in IBM Bluemix Cloud (Cloud computing), IBM Work light (mobile app development), IBM Big Insights (Data Analytics). MOU with Infosys has enabled to train our faculty members under FDP. Students are certified under Infosys campus connect programs on soft skill, python and facilitate industrial visit.

The college, in association with WIPRO, has set up WIPRO-MTLC Centre of excellence, where students of EEE, CSE and ECE department carryout interdisciplinary projects. As an example, Mr. Shreyas Antin's Project titled **Robotic ARM for Borewell rescue operation** (https://youtu.be/kru0_fxFwB4) was awarded prize from former ISRO chairman Dr A S Kiran Kumar for the innovation in inter-collegiate competition "Srishti 2018" held on 04 June 2018 in Bengaluru and also Robotic Invigilator was developed by the Student. <https://youtu.be/Z4QIOCDMncI>

3. Research centres

Currently 72 research scholars are pursuing research activities in the campus. In the last five year's faculty have published 252 publications in Scopus / web science /UGC recognised journals.

Mechanical Department has setup FMS, R&D Center, the benefits of FMS which includes, reduced work in process increased machine utilization, better management and students are certified on FMS technology.

4. Distinguished lectures & Industry visits

Institution has good network of industries that play an important role in the growth of the institution. Experts from the industry are invited regularly to deliver lectures on various topics of relevance which not only enhances the knowledge of students but inspires them to have greater goals. Industry visits to ISRO, JSW steels limited, Ballari Thermal Power Station, visit to Allipura substation, Tungabhadra Dam, NMDC-Donimalai, Kirloskar Ferrous, RTTC-BSNL Mysuru, SHAR-Sriharikota, Master Control Facility-Hassan, Infosys-Bengaluru, SPAN Systems etc., are regularly organised to understand the practical applications.

File Description	Document
Paste link for additional information	View Document

3.2.2 Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the last five years

Response: 15

3.2.2.1 Total number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year-wise during last five years

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

File Description	Document
Report of the event	View Document
List of workshops/seminars during last 5 years	View Document

3.3 Research Publications and Awards

3.3.1 Number of Ph.Ds registered per eligible teacher during the last five years	
Response: 3.27	
3.3.1.1 How many Ph.Ds registered per eligible teacher within last five years	
Response: 72	
3.3.1.2 Number of teachers recognized as guides during the last five years	
Response: 22	
File Description	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
URL to the research page on HEI website	View Document

3.3.2 Number of research papers per teachers in the Journals notified on UGC website during the last five years				
Response: 1.34				
3.3.2.1 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
99	45	61	53	33
File Description	Document			
List of research papers by title, author, department, name and year of publication	View Document			
Any additional information	View Document			

3.3.3 Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years**Response:** 1.06**3.3.3.1 Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings year-wise during last five years**

2018-19	2017-18	2016-17	2015-16	2014-15
33	80	60	31	26

File Description	Document
List books and chapters edited volumes/ books published	View Document
Any additional information	View Document

3.4 Extension Activities**3.4.1 Extension activities are carried out in the neighborhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the last five years.****Response:**

The Institution has a registered NSS unit. This unit takes the responsibility of organizing community based activities. The NSS unit and a team of committed faculty members engage students in the community development programs.

The NSS unit organizes yoga camps regularly and create awareness and benefits of yoga to the community. Students become global stakeholders in ensuring healthy body and mind. Every day hostellers are practicing Yoga in the campus.

Blood donation camps are conducted every year in the institution in collaboration with Indian / Youth Red Cross (IRC / YRC), Red Ribbon Club, District AIDS Prevention Control Office (DAPCO). Students and staff donate blood for a noble cause. The collected units of Blood are donated to Government Medical College (VIMS) - Ballari.

IRCS / YRC has acknowledged the highest contribution and the IRCS has received award from Governor of Karnataka for the same. Every year number of Blood Units donated is increasing which strengthens the sense of empathy and compassion among donors and also instils a sense of commitment towards society.

Programs on women empowerment such as self-defense classes, health and nutrition for women, women safety against cybercrime etc. are conducted to create awareness among girl students. This has created confidence among girl students and every year more number of girl students are opting our institution.

The NSS college unit organizes various events such as, Swaach Bharat, Awareness program on AIDS prevention, Environmental Pollution, Effects of usage of Plastic & Crackers on environment, Electoral Literacy Awareness programs etc. are also conducted. The institution organizes diversified activities like working with Orphanages involving youth. Events like International Yoga Day, Ozone day, Essay competitions on personality development are conducted for the students of surrounding villages. The above programs have ensured the Campus has become Environmental friendly.

Students participate in various activities such as Republic Day, Teacher's day, adoption of village, Mathrubasha diwas, National Youth Day, Youth for seva, National Education Day, Electoral awareness program etc., Participation of students in all these activities makes them informed, balanced and responsible citizens of the nation.

The sense of social accountability in students motivates them to address real challenges faced by the society. By leveraging the technology, our students have developed academic projects to address societal problems. Bore-well rescue project developed by our students is an example of such projects. (https://youtu.be/kru0_fxwB4). This project was well appreciated by all sections of society and was covered by many media channels.

Such programs sensitize the student volunteers towards the social issues and take challenges of the lesser privileged sections of the society. Involvement in these extension and outreach activities the students develop critical thinking skills, social entrepreneurship, time management, team working skills etc. Working outside the college campus and with diversified social groups of peoples allows students to gain more self-confidence, autonomy, and appreciation for others. These activities help them to become good leaders and well-mannered citizens.

File Description	Document
Upload any additional information	View Document

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

Response: 6

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

2018-19	2017-18	2016-17	2015-16	2014-15
02	01	01	01	01

File Description	Document
Number of awards for extension activities in last 5 year	View Document
e-copy of the award letters	View Document

3.4.3 Number of extension and outreach Programmes conducted by the institution through NSS/ NCC/ Red Cross/ YRC etc., (including the programmes such as Swachh Bharat, AIDS awareness, Gender issues etc.) and / or those organised in collaboration with industry, community and NGOs during the last five years.

Response: 39

3.4.3.1 Number of extension and outreach Programmes 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
11	07	09	06	06

File Description	Document
Reports of the event organized	View Document
Number of extension and outreach Programmes 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 at 3.4.3. above during last five years

Response: 40.29

3.4.4.1 Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year-wise during last five years

2018-19	2017-18	2016-17	2015-16	2014-15
2480	1041	754	1007	1670

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

3.5 Collaboration

3.5.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship per year

Response: 20

3.5.1.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
4	4	2	7	3

File Description	Document
e-copies of related Document	View Document
Details of Collaborative activities with institutions/industries for research, Faculty exchange, Student exchange/ internship	View Document

3.5.2 Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the last five years

Response: 15

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

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

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

NAAC

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

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

Response:

The institution is spread on a 11.00 acres campus with state of the art facilities.

- The total area of UG&PG Classrooms rooms is 4604Sq.m, (with Projectors / LED TV's), Drawing Hall 393Sq.m, Library & Reading Room 1100Sq.m, Seminar Halls 849Sq.m and Auditorium 703.89Sq.m with capacity of 650 members equipped with centrally Air Condition and High Definition Projector (15/15 feet) with 3 LED TV's for effective functioning of seminars and workshops.

The total area of UG & PG Laboratories are 4445Sq.m Central Computing Centre 309Sq.m, Workshop's 1305Sq.m & Drawing Hall 393Sq.m is available.

The Administrative area comprising Principals office, HOD Cabin, Placement Cell, Housekeeping, Store, Exam Control Office, Security, Board Room & etc. of 1420Sq.m.

The area of amenities consists of Boys & Girls common room, Cafeteria, Dispensary, Stationery Store & etc. are 634Sq.m.

Computing Facilities:

The campus has secured Mac based Wi-Fi facility and F-Secure Antivirus protection for servers and Clients. Total computers on network for labs - 865, multimedia - 23, central computing center - 97 and Office / Staff - 59 total is 1044 with firewall and printers are 51. Institution has 44 licensed legal application software's like Auto cad, Mat lab, CMC, oracle etc. and has 6 legal system software's.

The Institute had an internet Band width of 180 Mbps in the completed academic year and upgraded currently to 200 Mbps (100 Mbps BSNL+100 Mbps AIRTEL) which is provided by BSNL and Wave Infinity Ltd. It has 3 core switches and has 33 access points (DP link, TP link) across the campus and with 45 Jio hot spots.

Library:

The library encompasses, 11754, Titles, 99793 Volume of books, 36 National and International Journals, e-journals 1681, e-books 11,111, KNIMBUS (Remote Access & mobile app), Net analysis (Sententia grammatical tool), Turn-it-in (Plagiarism online tool) are made available. Also, the reprographic facility, facilities for viewing e-content from VTU- NPTEL is augmented through e- resource centre.

A full-fledged Dispensary with a Doctor & a nurse is made available for the students at a free of cost. College has its own Ambulance facility for any medical exigencies. To monitor the student activities and to guide them in an appropriate way, a counseling cell is available in the campus.

Laboratories:

The laboratories are equipped with state-of-the-art equipment's to conduct experiments as per the VTU curriculum. The programming laboratories are equipped with licensed software (15 legal System and 20 Application software's) with Internet contention ratio 1:1.

In addition to the regular curriculum, students are encouraged to pursue their project work and conduct many case studies in the emerging areas of research. To elevate the student abilities by identifying their special skills, the center of excellence / incubation center/innovative labs such as Wipro MTLC, NI Lab View, Robotic Process Automation, IBM labs, Harita Tech Serv, FMS Lab to name a few etc., are set up in the campus.

The above available infrastructure & Facilities meets and exceeds the University / AICTE requirements.

File Description	Document
Upload any additional information	View Document

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

Response:**Cultural Activities:**

The institution has state of the art auditorium with the capacity of 650 members equipped with state of the art Audio Video facility, lighting arrangements with Central Air Condition. The institution also has an Open Air Theatre which can accommodate 1500 students to conduct programs. In addition to it, institution has several seminar halls which facilitates extra-curricular activities conducted by different departmental forums. Each Hostels have community centers to conduct various cultural activities. All the inter collegiate events are completely sponsored by the institution with respect to TA & DA and accommodation. Cash awards and mementoes are provided for every event during the annual day. Students have developed android mobile app for online registration of various events during the Annual day.

Institution has a separate Cultural Club comprising of Literary, Theatrical, Fine Arts &, Audio Visual Club headed by a cultural coordinator. The Staff & Students take initiatives and conduct various events during the college day. Students also participate in VTU youth fest and other inter collegiate competitions that enable them to showcase their talents and creativity in various inter collegiate events. Each departmental forum such as Vaisheshika, MEF, Nirman, Maverick, Maanav, Finwhiz, Techvruksha, EEE Forum and Big Ants Club / Forum conduct departmental events.

The institution organizes a three-day Annual day fest namely "TARANG / EXPLORIKA" which provides an ideal platform for the students to exhibit their talents in various competitions like Quiz, Paper Presentation, Treasure Hunt, Debate, Elocution, Coding & Debugging, Dance Skit, Drama, Mime, One Act Play, Singing, Rangoli, Drawing, Face Painting, Mehendi, Poster Making, Collage, Clay Modelling, Short Movie Making, Documentary & etc.

Institution organized inter collegiate techno cultural fest “DRESTEIN – 2015” from 27th and 28th March – 2015 which had 25+ colleges had participated in the event.

Sports Facilities:

The objective of Sport department is to provide services and programs that enable physical and mental growth for wellness and healthy life of boys & girls. It also helps in building leadership qualities. Institution has well qualified physical education director that looks into the entire sports activities. Institution has sports facilities for Indoor and Outdoor Sports & Games like, Chess, Table Tennis, Carom, Basketball, Cricket, Football, Handball, Kabaddi, Kho Kho, Netball, Hockey & Volleyball (The average user rate is 150 per day for Indoor and Outdoor games).

The sports department conduct internal sports competition during the Annual day in addition to the regular sports activity on a day to day basis. The Institution sponsor’s such as sports attire, TA&DA & Accommodation. The students to participate in intra and inter zonal VTU sports events held throughout the academic year. Professional coaching is provided for sports like Cricket, Basket Ball & etc. To build a camaraderie cricket match is played between staff and students.

Gymnasium & Yoga:

Institution has a full-fledged gymnasium at Boys and Girls hostel separately. Hostel Students in particular practice Yoga on a regular basis for their wellness. Institution also invites Yoga Practitioners to train the students from time to time.

File Description	Document
Upload any additional information	View Document

4.1.3 Percentage of classrooms and seminar halls with ICT- enabled facilities such as smart class, LMS, etc. (Data for the latest completed academic year)

Response: 100

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 67

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

4.1.4 Average percentage of expenditure, excluding salary for infrastructure augmentation during last five years(INR in Lakhs)

Response: 62.82**4.1.4.1 Expenditure for infrastructure augmentation, excluding salary year-wise during last five years (INR in lakhs)**

2018-19	2017-18	2016-17	2015-16	2014-15
191.09	787.32	283.90	255.08	372.34

File Description	Document
Upload Details of budget allocation, excluding salary during the last five years (Data Template)	View Document
Upload audited utilization statements	View Document

4.2 Library as a Learning Resource**4.2.1 Library is automated using Integrated Library Management System (ILMS)****Response:**

Name of automation	Easylib	Easylib
Nature of automation (fully or partially)	Fully	Fully
Version	4.4.2	6.2a Web Version
Year of Automation	2008	2019 Upgraded

Area and Capacity

Institution has a voluminous library named as '**Knowledge Center**' accommodated in a spacious building spanning **1100 sq.m** with a reading hall capacity of **500** Students and reference section capacity of **65** students. Library is open for users **9am to 10pm** with references, circulation section, Reading and Newspapers section separately.

- **Collection**

The library has the rich collection of **99,793** Volumes of books comprising **11,754** titles. The Digital Library with 23 systems providing on-line access to e-resources, **VTU-NPTEL-NMEICT project e-learning** with **5TB** of offline video lecturers and 3556 CD's & DVD's. Library has **11,111 E-books and 1681 e-Journals** on various branches of Engineering, Science, Technology and Management along with **48** National and International Printed Journals. The old journals are bounded as back volumes which are 123 and maintains 1260 project reports of final year students. Since 2018-19, soft copies of the project reports are maintained., in addition to Central Library, departments have department Library for immediate reference and ease of access.

- **Library Automation and Networking [Intranet and Internet]**

The Library resources are Bar coded and automated in the year 2008 Easylib 4.4.2 version and upgraded to web version 6.2a in 2019. Integrated Library Package is used for Transactions and web OPAC (Online Public Access of Catalogues) for ease of access. Easylib generates all reports needed for daily records of the library. The digital resources are deployed using the library servers. **mLibrary and easylibbitm android mobile apps** provide remote access of library resources.

- **Membership, Subscription and Technology Platforms facilities**

The library is a member of National Digital Library of India (NDL) to access the vast e-resource. Internet facility is provided to access e-resource, VTU-NPTEL lecture videos and PDFs throughout the campus. The institution is a member of the VTU e-Resource Consortia for e-books of all major publishers like **Elsevier, Springer, Taylor & Francis, Institution of Civil Engineers, Emerald (Management) McGraw Hill, New Age Internationals and Packt and Technology Platforms like Knimbus, Turnitin and NetAnalytiks.**

- **Utilization**

Average utilization of library is around 95% through online access and footfall. A register is maintained to record the use of general and reference section. Average 50 in-person visits to reference section and **150-200** in-person visits to the general section.

- **Reprography facility:** A high-end SHARP AR Reprographic facility is available in library.

Books are organized subject-wise and department-wise for ease of access and quick retrieval on the open shelves. New arrivals are informed to the Staff & students. Library uses DDC classification for all books and MARC II format for cataloguing.

As per the library advisory committee regular stock verification process is carried out. There are library data boards which give information about the collection and services offered and staff details.

Library enlists all the resource as 'E-Resource Ready Reckoner'. Awareness about the databases of respective disciplines' and related areas is provided to the participants through Orientation programs.

File Description	Document
Upload any additional information	View Document

4.2.2 The institution has subscription for the following e-resources

- 1.e-journals
- 2.e-ShodhSindhu
- 3.Shodhganga Membership
- 4.e-books
- 5.Databases
- 6.Remote access to e-resources

E. None of the above

D. Any 1 of the above

C. Any 2 of the above

B. Any 3 of the above

Response: A. Any 4 or more of the above

File Description	Document
Upload any additional information	View Document
Details of subscriptions like e-journals, e-ShodhSindhu, Shodhganga Membership , Remote access to library resources, Web interface etc (Data Template)	View Document

4.2.3 Average annual expenditure for purchase of books/e-books and subscription to journals/e-journals during the last five years (INR in Lakhs)

Response: 42.07

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

2018-19	2017-18	2016-17	2015-16	2014-15
31.43	38.92	38.28	36.96	64.76

File Description	Document
Details of annual expenditure for purchase of books/e-books and journals/e- journals during the last five years (Data Template)	View Document
Audited statements of accounts	View Document
Any additional information	View Document

4.2.4 Percentage per day usage of library by teachers and students during the last completed academic year

Response: 93.38

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

Response: 3456

File Description	Document
Details of library usage by teachers and students	View Document
Any additional information	View Document

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

Response:

Institute regularly upgrades IT facility including Wi-Fi. The total number of computers on network is 1044. The number of printers are 51. The institution has 44 licensed legal system softwares like Auto cad, Mat lab, CMC, oracle etc. and has 6 legal application softwares. The institution contains Mac based secured Wi-Fi facility and F-secure Antivirus protection for servers and clients.

The Institute had an internet connectivity Band width of 180 Mbps in the completed academic year and upgraded currently to 200 Mbps (100 Mbps BSNL+100 Mbps AIRTEL) which is provided by BSNL and Wave Infinity Ltd. It has 3 core switches and has 33 Wi-Fi access points (DP link, TP link) across the campus available in Admin & PG block (9 access point), Millennium Block (4 access point), Electrical block(4 access point), C V Raman block(5 access point), Raj Gopal block(2 access point), Boys Hostel(4 access point), Girls Hostel(4 access point) and QPDS(1 access point). In addition to the Wi-Fi access points institution has installed 45 Reliance Jio Hotspots at Strategic Locations other than the Wi-Fi access points mentioned above. It has optical fiber cable connectivity for all labs and separate servers are maintained for e-content and NPTEL videos.

The college has well designed AUDITORIUM with a seating capacity of 650, equipped with high definition projector (15/15 feet) with 3 LED TV's, 1 Studio master equalizer, 1 Audio mixture with 18 channels input, 4 channel HDMI(audio-video) switcher, 3 crown amplifiers, 2 control chaser's and 8

speakers with centralized AC facility. It has 12 Infrared cameras for surveillance. It contains Tata sky HDMI satellite receiver with recording facility and an audio system supported with 5000 watts for effective functioning of seminars and workshops.

All classrooms, seminar halls are equipped with LCD projectors / LED TV's with Wi-Fi facility to train the students and teachers and any other programme for technology upgradation. Total computers on network for labs - 865, multimedia - 23, central computing center - 97 and Office / Staff - 59 total is 1044. Institution has ZYXEL(USG1100) Firewall protection. All the computer systems are installed with F-Secure Enterprise edition Anti-Virus Software. All faculties are having their own college e-mail ID's: staffname@bitm.edu.in served by Microsoft outlook 365 for better communication and improvements in academic standards.

Type	Computer & Office Internet Lab	Office	Departments	Others	Total Computers	Available Bandwidth (MGBPS)
Existing number of computers	865	29	116	34	1044	100 BSNL+
Total	865	29	116	34	1044	100 AIRTEL
						200

File Description	Document
Upload any additional information	View Document

4.3.2 Student - Computer ratio (Data for the latest completed academic year)

Response: 3.35

File Description	Document
Upload any additional information	View Document
Student – computer ratio	View Document

4.3.3 Bandwidth of internet connection in the Institution

E. < 05 MBPS

D. 05 MBPS – 10 MBPS

C. 10 MBPS – 30 MBPS

B. 30 MBPS – 50 MBPS

Response: A. ?50 MBPS

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

4.4 Maintenance of Campus Infrastructure

4.4.1 Average percentage of expenditure incurred on maintenance of infrastructure (physical and academic support facilities) excluding salary component during the last five years(INR in Lakhs)

Response: 26.47

4.4.1.1 Expenditure incurred on maintenance of infrastructure (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
139.27	251.65	144.66	132.61	120.64

File Description	Document
Upload any additional information	View Document
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	View Document
Audited statements of accounts	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:

A full-fledged building maintenance committee headed by Site-Engineer to oversee the construction and maintenance of physical infrastructure. The physical, academic and support facilities like classrooms, labs, seminar halls, auditorium, computer centre, Administrative Area etc., are well maintained as per the standard procedure described below.

Laboratory:

Regular maintenance of the machines and computers is done by the support team in the presence of lab instructors before the commencement of the academic year. Lab requirement is evaluated for new equipment, replacement of the old equipment, modernization of machines and software is prepared in

consultation with the HOD's, Principal and forwarded to the management for necessary procurement and maintenance.

Regular inspection of machines is organized. Annual maintenance contract / items under warranty are maintained regularly. In case of breakdown of equipment, the same is recorded in the breakdown register duly attested by the HOD, which is attended by the team immediately. Preventive maintenance and breakdown maintenance procedure is followed so as to ensure maximum availability of the systems in the lab. Like Installation of antivirus and firewall ensure that the software and system is secured. Laboratory manuals are maintained to ensure uniformity in conducting experiments. Safety precautions like first aid kit, Fire extinguisher are kept along with safety charts. Every laboratory has a layout, list of equipment's, date of purchase, cost along with the experimental details. The stock is verified annually by a meticulous stock verification process.

Library:

The Library consist of books, journals, E-journals, E-resource & Library Software (**Easily-lib 6.2a**) etc. The stock verification is done as a part of regular procedure. Central library known as knowledge centre works from 09.00 AM to 10.00 PM. Books are issued using barcode system. Lost books are replaced by the borrower. The library is overall monitored by Chief Librarian & Library coordinator. The old books are systematically replaced. The books damaged by the students are re-bounded during the semester vacations. Library server is backed up on a regular basis.

Sports:

Physical director conducts Sports & Games and maintains the sports facility including stock verification to ensure proper conduction of sports activity as per the planned schedule. In case of any damage observed, the same is recorded in the register pending further action including replacement. Regular maintenance of play ground is conducted under the supervision of Physical director by involving site engineer. The sports attire as well as equipment's for sports competition is fully sponsored by the Institution.

Classrooms:

The classroom's benches and windows are cleaned and mopping of the classrooms is done every day. Classrooms have a very good cross ventilation and ergonomically designed benches for human comfort. In case of any damage to the furniture's, projector, internet and audio systems, the class mentor brings it to the notice of the HOD. The necessary follow up is done by the department and steps are taken to fix the same.

Potable Water Supply:

RO Systems of capacity 500 LPH (05 Units), 50 LPH (10 Units), are installed in all the buildings to cater for safe drinking water. There are 41 Drinking water coolers which are maintained regularly through AMC. Sign boards and instructions are displayed for judicious use of water in college and hostel.

Sewage Treatment:

Campus has a sewage treatment plant having capacity of 325 KLD, which is approved by Karnataka Pollution Control Board. The Sewage water after treatment is utilized for gardening purpose.

Solid Waste Management:

The wet & dry waste is separated from the institution is collected within the campus. The same is transported through Institute "Swachh Bharat" Vehicle to the corporation segregation yard for scientific disposal.

Electricity and Solar Power:

Institute is provided with HT (11KV) service from GESCOM. Substation has 2 Transformers of capacity 250KVA and 100 KVA 11/440volts with 50cycles. Round the clock substation is managed by qualified electrical staff. In addition to the above institution has setup Rooftop Solar Generation Power Plant consisting of 50KW each inverter of 7No's with a total generation capacity of 350KW which is synchronized with the main grid. 75% of our power requirement is generated out of solar power plant.

Electric Power Backup:

Sufficient backup power supply has been implemented with 2 DG Generators having capacity of 250KVA and 200KVA with AMF panel. Entire labs and vital equipment's are provided with UPS of capacity like 30KVA (3 No), 20KVA (9 No), 15KVA (3 No), 10KVA (3 No), 5KVA (6 No) and 2 KVA (1 No) at different locations for different applications / labs and the same are maintained through AMC.

E-Waste disposal:

All un-serviceable E-Waste such as computers, printers, cables, CD's, mouse, Chokes, burnt Tube lights and CFL lamps, key board etc. is disposed through an authorised and approved by Karnataka Pollution Control Board E-waste collector as per guidelines for disposal of E-Waste (Management and Handling) Rules, 2011 issued by CPCB.

Budget & Security:

Every year sufficient funds are allocated for equipment's, vehicle, campus, building and electrical maintenance along with 3 tier security and with CCTV.

Vehicle Parking: Institution has separate and spacious parking area for Four wheelers, Two wheelers.

Maintenance of Infrastructure:

A campus maintenance committee maintains day to day repairs like annual repairs, need based repair, emergency repair, additions and alterations to the infrastructure. Cleanliness in and around of the college and hostel buildings, college vehicles, and central air conditions for auditorium, air coolers and AC at various departments are maintained as a routine practice. The infrastructure to the building is done by engaging different agencies in consultation with the management under the supervision of the Site-Engineer. Institution is a barrier free environment with each building having a Lift facility and the same are under AMC. Hostel rooms are daily cleaned and maintained and students sign on the Handbook of the Maintenance staff. All the mess facilities are FSSAI certified.

Equipment's:

All Major/advanced equipment are maintained by AMC. Minor Equipment's are repaired and maintained regularly. Calibration of equipment's are done regularly.

File Description	Document
Upload any additional information	View Document

NAAC

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 last five years

Response: 58.27

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

2018-19	2017-18	2016-17	2015-16	2014-15
2083	2220	2747	1917	1281

File Description

Document

upload self attested letter with the list of students sanctioned scholarship

[View Document](#)

Upload any additional information Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years (Data Template)

[View Document](#)

5.1.2 Average percentage of students benefitted by scholarships, freeships etc. provided by the institution / non- government agencies during the last five years

Response: 6.76

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

2018-19	2017-18	2016-17	2015-16	2014-15
226	190	184	384	192

File Description

Document

Upload any additional information

[View Document](#)

Number of students benefited by scholarships and freeships institution / non- government agencies in last 5 years (Date Template)

[View Document](#)

5.1.3 Capacity building and skills enhancement initiatives taken by the institution include the following

1. Soft skills
2. Language and communication skills
3. Life skills (Yoga, physical fitness, health and hygiene)
4. ICT/computing skills

E. None of the above

D. 1 of the above

C. 2 of the above

B. 3 of the above

Response: A. All of the above

File Description	Document
Details of capability building and skills enhancement initiatives (Data Template)	View Document
Link to Institutional website	View Document

5.1.4 Average percentage of students benefitted by guidance for competitive examinations and career counselling offered by the Institution during the last five years

Response: 45.79

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

2018-19	2017-18	2016-17	2015-16	2014-15
3356	1872	970	1255	610

File Description	Document
Number of students benefitted by guidance for competitive examinations and career counselling during the last five years	View Document

5.1.5 The Institution has a transparent mechanism for timely redressal of student grievances

including sexual harassment and ragging cases

1. Implementation of guidelines of statutory/regulatory bodies
2. Organisation wide awareness and undertakings on policies with zero tolerance
3. Mechanisms for submission of online/offline students' grievances
4. Timely redressal of the grievances through appropriate committees

E. None of the above

D. 1 of the above

C. 2 of the above

B. 3 of the above

Response: A. All of the above

File Description	Document
Upload any additional information	View 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

5.2 Student Progression

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

Response: 37.02

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
295	370	384	300	192

File Description	Document
Upload any additional information	View Document
Self attested list of students placed	View Document
Details of student placement during the last five years (Data Template)	View Document

5.2.2 Average percentage of students progressing to higher education during the last five years

Response: 16.81

5.2.2.1 Number of outgoing student progression to higher education during last five years

Response: 137

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

5.2.3 Average percentage of students qualifying in state/national/ international level examinations during the last five years (eg: IIT/JAM/ NET/SLET/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations, etc.)

Response: 96.44

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

2018-19	2017-18	2016-17	2015-16	2014-15
16	14	16	15	04

5.2.3.2 Number of students appearing in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT,GRE/ TOFEL/ Civil Services/ State government examinations) year-wise during last five years

2018-19	2017-18	2016-17	2015-16	2014-15
18	15	16	15	04

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 (Data Template)	View Document

5.3 Student Participation and Activities

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

Response: 6

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

2018-19	2017-18	2016-17	2015-16	2014-15
2	0	0	2	2

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

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

Response:

Administrative:

Every class has a class representative (CR) who coordinates with the students & staff. The CR regularly interacts with the students with respect to placement activities, discipline, cleanliness of the classes/labs, disseminating information provided by the staff, and any issues raised are communicated to the faculty for immediate corrective actions. Each Student participate twice in a year in the feedback process which takes into account with respect to faculty teaching quality, facilities, interaction & overall improvements.

Students are represented in various administrative bodies/committees namely IQAC, Anti ragging cell, SC/ST Cell, Grievance Redressal Prevention of Sexual Harassment, National Social Service, Sports, Cultural, BRICS (BITM Research & Incubation Commune for Startups)-ED Cell for startups & Bhoomika College Magazine. Students attend the meetings and their views are taken into account for decision making. Students are given an opportunity to suggest changes in the systems for overall development.

Co-Curricular:

Students represent in various Co-curricular committees/cell/chapters to conduct various events in the institution related to technical, management & innovation. Each department has technical forums managed and conducted by the students in coordination with the staff such as IEEE Student Chapter, Women in Engineering(WiE), MANAV-HR Student lab, Finwhiz-Finance Student Club, MAVERICK-Marketing Student Club, Knowledge café, Big Ants movie club, and student forums like Vaiseshika, Mechanical engineers, TechVruksha, & Nirman. In the Beginning of the academic year or a semester, students conduct meetings and decide the list of events to be carried out by the department forums. Students organize the events beyond the college working hours related to technical & management events such as hackathons, technical quiz, junk yard competition, troubleshooting, code debugging, case studies analyses etc. Student in consultations with staff invite guest lectures, tech talks & organize conclaves. Research mindset is inculcated through IEEE student branch, WiE and ISTE Student Chapter. Students play a key role in managing workshops & conferences. Institution has supported for conduction of the above events in the form of infrastructure, facilities and sponsorship of mementoes, prizes & remuneration for various competitions organized by the students.

Extra-Curricular:

Student play a key role in conduction of various Extra-curricular activities under the guidance of cultural coordinator. Institution has several Cultural Clubs Namely Literary, Theatrical, Fine arts, Audio visual, Social media & Event promo club. Each of the clubs are headed by the student coordinator under the guidance of the staff. Each club plan their activities in the beginning of the academic year/semester and decide on the list of the events to be conducted. Student take active participation in preparation of posters, promotion of the event through social media and development of mobile app for registration process. Student volunteers actively participate and coordinate for smooth conduction of events.

The college administration and student members of cultural committee organize “**EXPLORIKA**” a techno cultural fest & **Graduation Day** every year. In addition, Ganesh festival, Ayudha Pooja, Abhivrudhi – Management fest, Avishkar are organized by students.

File Description	Document
Upload any additional information	View Document

5.3.3 Average number of sports and cultural events/competitions in which students of the Institution participated during last five years (organised by the institution/other institutions)

Response: 21.6

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

2018-19	2017-18	2016-17	2015-16	2014-15
21	27	22	19	19

File Description	Document
Report of the event	View Document
Number of sports and cultural events/competitions in which students of the Institution participated during last five years (organised by the institution/other institutions (Data Template))	View Document

5.4 Alumni Engagement

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

Response:

The Ballari Institute of Technology and Management Alumni Association (BITM-AA): is registered under Karnataka Societies Registration Act 21 of 1960, Dated Dt-14-12-2015 with Registration No.BLY-S287-2015-16 at Ballari.

The association is established with the following aims and objectives, to provide a forum for the passed out students of the college and to promote the interests of the college as well as the interest of its past and present students. To promote goodwill and mutual among members, to contribute to the cause of technical education by sharing the experience of those in the field, help authorities to improve the academic activities of the college, assist the members for their employment and service matters without interfering in the policies of their employers, cooperate with other such bodies for the same ends, promote other matters beneficial to prospects of the association, extend financial help to economically backward and deserving students in form of scholarship for undergraduate and post graduate students of the institution.

In the last five years BITM Alumni Association has received Rs. 12,04,000/- & the Institution has received Rs 4,35,300/- to the Institution voluntarily by the alumni members. An alumni can register and connect to the portal www.alumni.bitm.edu.in. The total members in the portal are 4816 as on 14/02/2020 and the database is regularly updated.

They can also connect by using mobile application “My Alumni Network” powered by vaave networks on both android and IOS platform. The Association is organizing “Punarmilana” an annual alumni meet alternatively at the Institution and in Bengaluru. Alumni feedback and surveys are collected regularly on curriculum design process, new Initiatives etc. which act as an impetus to improve the institute Teaching Learning & OBE Process.

The esteemed alumni are part of the institute development as a member in various boards. Alumni are member in IQAC, Department Advisory Board (DAB) of the Engineering Programs in curriculum design process and mentors to the student's project at startup & incubation center. Alumni members share their experience with students during technical talks organized by the institute. The first year UG academic toppers are honored by the association as a source of encouragement to budding engineers. Alumni members are invited to the various events such as conferences, workshops & annual day events every year. Alumni working with different companies also guide the pre-final & final year students to prepare for campus placements & also conduct mock technical interviews using either skype or WhatsApp.

Our esteemed alumni Mr. Veeresh DR and Mr. Raghavendra Prasad HM from mechanical engineering department are working as Scientist SF Engineer in reputed Organization Namely Indian Space Research Organization(ISRO). Mr. Vishwanath Ghalgi from Computer science engineering department is working as Senior Software Engineer in Apple Incorporation. Mr. Padmakar Guduthur from Electronics and Communication engineering department is working as key account manager till date in Robert Bosch Engineering and Business Solutions Limited. Mr. Manjunath from Electrical and Electrical Engineering department is working as Assistant Executive engineer in Karnataka Power Transmission Corporation Limited to name a few.

File Description	Document
Upload any additional information	View Document

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

E. <1 Lakhs

D. 1 Lakhs - 3 Lakhs

C. 3 Lakhs - 4 Lakhs

B. 4 Lakhs - 5 Lakhs

Response: B. 4 Lakhs - 5 Lakhs

File Description	Document
Upload any additional information	View Document

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

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

Response:

The Vision & Mission and the objectives of the institutions are prepared taking into consideration the views of all the stakeholders: Management, faculty, students, parents, alumni, and industry. The Institute strongly believes in transparency, participative decentralized leadership and delegation of powers at various levels.

Vision:

To contribute valuable graduates for industry and society through excellence in technical & management education and research

Mission:

- To offer state-of-the-art undergraduate, postgraduate and doctoral programmes.
- To empower the students with Technical, Managerial Skills and professional ethics.
- To collaborate with academia and industries for skill development

The Governing Council of the institute is constituted as per the guidelines of AICTE. It consists of members from Management, Academic Institutions, Industry, Statutory bodies and two faculties on a Rotational Basis with Principal as member secretary.

All the academic & administrative issues with respect to Budget, finance, recruitment, Planning monitoring & purchases, training & placements, Information Technology, admissions, promotions, IQAC, Infrastructure, Result analysis etc., are discussed and is approved and implemented by the Governing Council.

The Principal and HODs meet periodically to discuss the academic issues and appropriate decisions are taken. Faculty members or members of various administrative, Co-curricular and extra-curricular bodies. In addition, members of management, Principal and HODs interact with staff and students regularly and deliberate on challenges and take decision in-line with Vision and Mission. Training and Placement meetings are held in every department once in a semester to discuss the progress made, set targets and plan of action. The Board of Appointments consists of members of management, external subject expert, Principal & concerned HOD, recruits staff following standard procedure in a free and fair manner.

The Principal, HODs and staff constitutes the following important committees for smooth, transparent and effective functioning of the institute like, Anti-ragging, Prevention of Sexual Harassment, Accreditation, IQAC, R & D, Women Safety and Grievance Redressal Cell & so on. Purchases are made by the purchase committee that has a faculty representation.

The institution has adopted, objective based self-appraisal for comprehensive evaluation and progress of

faculty. In line with college vision & mission, all the faculty members before the commencement of the academic year submit their objective based appraisal formats. All the faculties are briefed about the appraisal criteria & the corresponding weightage at the beginning of the academic year. Every faculty member discusses with their HOD's and frame goals & objectives for the upcoming academic year w.r.t. research, FDP, workshops, seminars, conferences and their academic performances which is line with their department vision and mission and the same is done by HOD's in consultation with principal. The principal in consultation with the management, sets the goals and the objectives in line with the vision and mission of the institution.

The leadership strives to maintain an open and interactive environment. All stakeholders are actively encouraged to participate and voice their perspectives for effective decision making & policy formulation. The college leadership maintains regular and active interaction with stakeholders by taking regular feedback.

File Description	Document
Upload any additional information	View Document

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

Response:

Decentralization in Working:

The Institute functions with decentralize administration that has complete transparency in the decision making process. The Governing council / body has clearly delegated the powers to the Principal with respect to institutional development, academics, curricular, co-curricular & extracurricular activities. The Principal in-line with the Vision and Mission has dedicated powers to the HOD's and concerned office staff. The head of the department along with the principal meet very frequently to discuss academic and administrative matters and take appropriate decisions. The principal, Vice-Principal and HOD's are delegated with adequate powers for the overall development of the institution. The same is evidenced in the organization chart.

The principal & HOD's have constituted 29 committees in consultation with Management for smooth functioning of the institute. Each committee consists of members from all the departments, who meet frequently to carryout the duties as per the functions and responsibilities of the committee. The coordinator of the committee briefs the Principal and HOD's on important decisions for the growth of the institution.

Participative Management:

The Institution has participative management at all levels. The management takes the important decision based on the input from the Principal, Vice Principal, HOD's and committees' coordinators. Principal discusses important issues with the HOD's and the same is appraised to the management. All the academic and administrative issues like, Budget, Recruitment, Purchases, Admissions, Promotions, Conferences, Training & Placement, variation in intake are discussed transparently and appropriate decisions are taken

for implementation.

CASE STUDY:

Town hall meetings: Town hall meetings is one of the case study to illustrate the decentralization and participative management. Beginning of each academic year / semester Management conducts meeting with all the teaching and non-teaching staff in the institution auditorium. The objective of the town hall meeting is to reflect back the previous academic year achievements and scope of improvements. The present status stock is taken and deliberated on strategies, requirements, scope and opportunities and create a road map to achieve the vision of the institute. All the members are given opportunity to express their views & suggestions concerning the institute. As on today 6 town hall meetings are held in the last five years and most of the decisions taken during the meeting have been implemented successfully after consulting faculty, students, industry, alumni and parents. Some of the important accomplishments in last five year are:

1. NBA Re-Accreditation for CSE, ECE and ME.
2. Setting up of Incubation Centre.
3. State of the art New Electrical Block, Laboratories, Research Centres.
4. Collaboration / MoU with IBM, Harita TechServ., NI-Lab View & etc.
5. Improvement in Teaching Learning process.
6. Placement improvement through Career Guidance and effective training plan.
7. Implementation of proctoring system followed by Real-time Attendance intimation system (SMS based).
8. Implementation of Rooftop Solar Power.
9. Town Hall Meetings.

File Description	Document
Paste link for additional information	View Document

6.2 Strategy Development and Deployment

6.2.1 The institutional Strategic / Perspective plan is effectively deployed

Response:

Establishing a start-up incubation centre.

ED Cell was constituted on 10/08/2015 with a 10-member committee:

1. To organize events such as Seminars, Workshops on Entrepreneurship development
2. To create necessary infrastructure for Incubation Centre of startups
3. To obtain necessary funding from Govt. Agencies
4. To attend events related to Entrepreneurship development
5. To conduct Ideathon Workshops & finalize the ideas for Incubation
6. To Setup BIRED cell at Bangalore for brand development and industry institute interaction.

Institute has taken up further initiatives to instill startup mindset in students by carrying out various activities related to startups.

1. Boot camp for Startup Karnataka/India on 11/12/2018 at BITM.
2. Inauguration of Incubation Centre on 16/02/2019
3. Ideathon 2019
4. Interaction with Dr. Maulishree CEO Dept. of IT & BT
5. E-Step Boot Camp at BITM
6. Ideathon 2019 - Top Projects sent to Govt. for Approval

Based on the Hon'ble Prime Minister Shri Narendra Modi who had a direct interaction with startups, innovators and young entrepreneurs across the country over video conference on 6th June 2018. The institution decided to setup Incubation Centre. The State Government of Karnataka in collaboration with our institute decided to play an active role in promoting the Startup through startup Karnataka Yatra Boot Camp. Boot camp was successfully carried out in which 532 students participated from Ballari district. 42 students participated for spot Idea Pitching & 10 teams were selected for finals which was held at Bangalore on December 2018 at NASSCOM. BITM Research & Incubation Commune for Startups (BRICS) conducted Ideathon 2019 on 16/02/2019 in which 42 teams from Ballari participated & 17 teams were shortlisted for 2nd round which were to be sent to Govt of Karnataka for final scrutiny out of which 10 best projects would be selected & funding of 3 lakhs/project would be released by KITS, Department of IT, BT, Government of Karnataka.

To keep up the tempo BRICS conducted various activities like Interaction with CEO Dept. of IT & BT E-Step Boot Camp, District Innovation Associate. These programmes help the students to carry out their innovative projects towards startup. Once again E-Step Boot Camp which was held on 30/08/2019 in which more than 200 students participated in the Boot Camp. Resource persons gave in depth details of Ideation, Product Development, Business Model & Exhibition of their Idea with Logo. As on today institution has 15 projects shortlisted and the same are uploaded in the Govt. portal for approval.

On account of the above initiatives and efforts of the incubation centre

* Mr. Ansh Agarwal, student of ECE first year, participated in the start-up program at IIT-Kanpur. His idea namely "FREE BIRDIES" was accepted by the venture capitalist and received funding of Rs. 25Lakhs. His entire trip to IIT-Kanpur is sponsored by the BITM.

* Mr. Kaushik of 3rd year CSE dept. was successful in tying up with Aries solution Pvt. Ltd.–Hyd. for his drone project namely "VAJRAYUDA" for the women safety.

File Description	Document
Upload any additional information	View Document
strategic Plan and deployment documents on the website	View Document

6.2.2 The functioning of the institutional bodies is effective and efficient as visible from policies,

administrative setup, appointment and service rules, procedures, etc.

Response:

The Institution has following organization structure:

1. **Trust represented by the Management**
2. **Governing Body**
3. **Director / Deputy Director**
4. **Principal / Vice-Principal**
5. **Administrative Officer**
6. **Head of the Departments**
7. **Coordinators of various committee**

The Governing Body (GB) is the executive body constituted as per AICTE norms which controls the affairs of the college. GB consists of representatives from the Trust®, University, Govt. of Karnataka, AICTE, two faculty members and the Principal as a member secretary. GB is committed to develop BITM as a centre of excellence in the field of engineering and technology and meets twice a year.

Policies and Responsibilities:

- To frame, Amend and approve directive principles and policies of the institute.
- To approve the Institute Budget and monitor regularly along with review of the balance sheet.
- To review and approve starting of new courses, variation of intake/closure of the programs.
- To approve the creation / abolition of the various post and recruitment of staff from time to time including promotions.
- To review the academic progress and recommend appropriate action.
- To approve the procurement of equipment and any other infrastructure requirements.
- To constitute sub committees required for effective functioning and overall development of the institute.

Functions of Principal:

- To implement approved policies and decision of the GB including budget in consultation with the Management (Director Administration).
- To take appropriate action for ensuring compliance with the AICTE, Govt. & University regulations.
- As the chairman of the council of HOD's, constitute sub committees for delegation of responsibilities and coordinate for smooth implementation of policies with respect to academics, research and development activities, admissions, examinations & evaluations.
- Monitoring the Training and Placement, Industry Institute Interactions and Incubation centre in consultation with the Deputy Director administration.
- As a chairman of the NBA committee constitutes various committees.

- To keep pace with the development in higher education space and prepare framework for planned growth of the institution in consultation with the management.
- To ensure continuous improvement, periodic evaluation and monitoring of various process.

Functions of the HOD's:

- Provide necessary inputs to the principal in the councils of the HOD's meetings and ensure effective and timely implementation of the decision taken at the council of HOD's meeting.
- Convene departmental staff meeting periodically for review.

Administrative Officer (A.O.):

- The A.O. takes up the matter related to non-teaching staff to the principal who puts the matter to the management.
- A.O. manages admission, transportation, accounts, HR, Hostel, Security, maintenance, liasoning, Scholarship etc.
- A.O. reports to the management regarding all the information.

College has decentralized administrative setup with following committees.

Academic council, Alumni association, building & Electrical maintenance, college newsletter / magazine, consultancy, counselling/proctoring, ED cell, examination cell, finance, budget, hostel, industry advisory board, recruitment / board of appointments, ISTE chapter, IEEE student branch, library, NBA, PIC, Planning, monitoring & purchase, R&D, SC/ST grievance cell, sports/NSS, training & placement, cultural, IT Cell.

File Description	Document
Paste link for additional information	View Document
Link to Organogram of the Institution webpage	View Document

6.2.3 Implementation of e-governance in areas of operation

- 1. Administration**
- 2. Finance and Accounts**
- 3. Student Admission and Support**
- 4. Examination**

E. None of the above

D. 1 of the above

C. 2 of the above

B. 3 of the above

Response: A. All of the above

File Description	Document
Screen shots of user interfaces	View Document
ERP (Enterprise Resource Planning) Document	View Document
Details of implementation of e-governance in areas of operation, Administration etc	View Document
Any 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:

Wellbeing of the staff is important for effective functioning of the Institute. The institution has effective welfare measures for teaching and non- teaching staff.

Employee's Provident fund

Employee's Provident Fund (EPF) is a retirement benefit scheme. The institution has the mandatory provision of EPF and contributes the eligible amount to the respective EPF account.

ESIC:

ESIC scheme is covered for staff members both for teaching and non-teaching as a mandatory provision.

Accident Insurance:

Teaching and Non-Teaching Staff are covered under group accidental insurance scheme upto Rs. 2,00,000/-.

Gratuity:

Institution provides gratuity for all eligible employees and is linked with LIC of India. The gratuity amount is 15days of the last drawn Salary (Basic + DA) per year who have completed uninterrupted 5yrs of service.

Obituary Contingency:

Financial assistance will be given to the staff upto Rs. 10,000/-.

Maternity Leave:

College allows maternity leave to eligible lady staff as per the rules of the government.

Fee Concession:

30% Tuition Fee concession is given to the wards of the Teaching and Non-Teaching staff for the UG & PG programs.

Promotions:

Promotions are given to the faculty members, based on the qualification, services, and outcome of the performance appraisal.

Uniform Facility:

Uniform facility is extended to Drivers and maintenance staff.

Publication Incentives:

Cost of the registration and participation for the national or Internationals conferences / workshops / FDPs, etc., are given to the faculty members including national and international air fares.

Medical Facility:

Free Medical and Ambulance facility is extended for Teaching and Non-Teaching staff in the campus.

Ph.D. Contingency:

Faculty pursuing Ph.D., are provided with contingency amount of Rs. 25,000/-.

Salary Advance:

Salary Advance is given for the staff members of teaching and non-teaching upto a maximum of one-month Salary.

Staff Association:

College has a registered BITM staff association which extends financial assistance for teaching and non-teaching staff on the 10 times of the Gross Salary.

Career Growth:

Faculty members are encouraged to carry out the doctoral programmes, and are sponsored with respect to Boarding and Lodging, Registration cost, Travelling Allowance and Dearness Allowances for attending Short-term Training Programs like FDP, Workshops, Seminar, and Conferences for upgrading their skill and knowledge.

Bank & ATM Facility:

On campus full-fledged bank along with ATM facility is made available for all the employees of the Institution.

File Description	Document
Upload 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: 41.59

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
47	182	111	85	27

File Description	Document
Upload any additional information	View Document
Details of teachers provided with financial support to attend conference, workshops etc during the last five years	View Document

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: 5

6.3.3.1 Total number of professional development /administrative training Programmes 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
04	08	03	06	04

File Description	Document
Upload any additional information	View Document
Reports of the Human Resource Development Centres (UGC ASC or other relevant centres)	View Document
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff	View Document

6.3.4 Average percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP) during the last five years (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course).

Response: 13.52

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

2018-19	2017-18	2016-17	2015-16	2014-15
18	42	25	53	10

File Description	Document
Reports of the Human Resource Development Centres (UGC ASC or other relevant centers)	View Document
IQAC report summary	View Document
Details of teachers attending professional development programmes during the last five years	View Document

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

Response:

The Faculty Performance Appraisal System provides Faculty with meaningful appraisals that encourage professional learning and growth. The process is designed to foster faculty development and identify opportunities for additional support wherever required.

The institution has adopted, objective based self-appraisal for comprehensive evaluation and progress of faculty. All the faculties are briefed about the appraisal criteria & the corresponding weightage at the beginning of the academic year.

Objective Setting:

At the start of the year, Faculty agree and complete the objectives section and complete the Personal Development Plan(PDP) section.

Mid-year review: At mid-year, the performance is reviewed over the last 6 months and the appraiser adds comments and the extent achieved against each objective and update PDP section.

Year-end review: At year-end, the performance is reviewed over the last 12months and add comments and extent achieved against each objective and Update PDP section.

In line with college vision & mission, all the faculty members before the commencement of the academic year submit their objective based appraisal formats indicating the four objectives to be fulfilled for that academic year and also mention personal development plan.

Every faculty members discuss with their HOD's and frame goals & objectives for the upcoming academic year w.r.t. research, FDP, workshops, seminars, conferences and their academic performances which is line with their department vision and mission and the same is done by HOD's in consultation with principal. The principal in consultation with the management, sets the goals and the objectives in line with the vision and mission of the institution. The management, Principal and HODs are involved in reviewing the performance appraisal report and provide rating for their performance. Top management, reviews the performance of the faculty's appraisal, which reflects in increment and promotions. The decisions taken in the appraisal committee meeting is communicated to the respective members. The order copies are filed in their individual files and maintained in the office. The appraisal criteria for non-teaching staff is different from that of teaching, however, the procedure followed is similar to that of faculty w.r.t. maintenance of the lab, conduction of the lab and their lab results.

File Description	Document
Upload 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 has a mechanism for internal and external audit to ensure financial compliance. The institutional accounts are periodically audited. The observation of the auditors if any are immediately corrected / rectified.

Internal Audit: The internal audit is an ongoing continuous process. We have a mechanism to check the books of accounts, receipts & payments through tally package for keeping accounts upto date which are periodically evaluated by the management. Provisional balance sheets are drawn and expenditures are compared with the budgetary proposals and periodically reviewed.

External Audit: The external auditor is appointed by the college Governing Body and the auditor performs audit of the financial statements of the college. The financial records are audited by qualified

chartered accountant after the end of each financial year and the same is certified w.r.t income & expenditures, balance sheet and receipts and payments.

Statutory financial audit of Institute is conducted in two sessions, first in the month of October, November / December for period of six months starting from 1st April to September and second in the month of May/ June for the period from October to March. Finalization of account is completed in June and audited statement is prepared in July. The audited statement is duly signed by the Chairman and Chartered Accountant. All accounting systems are accrual basis computerized and maintained on Tally. The audited report is placed before the Governing body and the same is noted. The Institution also publishes audited financial statements on the institution website.

Finance Committee: The Governing body in its meeting held on 12.08.1999 constituted a Finance Committee as an advisory Body to advice the Governing Body on all matters connected with the finances of the college.

Annual budget for institute is prepared at the beginning of financial year, considering potential income and expenditures (recurring and non-recurring) involved for the year. Principal requests all the HOD's to send the budget proposals by specific date. The head of the department's conduct internal discussion among the staff members and forward their departmental budget proposal to the principal. The principal consolidates all the Budget proposals and the same is placed before the finance committee. Finance committee consists of all HOD's, Administrative officer and Management. The committee in turn forwards the proposals to Budget committee consisting of Administrative Officer, external financial expert, Management and the Principal prepares the budget based on the inputs received and places before the governing body for the final approval. Approved budget is communicated back to the departments.

File Description	Document
Upload any additional information	View Document

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

Response: 0

6.4.2.1 Total Grants received from non-government bodies, individuals, Philanthropers 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
Details of Funds / Grants received from of the non-government bodies, individuals, Philanthropers during the last five years	View Document

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

Response:

Mobilisation of Funds:

Mobilization of funds in the institute is through several ways. The primary source is through collection of tuition fees and other fees, transportation fee, from the students, interest and rental income. Institution is also receiving government grants from MODROB, VGST, KCTU, R&D projects, Suryamithra Grants, PMKVY, Consultancy and NAIN Opex. The details of mobilization of funds are as shown below:

UG Programs:

CET: For the year 2018-19 as per the seat matrix the CET quota is 45%, COMED-K is 30% and 25% is Management Quota. The fee structure for CET is Rs. 59,400/- per year for all the engineering Programs and the COMED-K fee structure is Rs. 1,30,680/- and Management Quota fee structure is Rs. 75,000/- to Rs. 1,30,680/-

PG Programs:

As per the Govt. circular 50% of the intake is with the Govt. and 50% is with the Management and the fee structure for the Govt. is Rs. 55,390/- (MBA) and Rs. 65,390 (M. Tech) and for the Management is Rs. 75,000/-.

Over and above Tuition Fee, Other fee for UG & PG program is Rs. 16,000/- and Rs. 10,000/- respectively.

Fees & Income Details 2018-19 (In Lakhs)

PROGRAMS	TUITION FEES	OTHER FEES	TOTAL FEES
UG PROG.	1845.55	377.59	2223.14
PG. PROG.	206.29	29.04	235.33
TOTAL	2051.84	406.63	2458.47

Misc. Income:176.06

Grants Received from 2014-15 TO 2018-19: 105.26(in Lakhs)

BITM NAIN OPEX FUND	1.57
BITM PMKVY-TI	0.03
MODRAB GRANTS	11.5
R&D PROJECT GRANTS	49.83

SURYAMITRA	0.06
VGST GRANT	42.03
IEEE STUDENT BRANCH BITM	0.24
TOTAL	105.26

REVENUE THROUGH CONSULTANCY	
YEAR	AMOUNT RECEIVED in Rupees
2018-19	97,200.00
2017-18	22,700.00
2016-17	3,00,000.00

Utilization of Resources:

The financial resources of the Institute are sufficient. Considering inputs from the Department HOD's, members of Governing Body and the management, the budget is prepared, funds are allocated and utilised as per the budget. Any over/under utilisations of funds are looked into and appropriate measures are taken to rectify the same by reallocation.

The details of budget and actual expenses are shown in the table below for the financial year 2018-19.

Budget v/s Expenditure for the year 2018-19 (in lakhs)

Description	Budget	Expenditure
Infrastructure	126.10	138.19
Library	38.00	31.43
Laboratory Equipment	34.00	51.00
Software's	4.0	1.89
Laboratory Consumables	8.75	13.29
Salary (Establishment Expenses)	1486.20	1409.06
Maintenance	111.40	121.36
Academic maintenance	12.55	17.91
R & D	6.0	0.59
Travelling Expenses	17.65	21.87
Miscellaneous	351.03	363.98
Others	8.6	5.78
TOTAL	2204.28	2176.35

File Description	Document
Upload 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 the institution was constituted which consists of 25-member committee, principal as a chairman and representatives from staff and students. The Academic Audit of the Departments is conducted by Internal Quality Assurance Cell (IQAC) and its objective is to improve and sustain the academic and administrative performance of the Institution. Academic Audit is conducted by IQAC once in a semester. IQAC will be evaluating the Departments on the following Criteria.

1: Implementation of OBE & Obtaining NBA:

To achieve goals and objectives the IQAC took initiative for conduction of various programmes: Institution conducted Instructional Design and Delivery system by NITTTRC Chennai from 18/12/2017 to 23/12/2017. The course covered the teaching learning process, defining instructional objectives, instructional planning and methods, technology enabled teaching learning process, classroom management, fundamental of

student evaluation and simulated teaching sessions. Faculty teaching demonstration was recorded and individual faculty strength and weakness were shared. The corrective measures and new teaching methodologies were inculcated during the course of workshop.

Proctoring system was introduced to improve the overall performance of the students. Department faculty were allotted 20 students to monitor, Guide & motivate them in all aspects.

EDUWIZE a real time attendance system was introduced to monitor the regularity of students which helped the ward's parents about their regularity in attending the class.

Design Based Experiments, MoU with several companies namely Infosys Ltd, Wipro Ltd, IBM India Pvt Ltd, Harita Techserv (TVS Company)' etc. enabled the students to take up certification & skill development programmes which in turn helped to improve the placements. The above good practises actionized in the institution helped to move towards OBE and obtain NBA accreditation for three UG programs namely CSE, ECE & ME.

2: Establishment of Startup & Incubation Centre(BRICS):

In line with Hon'ble Prime Minister Shri Narendra Modi vision to make India as a start-up, innovators and young entrepreneurs' hub IQAC cell initiated to setup incubation centre in the campus. Institution in collaboration with KITS (Karnataka Innovation and Technology Society, Govt. of Karnataka) setup NEW AGE INCUBATION NETWORK (NAIN) to foster young entrepreneur's mind and incubate start-ups at the institution. Totally ten student's projects will receive a total fund of Rs. 30.00Lakhs. Each student project shortlisted by the KITS, will receive a funding of Rs. 3.0Lakhs each. College has received a funds of Rs. 10.0Lakhs for the operational expenditure.

Boot camps and Ideathon were conducted in which 532 students participated from Ballari district. 42 students participated for spot Idea Pitching & 10 teams were selected for finals which was held at Bangalore in the month of December 2018 at NASSCOM. On account of the above initiatives and efforts of the incubation centre Mr. Ansh Agarwal, student of ECE first year, participated in the start-up program at IIT-Kanpur sponsored by institute. His idea "FREE BIRDIES" was accepted and received funding of Rs. 25Lakhs. Mr. Kaushik of 3rd year CSE dept. was successful in tying up with Aries solution Pvt. Ltd.-Hyd. for his drone project namely "VAJRAYUDA" for the women safety.

File Description	Document
Paste 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 and recorded the incremental improvement in various activities (For first cycle - Incremental improvements made for the preceding five years with regard to quality For second and subsequent cycles - Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives)

Response:

The institution has an IQAC cell which assess the teaching and learning process in the institute and recommend the steps to be taken for improvements.

1. Technology Learning Centre Labs (Mission 10X Learning Centre, E-Yantra Robotics lab.):

The Objectives of the Technology Learning centre lab are for Deeper Learning that enables to apply Higher Order Thinking Skills in real life scenarios, Communication that enables to generate shared understanding through oral or written or both types of communications and Collaboration to achieve higher goals as a team, at the same time developing the team members so as to create more human potential and also encourages entrepreneurship in students to develop next generation products. The first batch was formed in Feb-2014 with 30 students working on inter disciplinary projects with students from different engineering programs. In the past four years 194 students have been trained out of which 157 students got placed and 5 students opted for higher studies. Based on this input the IQAC took the initiative to continue this technology learning centre and subsequent years, 150 students have completed the inter disciplinary projects and 81% of the students have been placed since its inception, which in turn enabled to improve the placements every year.

2. E-Yantra:

It is sponsored by MHRD and National Mission on Education through ICT Program. An initiative by IIT Bombay that aims to create the next generation of embedded systems engineers with a practical outlook to help provide practical solutions to some of the real-world problems. Faculty members namely Mr. Naseeruddin, Mr. William Thomas, Mr. Manjunath. G, Mr. Prabhakar were trained for 6 months at IIT Bombay and through online. After successful completion of the training, E-Yantra lab was established in the institution on 27/08/2016 in the department of ECE. At the first year 4 number of students were trained through E-Yantra, and also certified. All the students were placed and 4 number of students were able to get placed in product based companies.

Based on the above results the IQAC took the decision to continue and integrate the E-Yantra lab to train the students regularly in the area of Robotics. As on today 132 number of students have made use of E-Yantra Lab which has enabled the students to get placed in product based companies with higher pay package also the guidance and collaboration from IIT-Bombay has yielded innovative projects which has created deep impact in society and hence giving a brand visibility to the institute. To site an example, Robotic Invigilator was the product from E-Yantra lab and the same can be viewed in the following link

provided in the additional information.

<https://youtu.be/Z4QIOCDMncI>

3. Course Enrichment activities and student publication:

The course enrichment and student publication are carried out for students so that they can enhance their knowledge to think out of the box, will help them in building research mind-set. The Add-on programs has enriched the students to get placed in reputed companies and publish papers in quality conferences / journals.

File Description	Document
Upload any additional information	View Document

6.5.3 Quality assurance initiatives of the institution include:

1. Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analysed and used for improvements
2. Collaborative quality initiatives with other institution(s)
3. Participation in NIRF
4. any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)

E. None of the above

D. 1 of the above

C. 2 of the above

B. 3 of the above

Response: A. All of the above

File Description	Document
Upload e-copies of the accreditations and certifications	View Document
Upload details of Quality assurance initiatives of the institution	View Document
Upload any additional information	View Document
Paste web link of Annual reports of Institution	View Document

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1 Measures initiated by the Institution for the promotion of gender equity during the last five years.

Response:

1. Safety and Security
2. Common Room
3. Counselling

The college has a zero tolerance towards any discrimination or harassment meted out to the female students and staff. It ensures a safe, secure, comfortable environment where the students and staff can pursue their academic dreams without any inhibition.

1. Safety & Security:

The Prevention of Sexual Harassment Committee has been constituted in the college under “The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013” referred to as “The Act. 2013”. They meet on need basis to address any complaints from students, teaching and nonteaching members and takes necessary action. The College has a zero tolerance policy towards any such transgression.

Anti-Ragging Committee is formed as per the AICTE/ VTU guidelines, and Squads make sure that there are no instances of ragging anywhere in the girls’ hostel or anywhere in the campus. Anti-ragging posters are prominently displayed at all prominent places with helpline numbers. The contact numbers of police station, ambulance, doctors are displayed in all departmental notice boards. Main gates are guarded with CCTV cameras and entry points are screened along with alcohol detection. Safety and security of all the students and staff is ensured. In case of Medical Emergency, ambulance is available in the campus for 24hours. Doctor is also available for medical care and first aid.

The faculty members conduct meetings to resolve student's issues related to medical, hostel, academic facility etc. A Dispensary facility available for students to exclusively use during sickness with a qualified female nurse. Student's counselling is one to one for understanding their issues through Proctorship / Mentorship program and parents meet.

Napkin dispenser & incinerator is made available in the ladies’ washrooms. Do’s and Don’ts of safety charts are displayed in the Laboratories. Fire extinguishers and hydrants are placed strategically.

2. Common Room:

Common room is available for students at the Library and near the rest rooms of the campus. Library common room has access to Wi-Fi and E-Resources. Separate Rest room facilities are available for both boys and girls with required facilities. Boys hostel and girls hostel have common rooms for students practice for intra and inter-institutional competitions and cultural activities. Separate hostel for boys and girls with proper safety and security provisions are arranged. Reading room is available at central library

common to all within the campus.

3. Counselling:

BITM has consistently strived to address contemporary issues like gender, women concern, safety and security etc. through the various seminars, workshops and awareness programs. The anti-ragging and prevention of sexual harassment committee heads are vigilant and always available for students to bring forth their concerns and have them addressed amicably. The head of the institution monitors all activities and training programs related to safety and security organized in the college. Experts are invited from the industry to conduct workshops and various sessions related to women safety like Karate (self-defence), cyber-crime and health & nutrition.

File Description	Document
Link for specific facilities provided for women in terms of: a. Safety and security b. Counselling c. Common Rooms d. Day care center for young children e. Any other relevant information	View Document
Link for annual gender sensitization action plan	View Document

7.1.2 The Institution has facilities for alternate sources of energy and energy conservation measures

- 1.Solar energy
- 2.Biogas plant
- 3.Wheeling to the Grid
- 4.Sensor-based energy conservation
- 5.Use of LED bulbs/ power efficient equipment

E. None of the above

D. 1 of the above

C. 2 of the above

B. 3 of the above

Response: A. 4 or All of the above

File Description	Document
Geotagged Photographs	View Document
Any other relevant information	View Document

7.1.3 Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 500 words)

- **Solid waste management**
- **Liquid waste management**
- **Biomedical waste management**
- **E-waste management**
- **Waste recycling system**
- **Hazardous chemicals and radioactive waste management**

Response:

Four of the Above.

Solid Waste Management:

The institution has sufficient quantity of dust bins for degradable and bio – degradable within the campus. The Dustbins are earmarked as Dry & Wet Waste. Dry Solid & wet waste generated in the campus is collected and scientifically segregated as per the norms of the State Pollution Control Board. The same is dumped into the separate institution owned Swachh Bharath Van and taken to municipal corporation landfill dumping yard for disposal.

Liquid Waste Management:

BITM Campus has a network of underground sewer lines and the sewage disposal is connected through a common line which diverts the entire sewage to a single source to treat the same. Waste water treatment is done through 325 KLD Sewage Treatment Plant built at a cost of Rs. 60Lakhs and approved by Karnataka State Pollution Control Board. The contaminants are removed and treated water are used for gardening and other purposes. Roof top rain water harvesting system with recharge pit has been implemented.

Liquid waste generated from the Chemical Laboratories are treated through a different process based on type of liquid waste. Chemicals are treated after neutralising with water and treated in UGD plant having a biological treatment. Waste water treatment is an important initiative for the betterment of the society and future of mankind. Chemical treatment is done using through PH neutralisation. Sodium Hydro Chloride is used to kill the harmful bacteria.

Biomedical Waste Management:

The Institution has a Medical facility for the Staff and Students. The Bio-Medical waste generated is very minimal. Institution has a tie-up with Basaveswara Medical Centre (BMC) – Ballari, any waste that is generated is handed over to Basaveswara Medical Centre(BMC) – Ballari which in turn has an MoU with M/s Suryakanth Environmental Technologies ® which disposes the Bio-Medical Waste Scientifically as per the norms of the Government.

E-Waste Management:

Institution has an MoU with Sogo-Energy Pvt Ltd which is an Govt Approved E-Waste Collector & Recycling company. E-Waste is segregated and disposed through SOGO-Energy Pvt. Ltd. Bengaluru. The

same agency which is approved by Karnataka State Pollution Control Board, scientifically segregates and recycles the E-Waste. The recycling agency who in turn collect the E-waste and recycles as per Govt. norms.

Waste Water Treatment:

Sewage water from entire college is collected through the underground pipelines. After treating, water is passed through the sludge settling tank, and the same is used for our gardening from a separate collection tank.

Hazardous Chemicals & Radioactive Waste Management:

The quantity of Chemical Waste generated is very minimal. Before disposal the chemical waste is diluted. A certain amount of coagulants is added to facilitate precipitation. The treated effluent is drained into the UGD system, which in turn undergoes a Biological treatment through Sewage Treatment Plant and water is reused for watering of Plants. The Sludge collected at the bottom is sealed in an airtight container and handed over to the authorized chemical waste collector.

File Description	Document
Link for Relevant documents like agreements/MoUs with Government and other approved agencies	View Document
Link for Geotagged photographs of the facilities	View Document

7.1.4 Water conservation facilities available in the Institution:

- 1. Rain water harvesting**
- 2. Borewell /Open well recharge**
- 3. Construction of tanks and bunds**
- 4. Waste water recycling**
- 5. Maintenance of water bodies and distribution system in the campus**

E. None of the above

D.1 of the above

C. 2 of the above

B. 3 of the above

Response: A. Any 4 or all of the above

File Description	Document
Geotagged photographs / videos of the facilities	View Document
Any other relevant information	View Document

7.1.5 Green campus initiatives include:

1. Restricted entry of automobiles
2. Use of Bicycles/ Battery powered vehicles
3. Pedestrian Friendly pathways
4. Ban on use of Plastic
5. Landscaping with trees and plants

E. None of the above

D. 1 of the above

C. 2 of the above

B. 3 of the above

Response: B. 3 of the above

File Description	Document
Various policy documents / decisions circulated for implementation	View Document
Geotagged photos / videos of the facilities	View Document
Any other relevant documents	View Document

7.1.6 Quality audits on environment and energy regularly undertaken by the Institution

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

E. None of the above

D.1 of the above

C. 2 of the above

B. 3 of the above**Response:** A. Any 4 or all of the above

File Description	Document
Reports on environment and energy audits submitted by the auditing agency	View Document
Certification by the auditing agency	View Document
Certificates of the awards received	View Document
Any other relevant information	View Document

7.1.7 The Institution has disabled-friendly, barrier free environment

1. Built environment with ramps/lifts for easy access to classrooms.
2. Disabled-friendly washrooms
3. Signage including tactile path, lights, display boards and signposts
4. Assistive technology and facilities for persons with disabilities (Divyangjan) accessible website, screen-reading software, mechanized equipment
5. Provision for enquiry and information : Human assistance, reader, scribe, soft copies of reading material, screen reading

E. None of the above**D.1 of the above****C. 2 of the above****B. 3 of the above****Response:** A. Any 4 or all of the above

File Description	Document
Policy documents and information brochures on the support to be provided	View Document
Geotagged photographs / videos of the facilities	View Document
Details of the Software procured for providing the assistance	View Document
Any other relevant information	View Document

7.1.8 Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance

and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities (within 500 words).

Response:

Institution has made considerable amount of effort to cater the students from different states, caste, creed & religion. At the beginning of the academic year all the first year students are taken through an 15days induction program, which highlights about the importance of inclusiveness, respect for different culture, caste and creed. Elaborated human values and ethics are discussed and debated during the induction program. All the staff members compulsorily go through an ISO induction program, which highlights about inclusive environment. Students are informed during the induction program about the usage of social media and ill effects of posting inflammatory messages in social media. Institution organises special student development programs on Fundamental of Computers for the students coming from the rural background and having low computer skills. Every year institution sponsors NSS students to attend National Integration Camp. The same students take a lead role in organising several extension activities for the upliftment of the society at large in the form of “Sadhbhavana Diwas”, “Mathrubhasha Diwas”, “National Unity Day”, “Electoral Literacy Day” & “Gandhi Jayanthi”.

Sadhbhavana Diwas is regularly organised on 20-August of every year to highlight the importance of communal harmony, peace, national integrity and unity in diversity. Mathrubhasha Diwas is organised on 21st February of every year to sensitize the students and staff on the importance of preserving mother tongue and promoting other Indian languages for development and progress of the nation. National Unity Day is celebrated every year on 31st October to educate the staff & students and reaffirm the inherent strength and resilience of our nation to withstand any threat to the unity integrity and security of our country. Electro Literacy Day is organised to impart awareness among the youth of the nation with respect to active participation in electoral process. Gandhi Jayanthi / International Non-violence Day is celebrated every year to highlight importance of Peace, Unity and Diversity. Institution organises annual day event where one day is marked as an Ethnic Day, where students adore with different costumes representing culture of different states, caste & creed. Students organises programs like cook without fire event to represent different food habits of the nation. Each student is provided with student code of ethics which highlights about representation and also respect for national, state and districts rules and regulations.

Institution celebrates national festivals such as Independence Day, Republic Day & Gandhi Jayanthi, where Students and staff are encouraged to deliver talks and speeches on national unity, communal harmony and bringing a sense of belongingness and national integrity among the staff and students. Institution celebrates International Women’s Day on 08th March of every year to highlight the importance of Women contribution to the society, sensitization of gender equality and respect for women.

File Description	Document
Link for supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	View Document

7.1.9 Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens (within 500 words).

Response:

To achieve the first objective, teachers were oriented on various constitutional and Universal Human values which are imbibed in the constitution and the focus of teaching and learning was on the constitutional values and objectives. To achieve this task, session was planned, structured and designed to teach the basics of Constitutional and Universal Human values and objectives to the faculty of the institution. Institution conducts 15days inductions program for first year students. During the student induction program, topics on Universal Human Values, Professional Ethics and highlighting information with respect to Fundamental duties, directive principles and responsibilities of citizens for developing the nation were conducted by Senior faculty members and other resource persons during the induction.

As a part of the University curriculum, constitution of India and professional ethics(CIPE) is taught as a credit course for the first year engineering and second year lateral entry students. Moreover, teaching about CIPE covers all modalities, which to sensitize a person, awaken his/her conscience and develop an attitude of behaving decently in a social set up with the following outcomes.

- 1.To create awareness about the constitutional values and objectives written in the Indian Constitution.
- 2.To ascertain the views of student teachers regarding the achievement made in respect of each of the values /objectives in the present context in India

Every year institution celebrates Republic Day and Independence Day to constantly remind the faculty and the students with respect to the sacrifices made by our freedom fighters and recollect the contributions made by Dr. B. R. Ambedkar, father of our Indian constitution. Students and staff speak about fundamental rights & duties, Human rights and directive principles of the constitution. Institution conducts essay writing competition on Republic day and prizes were distributed to the deserving candidates. Institution celebrates constitution day as “Samvidhan Diwas” on 26th November of every year. During this day all the staff and students administer oath to follow and protect the constitution of India.

The constitutional values that are reflected in the entire Constitution of India, its preamble, which embodies the fundamental values and the philosophy on which the Constitution is based are sovereignty, socialism, secularism, democracy, republic character, justice, liberty, equality, fraternity, human dignity, unity and integrity of the Nation are discussed and spoken during the constitution day celebrations at the institution. Institution organizes awareness program on “Electoral Day” and conduct rally at nearby village to sensitize the public with respect to voting and participation in the democracy. Institution conducts debate competition during the annual day on various subjects related to executive, judiciary and the Legislation.

File Description	Document
Link for details of activities that inculcate values necessary to render students in to responsible citizens	View Document

7.1.10 The Institution has a prescribed code of conduct for students, teachers, administrators and

other staff and conducts periodic programmes in this regard.

1. The Code of Conduct is displayed on the website
2. There is a committee to monitor adherence to the Code of Conduct
3. Institution organizes professional ethics programmes for students, teachers, administrators and other staff
4. Annual awareness programmes on Code of Conduct are organized

E. None of the above

D. 1 of the above

C. 2 of the above

B. 3 of the above

Response: A. All of the above

File Description	Document
Details of the monitoring committee composition and minutes of the committee meeting number of programmes organized reports on the various programs etc in support of the claims	View Document
Code of ethics policy document	View Document
Any other relevant information	View Document

7.1.11 Institution celebrates / organizes national and international commemorative days, events and festivals (within 500 words).

Response:

Independence Day (15th–Aug): The institution celebrates every year independence day. Management, Principal, Staff, NSS Volunteers and Students of the institution participate in flag hoisting. Students speak about the sacrifices made by our freedom fighters.

Teachers Day (05th – Sept): Students take lead in organizing the celebrations by showering love and affection towards the staff members for their service and sacrifice. Principal address all the staff members and speak about the achievements and qualities of Sri. Sarvepalli Radhakrishnan. Students distribute sweets to all the teaching and non-teaching staff.

Engineers Day (15th – Sept): It is Celebrated every year to mark the birth anniversary of Sir. M. Visweswaraiiah and technical talks are delivered by reputed engineers from the society. Quiz program is organised by the departments to recollect the engineer’s contributions.

International Day for Preservation of Ozone Layer (16th – Sept): NSS Volunteers organise awareness

in classes on the importance of Ozone Layer and products which effects the Ozone Layer.

Gandhi Jayanthi & Lal Bahadur Shastri Birth Anniversary (02nd – Oct): Students and staff members recollect the contributions made by father of the nation Mahatma Gandhi and Lal Bahadur Shastri w.r.t. importance of peace, non-violence and hygiene. Swachh bharath program is conducted by cleaning the campus and surrounding places.

Karnataka Rajyothsava Day (01st – Nov): Students, Staff and the Management recollect the importance of celebrations of statehood and Regional Language. Students speak about importance of kannada and the personalities for their contributions in the area of Arts, Science & Literature.

World Aids Day (01st – Dec): NSS Volunteers take a lead role in spreading the awareness on prevention of AIDS at the nearby villages. All the staff members wear the Red Ribbon on that day to empathize with patients, and recognize the contribution made by the district administration.

National youth day on occasion of Swami Vivekananda Jayanthi(12th – Jan): Student recollect the message put forth by Swami Vivekananda and the role of the youth in the development of the Nation and the Society.

Republic Day (26th – Jan): Students, Staff and Management hoist the National Flag and recollect the importance of protecting the constitution and contribution made by Dr. B. R. Ambedkar in framing the constitution.

International Women’s Day (08th – March): Reputed Women personalities are invited for the talks. The women achievers are awarded on this occasion.

File Description	Document
Link for Geotagged photographs of some of the events	View Document
Link for Annual report of the celebrations and commemorative events for the last five years	View Document
Link for any other relevant information	View Document

7.2 Best Practices

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

Response:

The Institution is recognized for best practices as per for Employability, Mentoring & Industry Interface, Teaching & Learning Process, Meeting with Regular Stakeholders, Regular Training with respect to Communication and Soft-Skills, Internships, Incubation Labs, Technology Learning Centres, FMS Lab, & Effective Alumni interface through Alumni portal on 26th Nov-2018 in Times of India as mentioned in the

below link.

https://www.aicte-india.org/flipbook/Best_Practices/#p=4

Best Practice-1

1. Title of the Practice: INFOSYS Soft-skills Certification.

2. Objectives of the Practice:

As the industry emphasizes on good soft skill and technical skills, which are essential for any graduate to have a successful career, the institution introduced Soft skill certification through the Infosys Campus Connect Program. The objective of Infosys Soft-Skills Certification program is to train 2nd year engineering students on Business Communication Skills and presentation, which will enable them to perform better in their careers. The underlying principles behind this practice are to ensure that the engineers and the management students passing out from our institution are equipped with good communication and presentation skills, enabling them to do better in the placements.

3. The Context:

The features of this certification program are to provide hands-on and real-life experience with respect to soft skills and their presentation skills. The trainers ensured that each and every student is assessed individually and the certification is issued along with the scorecard. The challenges faced were convincing the students from rural backgrounds to take up this soft skills certification. And this was addressed by conducting orientation and motivation programs with renowned speakers from industry namely Mr. Sundar K.S., Infosys Campus Connect Head – Mysuru & Mr. Vinod Nayak from pathfinder.

4. The Practice:

The institution constantly takes feedback from the industry. The industry had regularly mentioned the improvement of the students' soft skills to increase the placement percentage. Since college is an advanced partner for the Infosys campus connect program. The training and placement team took the initiative to conduct Infosys Soft Skill Certification for the 2nd year students. Student orientation program was conducted by Mr. Sundar K. S., Infosys Campus Connect Head, Mysuru, who spoke about its importance and how this program will enable all the students & in particular rural students to become better presenters. The training program was planned and external professional trainers executed the Infosys Soft Skills Module and assessments were carried out continuously. 523 students were trained for 100 hours on presentation skills, email writing skills and verbal ability. At the end of the training program students were given assignments to complete and a certification test was conducted by Infosys. The certificate received by the student is well recognized by the industry in India and abroad. The initial constraints faced by the institution were in convincing the rural students to take up the program. And the same was addressed through the orientation program as mentioned above.

5. Evidence of Success:

The number of students who took the program were 523 and 430 students were certified by Infosys. 82% of students were certified by Infosys in Soft Skills. At an average of 320+ students are campus placed in last five academic years. More than 20 companies are visiting for campus recruitment. Due to the above

factors more and more companies have signed an MoU for Skill Development. Example: Haritha Tech Serv, IBM, Wipro & etc. Institution has placed students in product companies, which insists on good communication and technical skills.

Example: Ms. Sneha K, placed in Adobe Systems with 27.7Lakhs per annum. Mr. Mandeep Singh, placed in BYJU's with Rs. 10.0Lakhs per Annum. Ms. Firdous, placed in TCS with 7.0Lakhs per annum package. Mohd. Amjad, placed in verifone, with 8.0Lakhs per Annum & Mr. Shreyas antin, placed in great learning with Rs. 7.0Lakhs per annum.

6. Problems encountered and resources required:

The initial problems faced by the institution was in convincing the students who are from a rural background and this was addressed through the orientation program conducted by Mr. Sundar K. S. from Infosys, who motivated the students to take up this program. Selecting the right training company to train the students at a larger scale was addressed by evaluating English professional trainers based on their experience.

7. Notes:

The above practices can be implemented for the institutions which are located in the backward regions, as students from rural areas lack in communications and soft skills

Best Practice-2

1. Title of the Practice: Proctoring System.

Each staff is allocated 18 to 20 students, who counsel and mentor them for their academic and co-curricular progress. Each student is provided with a proctoring book, where the proctor will discuss with the student and log all his previous academic details and his personal details. Students meet the proctors to discuss any problems faced by them both academically and personally. Proctors also log their examination details and look into the revaluation results aspects for the weaker students. Proctors regularly call the students' parents as and when needed.

2. Objectives of the Practice:

The objective of the above practice, is to allocate 18-20 students to each proctor. Each student is provided with a proctoring book to log the information. The underlying principle is, the Proctor (Teaching faculty) who is also the class teacher will regularly interact to counsel and monitor the students' progress with respect to academics and students' professional growth. The Proctor regularly interacts with the parents and updates the students' progress. Chief Proctor (HOD) gets the overall information from their department proctors. The intended outcome is to improve faculty-student communication, results, placements, R&D, and participation in co-curricular and extra-curricular activities.

3. The Context:

The challenges faced initially were the reporting mechanism and taking students into confidence with respect to its importance and benefits. Induction and orientation program for every student was conducted by the department heads to explain the importance and benefits of the proctoring.

4.The Practice:

The uniqueness of this proctoring practice is the faculty and the students are collaborating for the improvement through counseling and proctoring. This proctoring is not only to improve academics but also counsel with respect to higher studies, participating in various competitions, overcoming the students' emotional challenges, and for their overall development. The constraints initially faced by the faculty are taking the students into confidence, so that the students express their concerns without inhibitions. Girl students were not that expressive with the male faculty and care was taken to inform the students to express their concern with their department's female faculty.

5.Evidence of Success:

The overall results of the institution improved by 3.46% and number of students participating in co-curricular and extra-curricular activities were 1811 against the total number of students. The number of students who have published papers are 82. Only few students are dropping out of the Engineering Education due to effective counselling and proctoring. This is also resulted in better coordination between and student and teacher in various curricular and co-curricular activities. The above results indicate that, by taking students into confidence by removing the inhibitions, the students freely expressed their concerns, which enabled the proctor to suggest corrective actions and encouraged the students to improve academically and in extra-curricular activities.

6.Problems Encountered and Resources required:

The initial challenges encountered were, the proctors were not sufficiently trained to counsel the students and the students were hesitant to express their concerns to the Proctors. All the proctors were trained in counseling techniques by the senior faculty members in their departments. Faculty development program by NITTTRC also covered topics on Student psychology and understanding student differences. These two workshops empowered the proctors to counsel the students and take them into confidence. Awareness program on the importance of proctoring was conducted by the department heads and students were explained during the 1st year induction program, about the importance of proctoring and its benefits.

7.Notes(Optional):

This practice can be adopted across the higher education institutions by training the faculty in counseling techniques and faculty can become a better proctor.

File Description	Document
Link for Best practices in the Institutional web site	View Document

7.3 Institutional Distinctiveness

7.3.1 Portray the performance of the Institution in one area distinctive to its priority and thrust within 1000 words

Response:

In line with Vision, Mission, Quality Policy & Objectives the Priority & thrust is; Promoting prosperity of stakeholders by **expansion, excellence and equity for achieving rapid and inclusive growth for betterment of society & the nation through effective teaching & learning process.**

The institution founders envisaged the vision of providing competent & skilled workforce to the society by imparting quality education and training for the overall development in the Hyderabad Karnataka backward region [article 371J] of Karnataka as per Dr. DM Nanjundappa Committee report. The institution being an ISO certified follows systematic educational practices with focus on producing quality engineers & management students for the challenges of the changing world. Some of the initiatives envisaged here as follows:

The institute specially emphasizes building strong bond between student & teacher with clear emphasis on Outcome Based Education (OBE), Experiential & Student Centric Learning. Institution has placed a special focus for bridging the gap between Industry and Academia through Industry Institution Interaction & constant development of faculty as per the technological changes. A wide variety of teaching and learning techniques are employed to impart knowledge and skills to the students. The campus facilities are continuously augmented and strengthened with due care for environment. Innovation Labs, Incubation Centers, CoE's and state of the art laboratories in collaboration with industry give the necessary platform for the students to become industry ready. The Institution has consciously put strong emphasis and close monitoring of the student through proctoring & mentoring. Remedial Classes, Career Guidance, institutional sponsorship for internal & external curricular, co-curricular & extracurricular activities, parent teacher's meetings, alumni meet along with extension activities give a wholesome education that enables to compete and contribute to the society.

The institute has maintained Good campus placements. The departments Laboratories are equipped with state of the art equipment & infrastructure facilities. The institute strength is Student-Teacher Bond, Qualified & Experienced faculty with special focus on students from rural backgrounds. Due care and encouragement is given through various clubs, student chapters & forums for promoting Research, Innovation & entrepreneurship for staff & students. The outcome of effective teaching & learning process can be measured through placements, university rankholders & alumni who had an impact on the society through their contribution to the society & the institution.

Institution has given a tremendous thrust for the skill development which has resulted in an average 320+ students being placed in last five years from reputed multi-national companies. Some of the noted placements in last two years are: Ms. Sneha K[2020 CSE] is placed in Adobe Systems with a CTC of Rs 27.7 Lakhs per annum is the highest in the entire North Karnataka Region, MS. Firdous Afreen[CSE 2020] is Placed in TCS with a CTC of Rs 7.02 Lakhs PA, Mr Mohd Amjad[ECE 2019] is placed in Verifone with a CTC of Rs 8.0 Lakhs PA, Mr Shreyas N Antin[2019 ECE] is placed in GreatLearning with a CTC of Rs 7.0 Lakhs PA, Ms. Jinka Divya Jyothi [2019 Mechanical] & Ms. Rachana [2019 Mechanical] were placed in Autoliv with a CTC of 4.44 Lakhs PA, Ms. Meghana K[2019 EEE] is placed in JSW Steels with CTC of 4.64 Lakhs PA. D.R Veerasha [2001 Mechanical] is working at Indian Space Research Organization as a Scientist SF. He was instrumental in developing the necessary systems for the Successful Mars Mission of our Country. Mr. Raghavendra HM [2001 Mechanical] is working as Scientist SF at ISRO and has worked on the prestigious Chandrayan-1 mission of our country. Both the Alumni have constantly delivered talks with the students & were instrumental in organizing ISRO's Vikrama Sarabhai Centenary Celebration Program at our Institution in 2019-20 where 5000 students from various schools & college participated in

the event. Their contribution is well acknowledged in the society. Mr Paul Rohin Singh [2005 CSE] is working as the Head of the IBM Security Business unit responsible for providing necessary consultation for augmenting secure & safe information's systems across the Globe. Mr Ganeshan A [2002 CSE] working as a Senior Technological Lead & Mr Vishwanath Galgi [2005 CSE] working as a Senior Design Engineer have been the shining examples for their contributions to the society.

Mr Padmakar Guduthur [2003 ECE] is working as an Key Project Manager for in Robert Bosch Engineering & Business Solutions Ltd. He was instrumental in developing Driver Assistance Systems for Commercial Vehicles Division. Mr. Beerappa Utagi [2009 MBA] is the cluster manager at ICICI Bank-Bangalore. Ms. Shilpa Gangavathi [2010 MBA] is the Senior Analyst at Honeywell Bangalore. Mr Prashanth N[2011 Mechanical] working as an Senior Design Engineer in Tata Elxsi Ltd earned a Patent for his work on 'Sensor Horn Mechanism adopt in Steering Wheel in Cars'. Mr Rajesh Kumar [2011 MBA] is working as Senior Associate for Capgemini Business Services (India) Ltd. Mr Suneet Patil [2012 CSE] is a technology evangelist for Amazon-Alexa Community & working as an technical lead at Tieto-Evry. Mr Manjunath [2012 EEE] is working as a Asst. Executive Engineer GESCOM, KPTCL. Mr Prashanth Pandey[2011 ECE] is working at Election Commission of India. Mr Payaram Gopi Chaudhary[2014 ECE] is working as an Merchant Navy Officer. Ms. Drakshayani [2019 Civil] is working in TESCO as an Associate Quantity Surveying of the Civil Engineering department. Mr Shravan Gupta [ECE 2005] is a successful entrepreneur and MD at Enspar Energy Pvt Ltd. Mr Reddy Prasad [2006 Mech.] is the Founder and MD of Sunslav Technologies. Mr Nakul Raj Reddy[2012 Mechanical] is the founder and CEO of Color Stonz creative studios which is providing digital content learning for government colleges for class 11th and 12th. Mr Veeresh G [2013 MBA] is the Chairman of Focus Advanced Switch Gear, Bangalore. The above alumni have contributed tremendously for the national development. The Institution started with just 97 students and 12 employees has grown to a strength of 3535 Students & 376 employees in a short span of 23 years is the direct testimony of the effective teaching and learning process and its growing trust among the stakeholders including the society.

File Description	Document
Link for appropriate web in the Institutional website	View Document
Link for any other relevant information	View Document

5. CONCLUSION

Additional Information :

Prominent achievements & milestones of the Institution are:

- An ISO 9001 Certified Institution since 2005.
- Obtained NBA Accreditation for three undergraduate program.
- Recognized as an Advanced Partner College by Infosys Ltd.
- Consistently placed at an average 320 students over the past five years.
- Institution has secured Seven University Ranks in the last five academic years.
- Nominated by AICTE for Best Green Campus Award for adopting green practices such as -Roof Top Solar plant, Sewage Treatment Plant, Rain Water Harvesting, Waste Segregation, and E-Waste Disposal & Energy Auditing.
- One among the three colleges in Karnataka recognized for “Best Practices” by AICTE New Delhi on 26th November 2018.
- Institution is Rated ‘AAA’ by Careers360 Magazine-The Best Colleges Rating for the year 2019, 2018, 2017 & 2016.
- Institution is ranked 59th Best Private Engineering College in South Zone-The Week Survey 2019.
- Institution is ranked 89th Best Private Engineering College in All India Level-The Week Survey 2019.
- Institution is Rated A++ by Silicon India Magazine –Best B-School Ranking 2019.

Concluding Remarks :

Overall Conclusive Explication about the Institutions functioning.

Institution was established in the year 1997 with a clear objectives to provide quality education by having a transparent mechanism and decision making process in the best interest of all the stakeholders.

Since 2005, institution is an ISO certified and has followed open management and access policy. Principal, teaching staff, non-teaching staff & maintenance staff have access to decision makers including management to take opinion and decisions. This is quite evidenced in the organization chart mention in the link <https://www.bitm.edu.in/wp-content/uploads/2020/05/ORGANIZING-CHART.jpg>

The Organisation chart clearly indicates the decentralized approach in terms of decision making, delegation and responsibilities of the individuals. All administrative bodies are represented by the faculty and collective decisions are taken. Faculties are represented in Governing body, Finance and Budget committees, IQAC and Recruitment committee.

In addition to the Top Down approach, institute has given prominence for all the employees in the form of bottom up approach style of management where employees are free to express during the Town Hall meetings in presence of management which is held twice in a year. Faculty appraisal process is also done in a transparent manner taking into account the personal and professional development.

Student’s members are represented in IQAC, cultural committees, OBC/SC/ST Cell and Disciplinary committees for transparent decision making. Students also can express any grievances directly to the

management. Institution has an online grievance platform for all the stakeholders to place their grievances in an open and transparent manner.

To summarize institution is committed to its motto of excellence, transparency, equality and equity for decision making and inclusive growth.

NAAC