SELF ASSESSMENT REPORT (SAR)

FOR ACCREDITATION OF

UG ENGINEERING PROGRAMME

(Mechanical Engineering)

(TIER-II)

Submitted to

NATIONAL BOARD OF ACCREDITATION

New Delhi

BUDGE BUDGE INSTITUTE OF TECHNOLOGY

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http://www.bbit.edu.in

SAR Contents

PART – A

INSTITUTIONAL INFORMATION

PART A: INSTITUTIONAL INFORMATION

1. Name and Address of the Institution

BUDGE BUDGE INSTITUTE OF TECHNOLOGY (BBIT)
Nischintapur, Budge Budge, South 24 Parganas Dist., Kolkata - 700137

2. Name and Address of the Affiliating University

MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY (MAKAUT)
BF 142, Sector 1, Salt Lake City, Kolkata – 700064, West Bengal

3. Year of establishment of the Institution

2009

4. Type of the Institution

University	☐
Deemed University	☐
Government Aided	☐
Autonomous	☐
Affiliated	☑

5. Ownership Status

Central Government	☐
State Government	☐
Government Aided	☐
Self-Financing Trust	☑
Society	☐
Section 25 Company	☐
Any other (Please Specify)	☐

6. Other Academic Institutions of the Trust/Society/Company etc., if any

Name of the Institution(s)	Year of Establishment	Programs of Study	Location
Budge Budge Institute of Technology	2009	MBA, B.Tech & Polytechnic	Budge Budge, 24 Pgs. (S), Kolkata - 700137
BBIT Public School	2014	Playgroup To Class VII	Budge Budge, 24 Pgs. (S), Kolkata - 700137

7. Details of all the programs being offered by the institution under consideration

SL. No.	Program Name	Year of Start	Intake	Increase in intake, if any	Year of increase	AICTE Approval	Accreditation Status*NBA	Accreditation Status NAAC
1	**MBA**	2010	60	--	--	YES	Eligible but not applied	Granted accreditation from NAAC for five years from 16/09/2016.
2	**B.TECH IN CE**	2009	60	120	2012	YES		
3	**B.TECH IN ME**	2010	60	120	2012	YES	Applying first time.	
4	**B.TECH IN EE**	2009	60	--	--	YES	Granted provisional accreditation from NBA for the academic years2017-2018 to 2019-2020 up to 30-06-2020.	
5	**B.TECH IN ECE**	2009	60	--	--	YES		
6	**B.TECH IN CSE**	2009	60	--	--	YES		
7	**DIPLOMA IN CE**	2011	60	60 & 60	2013 & 2014	YES	Eligible but not applied	Eligible but not applied
8	**DIPLOMA IN ME**	2011	60	60 & 60	2013 & 2014	YES		
9	**DIPLOMA IN EE**	2011	60	--	--	YES		
10	**DIPLOMA IN CST**	2011	60	--	--	YES		
11	**DIPLOMA IN ETCE**	2011	60	--	--	YES		

8. Programs to be considered for Accreditation vide this application

Sr. No.	Program Name
1.	MECHANICAL ENGINEERING

9. Total number of employees in the institution

A. REGULAR* EMPLOYEES (FACULTY AND STAFF)

Items		CAY		CAY*m*1		CAY*m*2	
		Min	Max	Min	Max	Min	Max
Faculty in Engineering	M	63	63	51	51	50	50
	F	22	22	21	21	19	19
Faculty in Mathematics, Science & Humanities	M	23	23	17	17	13	13
	F	13	13	10	10	09	09
Non-teaching staff	M	49	49	47	47	40	40
	F	20	20	22	22	21	21

*** Means –**

- Full time on roll with prescribed pay scale. An employee on contract for a period of not less than two years AND drawing consolidated salary not less than applicable gross salary shall only be counted as a regular employee.
- Prescribed pay scales means pay scales notified by the AICTE/Central Government and implementation as prescribed by the State Government. In case State Government prescribes lesser consolidated salary for a particular cadre then same will be considered as reference while counting faculty as a regular faculty.

CAY: Current Assessment Year
CAYm1: Current Assessment Year minus 1
CAYm2: Current Assessment Year minus 2

B. CONTRACTUAL STAFF EMPLOYEES (FACULTY AND STAFF) (Not covered in Table A):

Items		CAY		CAY*m*1		CAY*m*2	
		Min	Max	Min	Max	Min	Max
Faculty in Engineering	M	NA	NA	NA	NA	NA	NA
	F	NA	NA	NA	NA	NA	NA
Faculty in Science & Humanities	M	NA	NA	NA	NA	NA	NA
	F	NA	NA	NA	NA	NA	NA
Non-teaching staff	M	NA	NA	NA	NA	NA	NA
	F	NA	NA	NA	NA	NA	NA

10. Total number of Engineering Students

B.TECH STUDENTS

ITEM	CAY	CAY*m*1	CAY*m*2
Total no. of boys	1114	1377	1134
Total no. of girls	219	253	224
Total no. of students	1333	1630	1358

POLYTECHNIC STUDENTS

ITEM	CAY	CAY*m*1	CAY*m*2
Total no. of boys	833	1086	821
Total no. of girls	122	167	127
Total no. of students	955	1253	948

(Instruction: The data may be categorized in tabular form separately for undergraduate, postgraduate engineering, other program, if applicable)

Note:
In case the Institution is running AICTE approved additional courses such as MBA, MCA in the first shift, engineering courses in the second shift, Polytechnic in Second shift etc., separate tables with the relevant heading shall be prepared.

11. Vision of the Institute

- To realize the full potential of knowledge through universal education and research so as to foster a new era of development and growth through innovations.

12. Mission of the Institute

- To open new horizons of knowledge and to promote academic growth by offering state-of- the-art undergraduate, postgraduate and research programmes.
- To keep pace with regional, national and global needs.
- To play a pioneering role in shaping future generations through collaboration between academia and industry as well as between different national and international institutions.

13. Contact Information of the Head of the Institution and NBA coordinator, if designated

I. **Name:** Prof. (Dr.) C V Reddy
Designation: Director
Mobile No: +91 9490194995
Email ID: director@bbit.edu.in

NBA coordinator, if designated:

II. **Name:** Dr. Shubhangi Gupta
Designation: Executive Director
Mobile No: +91 9748493158
Email ID: executivedirector@bbit.edu.in

14. History of the College / Institution in tabular form

Budge Budge Institute of Technology is an educational endeavour of the Jagannath Gupta Family Trust (JGFT) to create a landmark in the field of Technical Education and Personality Development. It is the dream child of Sri Jagannath Gupta, a well-known figure in the oil refining industry, who has been associated with a number of philanthropic causes in and around Budge Budge.

A name to reckon with, when it comes in terms of spreading educational facilities in West Bengal. A successful businessman, a pathfinder and a true leader out of his own will and resources, he kept no stones unturned in turning budge budge into an educational hub right from BBIT PUBLIC SCHOOL(CBSE) for children to BBIT **(Budge Budge Institute Of Technology**) for BTECH, diploma and MBA aspirants students.

Although a family trust, JGFT trustees are drawn from eminent members of society and include professionals and social activists. Its role is to oversee BBIT like a deep-rooted banyan tree, a symbol of consistency, strength and firmness.

The details of the programmes offered by the institute are depicted in Table above.

Campus: BBIT campus is spread over an area of 20 acres on K.P. Mondal Road, Nischintapur, Budge Budge. It presents a panorama of harmony in architecture and natural beauty. The campus has been organized in three functional sectors:

- Hostels for Students, Sports Complex and Auditorium

- Academic Buildings, Administrative Building and Library
- Faculty Quarters and Guest Houses for residential purposes

A synoptic view of the college campus

Main Entrance to the Campus

Swimming Pool within the campus

The academic buildings are located fairly in close proximate, to the hostels and the staff quarters. The

campus has a full-fledged computerized branch of Punjab & Sind Bank with ATM facility. Post office and other bank and ATM as well as courier services and other needs of students, residents and office are available nearby.

The Institute has a sister unit called **Jagannath Gupta Institute of Medical Sciences & Hospital** located at close proximity. JIMSH is a full-fledged hospital running with all the state of the art facilities and renowned function and have been appointed to treat the patients with all relevant equipment's and other required wards with accommodation of a 380 bedded fully functional hospital with 10 bedded emergency, ICU, ICCU, NICU/PICU, SICU and OTs. All departmental OPDs including General Medicine, Obstetrics and Gynaecology, General Surgery, Orthopaedics, ENT, Ophthalmology, Dermatology, Psychiatry, Paediatrics, Pulmonary Medicine, Anaesthesia, Dental, Speech & Audiology and Physiotherapy are fully functional with best doctors available all round the clock.

Spacious canteen is located close to the instruction zone and hostels. Two more cafeterias exist on the campus. The Institute has a well-equipped with a gymnasium and a swimming pool apart from various playgrounds for Tennis, Badminton, Volley Ball, Football and Cricket. NCC unit is also located on campus. They are very well used by students and campus residents of quarters.

PARTB: Criteria Summary

Name of the program: Mechanical Engineering

Criteria	Criteria	Mark/Weightage
	Program Level Criteria	
1.	Vision, Mission and Program Educational Objectives	60
2.	Program Curriculum and Teaching – Learning Processes	120
3.	Course Outcomes and Program Outcomes	120
4.	Students' Performance	150
5.	Faculty Information and Contributions	200
6.	Facilities and Technical Support	80
7.	Continuous Improvement	50
	Institute Level Criteria	
8.	First Year Academics	50
9.	Student Support Systems	50
10.	Governance, Institutional Support and Financial Resources	120
	Total	**1000**

PART – B

CRITERIA SUMMARY

CRITERION 1:

Vision, Mission and Program Educational Objectives

CRITERION 1	Vision, Mission and Programme Educational Objectives	60

1. Vision, Mission and Programme Educational Objectives (60)

1.1 State the Vision and Mission of the department and institute (5)

The Vision of the Institute:

To realize the full potential of knowledge through universal education and research so as to foster a new era of development and growth through innovations.

Mission of the Institute:

- To open new horizons of knowledge and to promote academic growth by offering state-of-the-art undergraduate, postgraduate and research programs.
- To keep pace with regional, national and global needs.
- To play a pioneering role in shaping future generations through collaboration between academia and industry as well as between different national and international institutions.

Vision of the Department:

"Strive to thrive for quality man power who will contribute towards technological development in the field of mechanical engineering and socio-economy."

Mission of the Department:

1. To impart fundamental knowledge of engineering and its practical application by developing state-of-the-art facilities for the department of Mechanical Engineering.
2. To nurture conducive academic ambience by giving more emphasis to have competent faculty in the department of Mechanical Engineering.
3. To build Industry – Institute linkage for quality improvement by promoting participation of industries in the area of consultancy.
4. To encourage the students towards higher education through research and development activities.

1.2 Programme Educational Objectives (5)

PEOs of the B. Tech (Mechanical Engineering) program are as following:

I. To empower the students with the knowledge of Basic Engineering Science & Technical Skills

II. To develop the skill of methodological approach for decision making and designing

III. To prepare students for different fields like industries, Research & Development, teaching etc. through which society will be served

IV. To create awareness towards social, environmental and energy related issues and emphasize on effective communication skill and professionalism.

1.3 Indicate where the Vision, Mission and PEOs are published and disseminated among stakeholders (10)

- The mission and vision of the institute is published in the Institutional website (www.bbit.edu.in) and all the stakeholder's and future Students can have the access.
- The mission and vision displayed at prominent locations in the campus can be viewed by Students, parents, faculty members and others.
- For fresher's, institute organizes orientation program in which they are given the institutional profile along with some do's and dont's.

The Vision and Mission of the department are disseminated through:

	Place of Dissemination	**Meant For**
1	Display Board at the entrance of department	Internal Stakeholder
2	Departmental Notice Board	Internal Stakeholder
3	Departmental Laboratories	Internal Stakeholder
4	BBIT Website	Internal & External Stakeholder
5	Student – Teacher Committee Meeting	Internal Stakeholder
6	Faculty Development Programme	Internal & External Stakeholder
7	Seminar	Internal Stakeholder
8	Workshop	Internal & External Stakeholder
9	Orientation Programme	Internal & External Stakeholder

	PEOs are published at:	**Meant For**
1	BBIT website	Internal & External Stakeholder
2	Departmental Notice Boards	Internal Stakeholder
3	Handouts of seminar/workshop material	Internal & External Stakeholder

	PEOs are disseminated through:	**Meant For**
1	BBIT website	Internal & External Stakeholder
2	Departmental Notice Boards	Internal Stakeholder
3	Handouts of seminar/workshop material	Internal & External Stakeholder

1.4 State the process for defining the Vision and Mission of the Department, and PEOs of the program (25)

Process for Defining Vision and Mission of the Department

Considering the institutional Mission & Vision, the environmental scan and future of the country and global projections in the field of **Mechanical Engineering** and allied fields, the Vision and Mission Statements of the department have been defined.

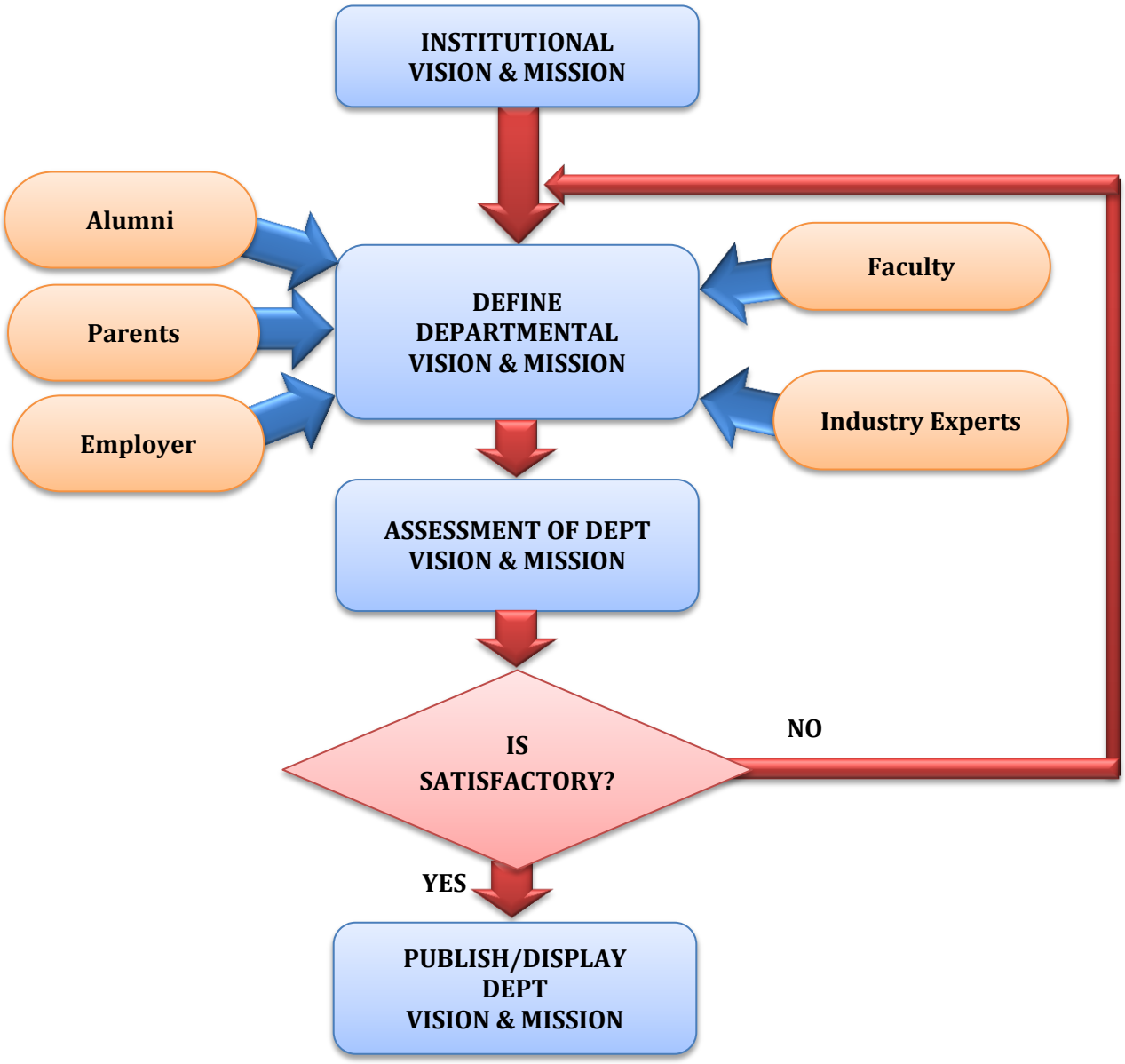
Following processes were adopted in developing Departmental Vision and Mission statements:

- Analysis was conducted by considering internal stakeholders including management and alumni.
- All the information's were collected summarized, and the faculty listed the most critical areas to be addressed by the Department by next five years based on our expertise and available resources.
- Equipped with the information thus collected, the departmental faculty met number of times to develop and cultivate a strong and meaningful vision and mission. The mission was also finalized based on the following components.
- Quality education, Professional career, higher education, Innovation and Creativity and Lifelong learning.

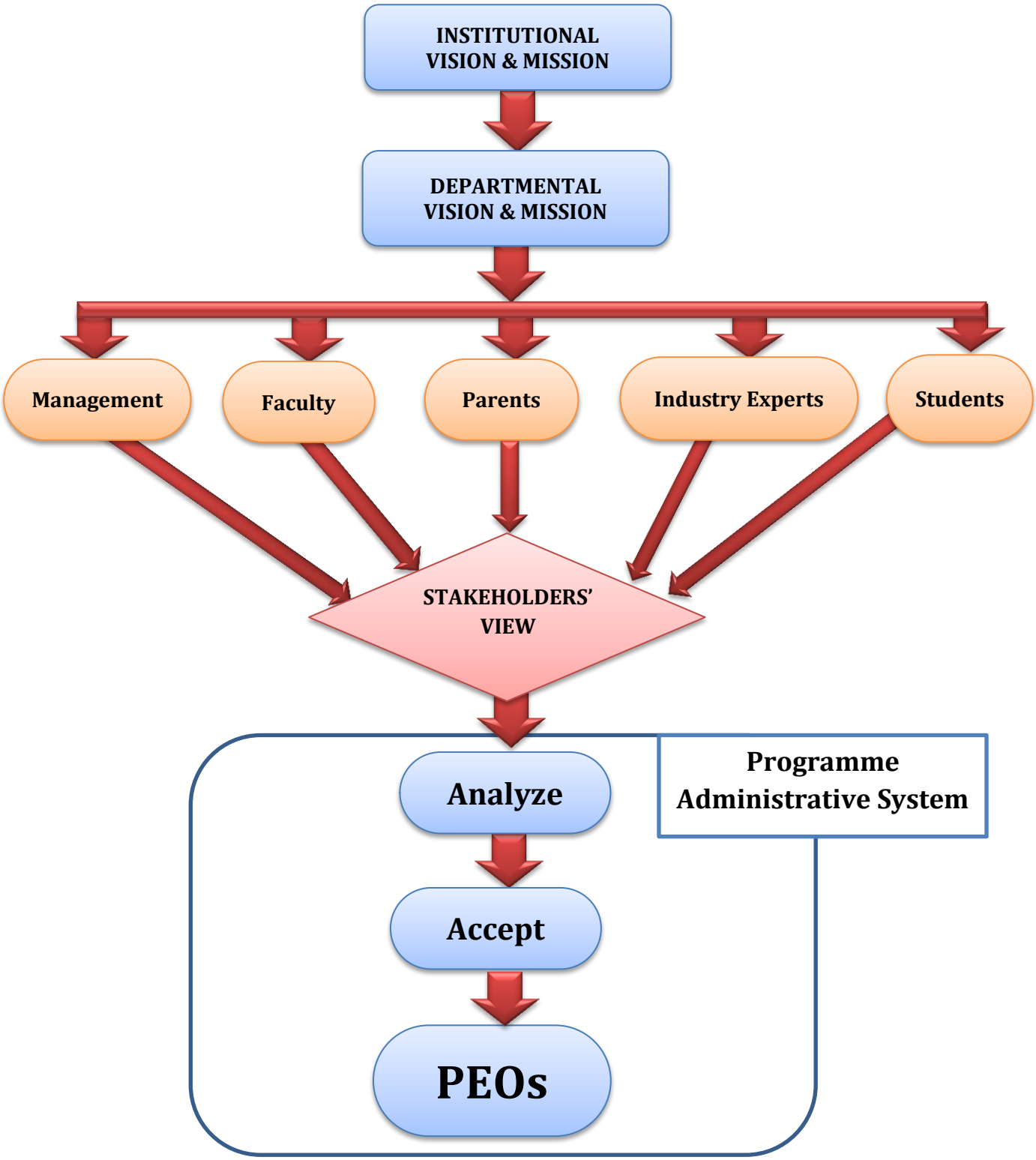
Process for defining the PEOs and POs:

A series of discussions were conducted simultaneously among Mechanical Engineering departmental Academic Committee, alumni representatives, Industry experts and Training experts to finalize the PEOs. The PEOs were also finalized based on the following components:

1. Departmental meeting
2. Feedback from industries
3. Feedback from students/ alumni
4. Feedback from training and placement department
5. Parents meet.



Process for Defining Vision and Mission of the Department



Process for Establishing PEOs

Establish consistency of the PEOs with Mission of the Department (15)

By mapping mission with the program objectives we can show the consistency.

PEO statements	Department Mission Satisfied				Justification
	M1	M2	M3	M4	
I. To empower the students with the knowledge of Basic Engineering Science & Technical Skills	**3**	**3**	**-**	**3**	Mission 1 – is strongly consistent with PEO1, as objective is to develop the ability among students and understand concepts of fundamental engineering knowledge which can be accomplished. Mission 2 – also strongly supports PEO1 by creating proper academic ambience to embed a strong foundation in Engineering to meet global research challenges. Mission 4 – is strongly supportive to PEO1 as the students will be able to apply their knowledge of Engineering Science & Technical Skills in higher education and R&D.
II. To develop the skill of methodological approach for decision making and designing	**-**	**3**	**-**	**3**	Mission 2 – strongly supports PEO2 by creating productive academic ambience with competent faculties so that that decision making and designing skills could be built up among the students. Mission 4 – strongly supports PEO2 as higher education and R&D requires methodological approach for decision making and designing.
III. To prepare students for different fields like industries, Research & Development, teaching etc. through which society will be served	**2**	**3**	**3**	**3**	Mission 1 – moderately supports PEO1 as students will be able to apply their acquired engineering knowledge (along with advanced concepts of Mechanical Engineering) in different areas like industry, R&D etc. Mission 2 – strongly supports PEO1. Conducive academic ambience will make the students enabled for the industry and research works. Mission 3 – strongly supports PEO1. Industry interaction will provide the essence of real life engineering application. Mission 4 – is strongly supportive to PEO1 and this is evident from the statement also.
IV. To create awareness towards social, environmental and energy related issues and emphasize on effective communication skill and professionalism.	**-**	**3**	**3**	**3**	Mission 2 – strongly supports PEO1. Proper academic atmosphere will create awareness towards social, environmental issues. Mission 3 – strongly supports PEO1. Industry interaction will provide the knowledge of environmental issues of industries. Mission 4 – is strongly supportive to PEO1. Higher education will create awareness towards social, environmental and energy related issues.

1: Slight (Low) **2: Moderate (Medium)** **3: Substantial (High)**

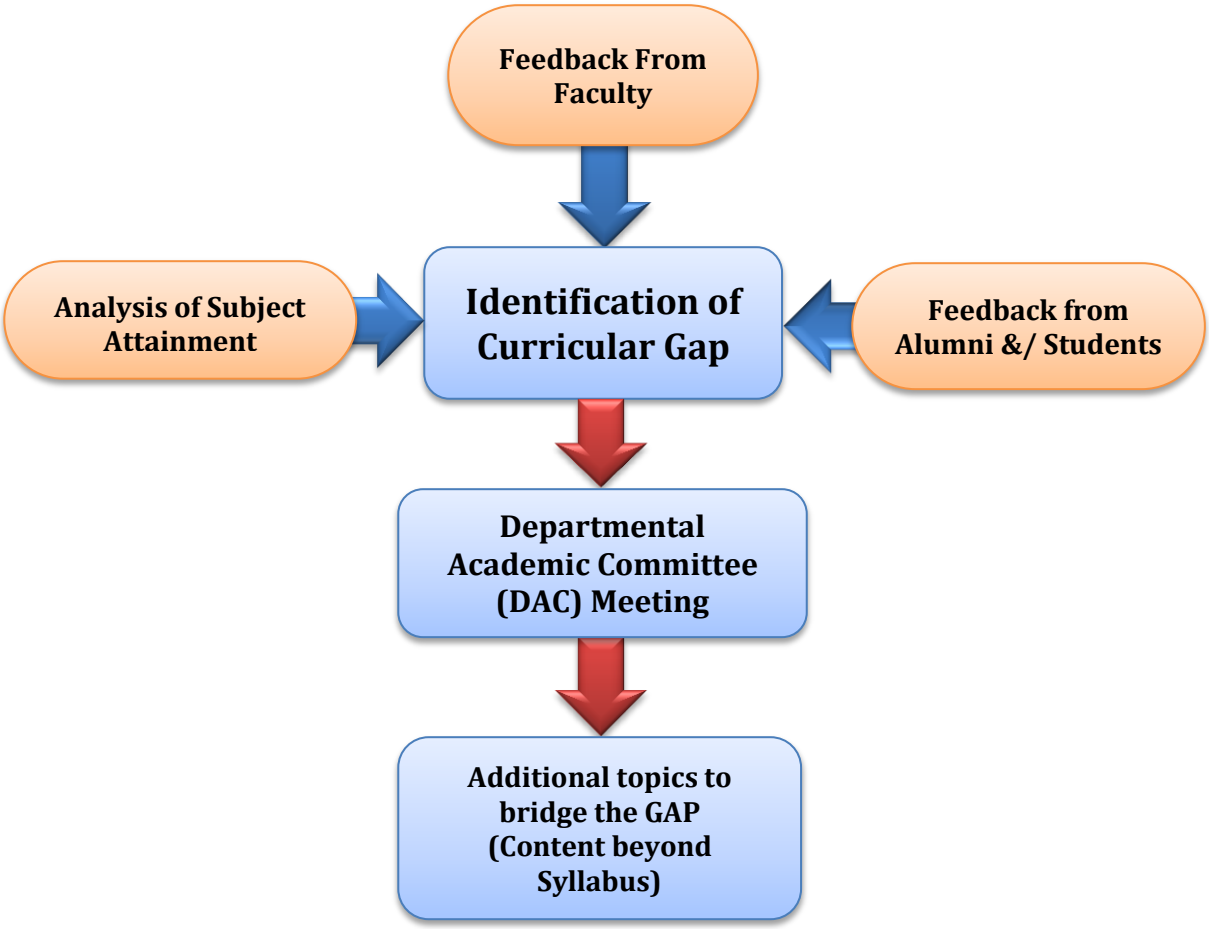
CRITERION 2:

Programme Curriculum and Teaching –Learning process

2. Programme Curriculum and Teaching –Learning process (120)

2.1 Programme Curriculum (20)

2.1.1 State the process used to identify extent of compliance of the University curriculum for attaining the Program Outcomes and Program Specific Outcomes as mentioned in Annexure I. Also mention the identified curricular gaps, if any (10)



PROCESS OF GAP ANALYSIS

This institute is affiliated to Maulana Abul Kalam Azad University of Technology (MAKAUT), West Bengal, formerly West Bengal University of Technology (WBUT). The course curriculum of Mechanical Engineering departmental has been provided by the university.

Following is the process used to identify extent of compliance of University curriculum for attaining the POs and PSOs.

- Identify Course Outcomes for each subject

- Map each Course Outcome with POs and PSOs
- The GAP is analyzed on the basis of the CO attainment of individual courses
- The Gap is discussed in the Departmental Academic Committee (DAC) meeting and the content beyond the syllabus is prepared accordingly to bridge the GAP.
- These contents are delivered to the students through Tutorial and/or Remedial classes.

List of Curricular Gaps CAY - 2015-16:

Sl. No.	Course Name	Gap Description	Proposed Action
1	Heat Transfer	Methods of Dimensional Analysis	Remedial Class
2	Primary Manufacturing Processes	Basic Concepts of Powder Metallurgy & Plastic Manufacturing	Tutorial Class

List of Curricular Gaps CAYm1 - 2014-15:

Sl. No.	Course Name	Gap Description	Proposed Action
1	Engineering Thermodynamics & Fluid Mechanics	Basic Concepts of Exergy & Anergy	Remedial Class
2	Dynamics of Machines	Static Force Analysis	Remedial Class

List of Curricular Gaps CAYm2 - 2013-14:

Sl. No.	Course Name	Gap Description	Proposed Action
1	Advanced Manufacturing Technology	Basic concepts of Powder Metallurgy to cover Selective Laser Sintering	Remedial Class

2.1.2 State the delivery details of the content beyond the syllabus for the attainment of POs and PSOs (10)

The following are the means and methods used to identify extent of compliance of the University curriculum for attaining the Program Outcomes are:

(i) Class room instructions

(ii) Tutorials

(iii) Remedial Class

(iv) Presentation (Still and Video)

(v) NPTEL videos

(vi) Course materials

CAY: 2015 – 16

Sl. No.	Identified Gap	Paper Code	Action Taken	Faculty Name	% of Attendance	Relevance to PO's & PSO's
1	Methods of Dimensional Analysis	ME502	Remedial Class	Prof. Kaushik Mandal	92	PO1, PO2, PO5, PO12 PSO1
2	Basic Concepts of Powder Metallurgy & Plastic Manufacturing	ME403	Tutorial Class	Prof. Jayanta Mistri	95	PO5, PO12, PSO1

CAYm1: 2014 – 15

Sl No.	Identified Gap	Paper Code	Action Taken	Faculty Name	% of Attendance	Relevance to PO's & PSO's
1	Basic Concepts of Exergy & Anergy in Thermodynamics	ME201	Remedial Class	Prof. Abhijit Roy	90	PO2, PO6, PO7, PSO1
2	Static Force Analysis	ME501	Remedial Class	Prof. Gadadhar Das	92	PO2, PO4, PO12 PSO1

CAYm2: 2013 – 14

Sl No.	Identified Gap	Paper Code	Action Taken	Faculty Name	% of Attendance	Relevance to PO's & PSO's
1	Basic concepts of Powder Metallurgy	ME702	Remedial Class	Prof. Samriddhya Ray Chowdhury	92	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO9, PO10 PSO1, PSO2, PSO3

2.2 Teaching –Learning process: (100)

2.2.1 Describe the process followed to improve the quality of Teaching & Learning (25):

- Department follows the academic calendar provided by the parent University. It consists of the activities planned for the semester which includes internal test dates, laboratory and end examination schedules etc.
- Subject allotment is done well in advance for the staff members to prepare lesson plans, course plan, soft and/or hard copies of the lecture notes.
- E-learning facility (using NPTEL based Lecture CD, MOOCS) is made available for skill development of the Students.
- Experiments in the laboratories are conducted as per the university guidelines. Some discussions are made beyond syllabus relevant to the course. Laboratory manuals explaining the details of the experiment are available with the course teacher and are given to students during the semester.
- The faculty of department adopts various innovative Teaching & Learning methodologies to create the best learning environment for student.
- These methodologies include traditional chalk & talk methods, presentations, video lecturing, collaborative learning methods are used where every concept is explained with real world illustrations, design and problematic aspects.
- Faculties are now oriented towards Outcome based Education (OBE) and are actively utilizing the OBE to cater the learning needs of students by innovative ways.
- Lecture Session duration is 50 minutes. Laboratory duration is 150 minutes.
- Assignments are given to students for their better performance.
- Invited talks and seminars on the current trends are done regularly from the industry persons and/or academia.
- Tutorial/Remedial classes are conducted to bridge the curriculum GAP as well as to support the slow learners based on their performance in external exams and after the first internals.
- Motivating and guiding students for higher studies and university ranks.
- Industrial visits are conducted to reduce the gap between industry and institute.
- Workshops are organized to help the students to understand concepts beyond curriculum.
- Mentoring sessions are conducted to provide guidance to students towards achieving professional fulfillment and assessment of his/her academic progress as well as personal

growth. One-one discussion, interaction between Professors and students has increased confidence levels of the students.

- Identification of bright and weak students. Motivate the weak students to attend tutorials and help them solve more problems. Encourage the bright students to attend more workshops and technical talks.

2.2.1.1. Collaborative learning:

Through collaborative learning students are exposed to learn various topics through learning and hands on experience under different laboratories related to their program curriculum.

Sl. No.	COURSE	ASSOCIATED LABORATORY
	SEMESTER – 1	
1	Engineering Physics	Physics Lab
2	Basic Electrical & Electronic Engineering	Electrical Lab & Electronics Lab
3	Workshop Practice	Mechanical Workshop
	SEMESTER – 2	
4	Basic Computation & Principles of Computer Programming	Computer Lab
5	Engineering Chemistry	Chemistry Lab
6	Basic Electrical & Electronic Engineering	Electrical Lab & Electronics Lab
7	Basic Engg Drawing & Computer Graphics	Graphics Lab
	SEMESTER – 3	
8	Technical Report Writing & Language Lab Practice	Language Lab
9	Advanced Physics	Physics Lab
10	Machine Drawing	Graphics Lab
11	Workshop Practice	Mechanical Workshop
12	Applied Mechanics	Applied Mechanics Lab
	SEMESTER – 4	
13	Numerical Methods	Computer Lab
14	Fluid Mechanics & Hydraulics	Fluid Mechanics & Hydraulics Lab
15	Manufacturing Technology	Mechanical Workshop
16	Material Testing	Applied Mechanics Lab
17	Assembly & Detailed Machine Drawing in CAD software	CAD lab
	SEMESTER – 5	
18	Applied Thermodynamics & Heat Transfer	Heat Transfer Lab
19	Design Practice	Graphics Lab
20	Metrology & Measurement	Metrology & Measurement Lab
21	Electrical Machines	Electrical Machines Lab
	SEMESTER – 6	
22	Machining & Machine Tools	Mechanical Workshop
23	IC Engine	IC Engine Lab
24	Design Practice	CAD Lab
25	Dynamics of Machines	Dynamics of Machines Lab
26	Air Conditioning & Refrigeration	Air Conditioning & Refrigeration Lab
	SEMESTER – 7 & 8	
	Advanced Manufacturing	Advanced Manufacturing Lab
	Deign of a Mechanical System	Graphics & CAD Lab
	Project	Project Lab Different Lab associated with the project

2.2.1.2. Initiatives and implementation details of Encouraging Bright Students

- Budge Budge Institute of Technology always had the culture of encouraging bright students by providing them necessary guidance and moral support.
- Class Toppers are awarded every year.
- The bright students are identified based on their overall performance and their orientation towards Academics.
- Encouraged to attend conferences, workshops.
- Encouraged to take up innovative projects and apply for funding.
- Encouraged to participate in various competitions.
- The bright students having high academic track records are encouraged by faculties to achieve university ranks, also encouraged to take up competitive examinations like GATE, GRE etc.
- The bright students having orientation to research are encouraged by faculties to publish their work in National & International Conferences& Journals.

Co-curricular activities

Sl. No.	Participants	Participation Details
1	Mainak Bhattacharya, Abhishek Bose	"REVIEW OF DEFECTS IN 3 - DIMENSIONAL PRINTING", At NCESSD-2015 held on 9th - 10th October, 2015
2	Hritaban Dasgupta, Abir sarkar, Anshuman Bera, Aditya Ghoshal	"DESIGN OF ALTERNATIVE ENERGY SOURCE USING MAGNETIC REPULSION FORCE", At NCESSD-2015 held on 9th - 10th October, 2015
2	Abhishek Kumar	Winner, "Wizards of Math" – Vista Mind, 2015
3	Abhinav Tiwari	Winner, "Wizards of Math" – Vista Mind, 2014

Extra-curricular activities

- Inter College Football Championship, Future Institute Of Engg & Mgt, 2016
- "TEMPEST – 2016" Basketball Tournament, Marine Engineering & Research Institute, Kolkata, 2016
- Winner, Gulabi Devi Inter College Football Tournament, Budge Budge Institute of Technology, Kolkata, 2015
- Winner, Invitation Cricket Tournament, IISTE, Shibpur, 2015-16
- Winner, BBIT Champions Trophy – 2015, Budge Budge Institute of Technology, Kolkata, 2015
- 2nd position, "Cricket Premier League – 2015", Jalpaiguri Government Engineering College, 2015

- ❖ 2nd position, "TEMPEST – 2014" Cricket Tournament, Marine Engineering & Research Institute, Kolkata, 2014

2.2.1.3. Initiatives and implementation details of Assisting Weak Students

- ➢ The department has a well-defined process of monitoring, guiding and assisting slow learners (weak students).
- ➢ Care is taken by the faculties in monitoring the performance of slow learners, the students deviations from studies is observed by the respective mentors and corrective measures are taken.
- ➢ The faculties also go a step ahead and have periodic interaction with the parents about the performance of slow learners.
- ➢ A motivation and responsibility from both parents and faculty will create a positive mindset and will help to overcome the inabilities and hurdles faced by the slow learners.
- ➢ Every parent is informed about marks and the attendance of their respective candidate.
- ➢ Additional coaching is given to slow learners through Remedial classes and study materials are provided to them.
- ➢ A special counseling and tutorial classes are conducted by the faculty for those students who have failed in any subject.

2.2.1.4. Scope for self-learning:

- ➢ Value added lab sessions beyond syllabus are conducted to expose the students to software / hardware trends not included in their curriculum.
- ➢ Hobby lab enables students to do something on their own, test them- know by doing discussions, brainstorming and problem solving focused on outputs of learning and academic careers.
- ➢ Professional skill development courses are arranged.
- ➢ Do it yourself.
- ➢ Engaged to work in Industries during vacation and have Industrial training
- ➢ Language lab facilities provided – This enables students to prepare to take up the GATE, IELTS, TOEFL
- ➢ GRE examinations.
- ➢ Industrial visits, arranged by the Departments.
- ➢ Technical talks.

- Seminars for senior students.

GENERATION OF SELF-LEARNING FACILITIES AND MOTIVATION:

- For lab courses, the lab manuals are issued, and certificates given based on a test at the end of the session.
- Intranet facilities are provided
- Wi Fi zone enables the students to use the facility any time (even beyond college hours)
- Browsing centre open for 12 Hrs. a day
- Students motivated by sending them to write research papers and present papers in conferences. College bears the expenditure.
- Learning material are put on the Intranet – students are encouraged to do exercises
- Labs are open to students to experiment on their ideas
- Encouraging students to put innovation on web

AVAILABILITY OF LEARNING BEYOND SYLLABUS CONTENTS AND PROMOTION:

- Intranet facility provides learning of subjects not necessity in the curriculum
- Problem solving techniques
- Social service field work offers service learning opportunities to students
- Literature on professional ethics, personality development, even English literature are put on the Intranet
- Many e-learning materials, journal and magazine are subscribed and made available to the student at the Institute Library to help the students inculcating the habit of self-learning.
- Moreover, provision of Internet in the hostels also helps the students to learn beyond what is taught in the classroom.
- Students are encouraged to use the self-learning materials in the Institute.
- In addition to this NPTEL, Wi-Fi and SWAYAM MOOCs and different software are available for student reference.
- The biggest resource for self-learning is obviously the college library. The college library not only possesses plenty of books to meet the students' syllabus- oriented needs, but it also houses numerous books by eminent national and international authors on a variety of topics which students may regularly access to sharpen and broaden their knowledge. The library also possesses a number of magazines and periodicals related to different branches of science and technology which the students may readily access
- The library also subscribes to a host of online and printed journals which are also made readily available to the students.

- The library also includes a computer room with internet access which is often used by students to access various forms of e-materials for their self- development.
- Students are encouraged to visit NPTEL lectures, browse different internet sites to increase their knowledge base about the subject.

GENERATION OF SELF-LEARNING FACILITIES, AND AVAILABILITY OF MATERIALS FOR LEARNING BEYOND SYLLABUS

- Laboratories and Library is made available beyond working hours to help the students in self-learning.
- The campus is almost residential which enables learning beyond working hours with formal and
- Informal interaction with faculty and peer groups.
- Students are encouraged to involve themselves in various co-curricular and extra-curricular activities at Institute and Department level like MES, AXIS, AROHI, etc. Many eminent personalities are invited to interact with students on many occasions to help students learn recent trends in engineering, technology
- This apart, students are also endowed with various resource materials by the teachers for their self-development and they are also encouraged by them to participate in various competitions of technical innovations for which again they have to participate in innovative thinking and experimentations
- The Tech-Fest organized by the college also serves to create opportunities for students' self-development based on extra-syllabus technological knowhow.
- The Department of Humanities regularly organizes Soft Skill classes for various departments, based on availability and requirement, to enhance the students' communication skills, grooming and body language to equip them for the professional world.
- C, C++, Java are taught to students of different departments to endow them with requisite professional skills practices.

2.2.2 Quality of the internal semester question papers, Assignments and Evaluation: (20):

- Internal semester question papers are prepared considering the standards of GATE, PSU entrance, JU, IIEST and other institutions.
- Assignments are given to the students in such a fashion that they have to solve the problem themselves by self-learning methods.
- Evaluation methods are predefined which is as follows:

Evaluation System:

Assessments		Frequency / Sem.	Theory Courses (%)	Practical Courses (%)	Project Courses (%)
Written Examination	Internal test I & II	2	15	----	----
	Attendance	1	5	----	----
	Teachers' assessment & quiz	3	10	----	----
	End semester	1	70		
Practical examination (Experiments, Practical records and Viva-voce	Viva-voce on lab subject	1	----	20	----
	Organization of experiments	1 / Expt		5	
	Actual data generation & conducting of expt.	1 / Expt		15	
	Data analysis/ synthesis & conclusion	1 / Expt		20	
	Attendance & regularity	1 / Expt		5	
	Preparedness for conduct of expt	1 / Expt		10	
	Initiative for learning & interacting	1 / Expt		10	
	Presentation of lab report, regularity in submission & content	1 / Expt		15	
Project Examination	Project report	1	----		50
	Power point presentation & Viva-Voce	1	----		50

- **Question Papers:**
  - While setting the question paper all previous university exam papers are taken into consideration.
  - According to level of toughness the questions are prepared (viz., analyzing the problems, implementation of modern tools, formulating the problems etc.), which is termed as Bloom's Taxonomy.
  - The questions are mainly prepared based on the Course Outcomes.

- **Assignments:**
  - Assignment problems and submission dates are provided by the respective faculty members.
  - Assignment questions are prepared using Bloom's Taxonomy process in relation with COs.

2.2.3 Quality of the students' projects: (25):

To start with, HoD issues a circular to all the faculty members of the department to provide the list of projects to be given to the students at the end of even semester. The same is being notified to the students by the way of addressing in the class room by the project coordinator, besides putting a notice in the notice board of the department. Students are also encouraged to come up with the idea of their own for doing the project. The same is presented to the project review

committee. After the careful examination of the idea presented by the student/team, guides may be allocated to the students by project coordinator.

Approach of project preparation is as follows;

- Students are briefed about the objectives, outcomes & specific outcomes of the projects and steps to be followed.
- Selection of area in which students are interested to do the project.
- Literature survey
- Identification of Project
- Allotment of Project
- Manufacturing / Prototype making
- Collection of Data
- Analysis of Data
- Conclusion of the Project
- Future scope of work

Project works are evaluated as per the schedule by the Project Review committee (PRC). Students appear before the committee with Power point presentation and followed by Viva-Voce.

Project Relevance with POs and PSOs: Academic Year CAY – 2015-16

Sl. No.	Project Name	Relevance with POs	Relevance with PSOs
1	Development of amphibious vehicle	PO1,PO2,PO3,PO5,PO6,PO9,PO8,PO11	PSO1,PSO2,PSO4
2	Design a working model of Hover craft	PO1,PO4,PO3,PO5,PO6,PO9,PO8,PO11	PSO1, PSO4
3	The effect of nozzle temperature on the tensile strength of a 3D printed object	PO1,PO4,PO3,PO5,PO6,PO9,PO8,PO11	PSO1,PSO2,PSO4
4	Study the surface quality of a mild steel plate with the variation in wire tension of wire EDM process	PO1,PO4,PO5,PO6,PO9,PO8,PO11	PSO1,PSO2,PSO3 PSO4
5	To Study design ,and manufacture convergent divergent steam nozzle	PO1,PO4,PO5,PO6,PO9,PO8,PO11	PSO1,PSO2,PSO4
6	Solar Vapour absorption refrigeration system	PO1,PO2,PO3,PO5,PO6,PO9,PO8,PO11	PSO1,PSO2,PSO4
7	Analytical study about the scope of green supply chain management under industrial environment	PO1,PO3,PO4,PO5,PO6,PO9,PO8,PO11	PSO1, ,PSO4

Sl. No.	Project Name	Relevance with POs	Relevance with PSOs
8	Optimization of cutting parameters in turning	PO1,PO4,PO5,PO6,PO9,PO8,PO11	PSO1,PSO2,PSO4
9	Heat transfer enhancement in single micro channel using Micro Fins	PO1,PO2,PO3,PO5,PO6,PO9,PO8,PO11	PSO1,PSO2,PSO4
10	Thermodynamic modeling of a bio gas fueled internal combustion spark ignition engine	PO1,PO4,PO5,PO6,PO9,PO8,PO11	PSO1,PSO2,PSO4
11	Design and analysis of solar water heating system	PO1,PO4,PO3,PO5,PO6,PO9,PO8,PO11	PSO1, ,PSO4
12	Experimental study on the performance of two graded savonius wind turbine for electric power generation	PO1,PO3,PO4,PO5,PO6,PO9,PO8,PO11	PSO1,PSO3,PSO4
13	Experimental study of Grinding process of a mild steel material under different condition	PO1,PO3,PO4,PO5,PO6,PO9,PO8,PO11	PSO1, ,PSO3,PSO4
14	Development of an assistive system for the visually impaired persons	PO1,PO2, PO3,PO4,PO5,PO6,PO9,PO8,PO11	PSO1, ,PSO3,PSO4

2.2.4 Initiatives related to industry interaction: (15):

To strengthen interaction with industries and to keep our students updated with the latest trends in Mechanical Engineering, the Department has implemented following initiatives.

1. One departmental coordinator from Mechanical engineering department always keeps contacts with the Training & Placement Office of this institute regularly. Special lecture on hi-tech area by experts from industries are conducted for exposing the industrial needs to the students.
2. Students are permitted to take training at various industries.
3. All students undertake summer/winter vacation training in industries **which is mandatory**.
4. Industrial visits along with the faculty members are arranged to bridge the gap between theoretical concepts and practical implications of the same.
5. Department entered in to an MoU with JKB Gas Pvt. Ltd for Advanced Manufacturing and material testing for the benefit of the mechanical engineering students.

Sl. No.	Event	Name of the Organization	Date/ Period
1	Industry – Academic Workshop On "Press Tool Technology For Mass Production" (in association with Indo-Danish Tool Room)	JKB Gas Pvt. Ltd, Budge Budge	12th Aug – 13th August, 2015
2	Seminar On Mechanical Engg– Manufacturing & Power Generation	BBIT	15th September, 2012

2.2.5 Initiatives related to industry internships/ summer training: (15)

- Training & Placement Cell identifies the organizations, suitable for Mechanical Engineering students and approach them to allow our students for internship/ summer training.
- Faculty members also arrange internships (through their personal contacts) for the students, in suitable organizations.
- Some of the organizations where students are going for the internships/ summer training are appended below:

1. Ichhapur Riffle Factory
2. Garden reach ship builders
3. JKB Gas Pvt. Ltd, Budge Budge
4. IOCL Bottling Plant, Budge Budge (Kol – 700137)
5. Garden Reach Ship Builders & Engineers (Kol – 700024)
6. Shricon Construction TMT Bars
7. Liluah Railway Workshop
8. India Carbon Limited, Budge Budge etc.

CRITERION 3:

Course Outcomes and Programme Outcomes

CRITERION 3	Course Outcomes and Programme Outcomes	120

3. Course Outcomes and Programme Outcomes (120)

3.1 Establish the correlation between course outcomes (COs) and programme outcomes (POs) and programme Specific outcomes (PSOs): (20)

3.1.1 Course Outcomes (COs) (SAR should include course outcomes of one course from each semester of study, however, should be prepared for all courses and made available as evidence, if asked):(05)

Note: Number of Outcomes for a Course is expected to be around6.

Course Outcomes:

SEMESTER: 1	
Course : ENGINEERING MECHANICS **Code: ME 101** **Year Of Study: 2015-2016**	
SL. NO.	**Course Outcome**
ME101.1	To acquire fundamental knowledge in Engineering Mechanics concepts.
ME101.2	Understand and Apply free body diagrams to calculate the reactions necessary to ensure static equilibrium.
ME101.3	Identify and Analyze various forces associated with a static frame work.
ME101.4	Apply and Analyze problems associated with frictional forces. Centre of gravity and moment of inertia.
ME101.5	Understand and Apply basic concepts of stress and strain in solids to solve related problems.
ME101.6	Describe the motion of a particle in terms of its position, velocity and acceleration in different frames of reference and to Analyze the forces causing the motion of a particle.

SEMESTER: 2	
Course : ENGINEERING THERMODYNAMICS AND FLUID MECHANICS **Code: ME 201** **Year Of Study: 2015-2016**	
SL NO.	**Course Outcome**
ME201.1	To acquire fundamental **knowledge** in Thermodynamics concepts and encourage the students to observe and **distinguish** the different thermodynamic processes around them.
ME201.2	**Understand** different Laws of Thermodynamics AND AIR STANDARD CYCLES and to **Apply** them in practice when called for.
ME201.3	**Apply** and **Analyze** various relations, tables and charts for problem solving.
ME201.4	Be conversant with various concepts of Fluid mechanics and be able to **describe** them.
ME201.5	**Calculate** pressure variations in accelerating fluids **applying** Euler's and Bernoulli's equations
ME201.6	Apply the momentum and energy equations to fluid flow problems based on **analysis** of various system specification (i.e. viscid, inviscid, rotational, irrotational, steady, unsteady etc.).
SEMESTER: 3	
Course: Engineering Materials **Code:** ME 303 **Year Of Study: 2015-2016**	
SL NO.	Course Outcome
ME303.1	**Understand** the concept of engineering materials along with its classification and crystal structure, as well as its corrosion and degradation.
ME303.2	To **identify** various imperfections in engineering metals.
ME303.3	**Illustrate** the concept of Phase diagram and Iron-Carbon system.
ME303.4	**Distinguish** between metals and alloys, elastomers and polymers, ceramics and composites.
ME303.5	**Apply** the knowledge of materials selection methodology in real life applications.
SEMESTER: 4	
Course: Fluid Mechanics and Hydraulic Machines **Code: ME 401** **Year Of Study: 2015-2016**	
SL NO.	Course Outcome
ME 401.1	**Understand** the concept of fluid and its kinematic as well as dynamic properties.
ME 403.2	**Evaluate** flow through pipes, orifices, V-notches, weirs, open channels.
ME 403.3	**Analyse and investigation** on flow systems like Buckingham Pi theorem, Dimensionless numbers in fluid flow, submerged bodies, drag and lift, Boundary layer.
ME 403.4	Demonstrate the concept of hydraulic turbine, reciprocating pumps and centrifugal pumps.
SEMESTER: 5	
Course: Heat Transfer **Code: ME 502** **Year Of Study: 2015-2016**	
SL NO.	Course Outcome
ME 502.1	**Describe** the physical mechanism of different modes of heat transfer (conduction, convection and radiation)
ME 502.2	**Solve** one dimensional steady (with and without heat generation) as well as unsteady state (without heat generation) heat conduction problems
ME 502.3	**Evaluate** the effectiveness and efficiency of rectangular and pin fins installed on a surface
ME 502.4	**Explain** Lumped parameter approach, Time constant, Biot number of transient heat conduction problems
ME 502.5	**Understand** the physical significances of the pertinent dimensionless numbers (e.g. Reynolds no, Nusselt no, Prandtl no, Grashof no, Peclect no, Rayleigh no etc.)governing the phenomenon of convective heat transfer coefficient.

ME 502.6	**Compute** the solution of convective heat transfer problems, with the application of the given working relations of heat transfer coefficient with pertinent variables.
SEMESTER: 6	
Course: MACHINE DESIGN **Code: ME 603** **Year Of Study: 2015-2016**	
SL NO.	Course Outcome
ME 603.1	**Develop** a strong knowledge to distinguish between a various mechanical machine parts on the basis of their function and application.
ME 603.2	**Identify and Apply** the factors to be considered while designing a machine part.
ME 603.3	**Demonstrate** to analyze each component with respect to load analysis, material selection, safety and environmental hazards.
ME 603.4	**Design** a transmission part with sturdiness, efficiency and cost effectiveness.
SEMESTER: 7	
Course: Power plant Engineering **Code: ME 701** **Year Of Study: 2015-2016**	
SL NO.	Course Outcome
ME701.1	**Identify** elements and their functions of steam power plants.
ME701.2	**Demonstrate** equipment's of different power plants.
ME701.3	**Analyze** economics of power plants and list factors affecting the power plants.
ME701.4	**Determine** performance of power plants based on load variations.
SEMESTER: 8	
Course : Automobile Engineering **Code: ME 803D** **Year Of Study: 2015-2016**	
SL NO.	Course Outcome
ME 803D.1	**Understand** and **demonstrate** the basic parameter of Mechanical system of IC engine
ME 803D.2	**Understand** the working of different types Fuel system and **able** to distinguish between Petrol & Diesel engine.
ME 803D.3	**Understand** of various types of Lubrication system and parameters of lubrication oil
ME 803D.4	**Understand** and **demonstrate** the importance of Cooling System and also about various cooling system for IC engine
ME 803D.5	**Understand** and **demonstrate** the various types of Ignition System.

3.1.2 CO-PO matrices of courses selected in 3.1.1: (six matrices to be mentioned; one per semester from 3rd to 8th Semester) (05)

Semester- 3

CO-PO Matrices

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
ME303.1	3	3	-	2	1	-	1	-	-	-	2	1
ME303.2	3	3	1	1	-	-	-	-	-	-	2	1
ME303.3	3	2	2	1	-	-	1	-	-	-	1	1
ME303.4	2	-	-	2	1	-	-	-	-	-	1	1
ME303.5	1	3	2	2	1	-	1	-	-	-	2	1

Semester- 4

CO-PO Matrices

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
ME 401.1	3	1	1	1	-	-	-	-	-	-	-	1
ME 401.2	3	2	3	2	1	-	1	-	-	-	1	1
ME 401.3	3	3	2	2	-	-	1	-	-	-	2	1
ME 401.4	3	2	2	-	-	-	2	-	-	-	2	1

Semester- 5

CO-PO Matrices

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
ME 502.1	3	2	-	-	2	2	2	2	-	-	-	-
ME 502.2	3	2	2	-	-	2	2	2	2	-	-	2
.ME 502.3	3	3	2	-	-	2	2	-	2	-	2	2
ME 502.4	3	3	-	2	2	-	2	2	-	2	2	2
ME 502.5	3	3	3	2	-	2	2	2	-	-	2	-
ME 502.6	-	-	-	-	2	-	2	2	-	2	-	-

Semester- 6

CO-PO Matrices

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
ME 603.1	3	-	2	-	-	-	-	-	-	-	-	2
ME 603.2	3	3	3	-	-	2	-	-	-	-	3	2
ME 603.3	3	3	3	3	3	2	-	-	-	-	3	2
ME 603.4	3	3	3	3	3	2	-	-	-	-	-	2

Semester- 7

CO-PO Matrices

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
ME701.1	3	-	1	1	-	1	1	-	-	-	2	1
ME701.2	3	1	1	1	-	-	-	-	-	-	1	1
ME701.3	3	2	1	1	-	1	1	-	-	-	1	1
ME701.4	3	3	2	1	-	1	2	-	-	-	1	1

Semester- 8

CO-PO Matrices

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
ME 803D.1	3	2	2	1	2	1	-	-	-	-	2	1
ME 803D.2	3	1	1	1	-	1	1	-	-	-	1	1
ME 803D.3	3	1	1	1	1	1	1	-	-	-	1	1
ME 803D.4	3	2	1	1	2	2	2	-	-	-	1	1
ME 803D.5	3	2	1	1	-	1	1	-	-	-	1	1

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

CO-PSO Matrices

Semester- 3

	PSO1	PSO2	PSO3	PSO4
ME303.1	3	2	2	-
ME303.2	3	-	-	-
ME303.3	-	-	-	-
ME303.4	3	-	2	-
ME303.5	-	-	-	2

Semester- 4

	PSO1	PSO2	PSO3	PSO4
ME 401.1	-	3	-	-
ME 403.2	2	-	-	-
ME 403.3	2	-	-	-
ME 403.4	-	-	2	-

Semester- 5

	PSO1	PSO2	PSO3	PSO4
ME 502.1	3	-	-	-
ME 502.2	3	-	-	-
.ME 502.3	-	2	-	-
ME 502.4	-	-	3	-
ME 502.5				
ME 502.6				

Semester- 6

	PSO1	PSO2	PSO3	PSO4
ME 603.1	3	2	-	2
ME 603.2	3	-	-	2
ME 603.3	3	2	-	2
ME 603.4	3	2	2	3

Semester- 7

	PSO1	PSO2	PSO3	PSO4
ME701.1	3	3	-	-
ME701.2	-	-	3	-
ME701.3	3	-	-	-
ME701.4	3	-	-	2

Semester- 8

	PSO1	PSO2	PSO3	PSO4
ME 803D.1	-	3	-	-

ME 803D.2	3	-	-	-
ME 803D.3	-	-	2	-
ME 803D.4	-	-	-	2
ME 803D.5	3	-	-	-

Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

3.1.3 Programme Level Course-PO matrices of all courses including first year courses: (10)

Programme Level Course-PO &Programme Level Course – PSO Matrices:

High: (3) Medium: (2) Low: (1)

Curriculum			Programme Outcome (POs)											
Sl. No.	Course name	Course code	1	2	3	4	5	6	7	8	9	10	11	12
1.	English Lang & Tech Comm	HU101										3		2
2.	Physics – 1	PH101		1			2			1		1		2
3.	Mathematics-1	M101		2	2		2			1		1		2
4.	BEEE – 1	ES101	1			1	2			1	1	1	1	1
5.	Engg. Mechanics	ME101	1	1	1	1			1		1	1	1	1
6.	Basic Comput& Principles of Comp Prog	CS201	1	1	1	1	2	1	1	1	1	2	2	2
7.	Chemistry1	CH201	1	1			2	1		1	1	1	1	1
8.	Mathematics2	M201		1	1	1	1				1	1	1	2
9.	BEEE-II	ES201	1	1	1	1					1	1	1	1
10.	Engg Thermo & Fluid Mechanics	ME201	2	2	1					1	1	1	1	2
11.	Applied Thermodynamics	ME 301	2	1	1					1	1	1	1	2
12.	Values & Ethics in Profession	HU301		2				1		3	1		1	1
13.	Physics2	PH301	2	2	1					1	1	1	1	2
14.	Basic Environl Engg& ElemBio	CH301	1	1	1			1		1	1		1	1
15.	Strength of Materials	ME 302	3	3	3	2				1	1	1	1	3
16.	Engineering Materials	ME 303	2		2	2			1		1	1	1	2
17.	Numerical Methods	M(CS)401	1	1	1	1	1			1	1	1	1	1
18.	Mathematics3	M402	1	1	1	3	2				3	3	3	1
19.	Fluid Mech& Hydraulic M/C	ME 401	1	1	1	3					3	3	3	2
20.	Mechanisms	ME 402	1	1	1	3	2				3	3	3	1
21.	Primary Manufacturing Processes	ME 403	1	2	1	2	2	2	3	3	3	3	3	2
22.	PPM	HU511		2				3			2	3	2	2
23.	Dynamics of Machines	ME 501	1	1	1			3			3	3	3	2
24.	Heat Transfer	ME 502	1	1	1	3					3	3	3	2
25.	Design of Machine Elements	ME 503	1	1	1	3	2		3	3	3	3	3	2
26.	Metrology & Measurement	ME504	1	1	2	3	2	3	3	3	3	3	3	2
27.	Prod & Op Management	HU 611		2				2		2	2		2	2
28.	IC Engines and Gas Turbines	ME 601	2	2	3					3	3		3	2
29.	Machining Principles & M/C Tools	ME 602	1	1	2	2	2			3	3	3	3	2
30.	Machine Design	ME 603	1	1	1	2	2	3	3	3	2	3	3	1
31.	Power Plant Engineering	ME 701	2	2	3	3	2	3	3	3	3	3	3	3
32.	Adv Manufacturing Tech	ME 702	1	1	1	2	1	3	3	3	3		3	2
33.	Economics for Engineers	ME 801 HU		3		3	3			3	3	3	3	3

Curriculum			Programme Outcome (POs)											
Sl. No.	Course name	Course code	1	2	3	4	5	6	7	8	9	10	11	12
34.	Electrical Machines	ME505A	2	3		3					3	3	3	3
35.	Applied Fluid Mechanics	ME 505B	1	1	1	3					3	3	3	2
36.	Air Conditioning & Refrigeration	ME604A	2	2	2	2	2	3	3	3	2	3	3	2
37.	Mechatronics	ME604B	3	3	2		2	3	3	3	3	3	3	3
38.	Fluid Power Control	ME604C	2	2	2		2	3	3	3	3	3	3	2
39.	Materials Handling	ME605A	2	2	2	3	2	3	3	3	3	3	3	2
40.	Finite Element Method	ME605B	3	3	3	3	3	3	3	3	3	3	3	3
41.	Turbo Machinery	ME605C	2	3	3	3	2	3		3	3	3	3	3
42.	Maintenance Engg	ME703A	2	2	2	2	2	3	3	3	3	3	3	2
43.	Renewable Energy Systems	ME703B	2	2	2	2	2	3	3	3	3	3	3	3
44.	Tribology	ME703C	3	3	3	3	3	3	3	3	3	3	3	3
45.	Quantity Production Method	ME704A	2	2	2	2	2	3	3	3	3	3	3	2
46.	Advanced Welding Technology	ME704B	2	2	2	3	2	3	3	3	3	3	3	2
47.	Comp Methods in Engineering	ME704C	3	3	3	3	3				3	3	3	3
48.	CAD/CAM	ME802A	2	2	1	2	1	3	3	3	3	2	3	2
49.	Industrial Robotics	ME802B	1	1	1	1	1	3	3	3	3	3	3	1
50.	Energy Conservation & Mgmt	ME802C		3	3	3			3		3	3	3	3
51.	Quality & Reliability Engineering	ME802D	3	3	3	3	3			3	3	3	3	3
52.	Software Engineering	ME705A	3	3	3	3	2	3	3	3	3	2	2	2
53.	Industrial Instrumentation	ME705B	3	3	3	3					3	3	3	3
54.	Operations Research	ME705C		3		3	3				3	3	3	3
55.	Biomechanics & Biomaterials	ME705D	3	3	3			3		3	3		3	3
56.	Safety & Occupational Health	ME803A	3	2	2	3	2			3	3	3	3	2
57.	Automation & Control	ME803B	2	2	2	2	2				3	3	3	2
58.	Water Resource Engineering	ME803C	3	3	3	3				3	3	3	3	3
59.	Automobile Engineering	ME803D	2	2	2	3	2			3	3	3	3	3
60.	Project : Part I	ME 881	1	1	1	1	1	3	3	3	2	2	1	1
61.	Project Part II :	ME 882	1	1	1	1	1	3	3	3	2	2	1	1
62.	Workshop practice Lab	ME 192	1	1	1	1	1	3	3	3	2	3	3	1
63.	Physics Lab	PH 191		3			2			3		3		2
64.	BEEE Lab	ES 191	3			3	2			3	3	3	3	3
65.	Eng Lang & Tech Comm Lab	HU 191					2			3		1		2
66.	N.S.S	XC 181	1	1	1	1	1	1	1	1	1	1	1	1
67.	Engineering drawing	ME 292	1	1	1	1	1	3	3	3	2	3	3	1
68.	Basic Compu& of CP Lab	CS 291	3	3	3	3	2	3	3	3	3	2	2	2
69.	Chemistry Lab	CH 291	3	3			2	3		3	3	3	3	3
70.	BEEE Lab	ES 291	3			3	2			3	3	3	3	3
71.	Tech Report Writing & Lang Lab	HU 381					2			3		1		2
72.	Physics Lab2	PH 391		3			2			3		3		2
73.	Machine Drawing –I	ME 391	1	1	1	3	2			3		1	3	1
74.	Workshop PracticeII	ME 392	1	1	1	1	1	3	3	3	3	3	3	1
75.	Applied Mechanics Lab	ME 393	1	1	1	1	1	3	3	3	3	3	3	1
76.	Numerical Methods Lab	M(CS)491	3	3	3	3	3			3	3	3	3	3
77.	Fluid Mechanics & Hydraulics Lab	ME491	1	1	1	1	1	3	3	3	3	3	3	1
78.	Manufacturing Technology Lab	ME 492	1	1	1	1	1	3	3	3	2	3	3	1
79.	Material Testing Lab	ME493	1	1	1	1	1	3	3	3	3	3	3	1
80.	Machine DrawingII	ME 494	1	1	1	1	1	3	3	3	3	3	3	1

Curriculum			Programme Outcome (POs)											
Sl. No.	Course name	Course code	1	2	3	4	5	6	7	8	9	10	11	12
81.	Applied Thermo& H T Lab	ME 592	1	1	1	1	1	3	3	3	3	3	3	1
82.	Design Practice	ME 593	1	1	1	1	1	3	3	3	3	2	3	1
83.	Metrology & Measurement Lab	ME594	1	1	2	1	1	3	3	3	3	3	3	1
84.	Machining & Machine Tools Lab	ME 691	1	1	1	1	1	3	3	3	3	3	3	1
85.	IC Engine Lab	ME 692	1	1	1	1	1	3	3	3	3	3	3	1
86.	Design Practice II	ME 693	1	1	1	1	1	3	3	3	3	2	3	1
87.	Dynamics of Machines Lab	ME 694	1	1	1	1	1	3	3	3	3	3	3	1
88.	Advanced Manufacturing Lab	ME 791	1	1	1	1	1	3	3	3	3	3	3	1
89.	Electrical Machines	ME595A	2	3			2		3	3	3	3	3	3
90.	Applied Fluid Mechanics	ME595B	1	1	1	3					3	3	3	2
91.	Air Conditioning & Refrigeration	ME695A	1	1	1	1	1	3	3	3	3	3	3	1
92.	Mechatronics	ME695B	2	2	2	3	2	3	3	3	3	3	3	2
93.	Fluid Power Control	ME695C	2	2	2	3	2	3	3	3	3	3	3	3
94.	Seminar	ME 581	1	1	1	1	1	3	3	3	3	2	2	1
95.	Viva Voce on Vocational Training	ME 782	1	1	1	1	1	3		3		1	3	1
96.	Group Discussion	ME783	1	1	1	1	1	3		3		1	3	1
97.	Comprehensive viva	ME 883	1	1	1	1	1	3		3		1	3	1

Curriculum		PSOs			
Sl. No.	Course name	1	2	3	4
1.	English Lang & Tech Comm				1
2.	Physics – 1	1		1	
3.	Mathematics-1			1	
4.	BEEE – 1	2	1	2	
5.	Engg. Mechanics	2	1		
6.	Basic Comput& Principles of Comp Prog	2	1	2	
7.	Chemistry1			1	
8.	Mathematics2			2	
9.	BEEE-II	2	1	1	
10.	Engg Thermo & Fluid Mechanics	3	1	1	
11.	Applied Thermodynamics	1	1	1	
12.	Values & Ethics in Profession			1	
13.	Physics2			1	
14.	Basic EnvironlEngg& ElemBio			1	
15.	Strength of Materials	3	2	1	
16.	Engineering Materials	3	2	1	
17.	Numerical Methods			1	
18.	Mathematics3			3	
19.	Fluid Mech& Hydraulic M/C	1	3	3	
20.	Mechanisms	1	3	3	
21.	Primary Manufacturing Processes	1	1		
22.	PPM			3	2
23.	Dynamics of Machines	1	2	3	
24.	Heat Transfer	1	2	3	
25.	Design of Machine Elements	1	2	3	
26.	Metrology & Measurement	1	2	3	

Curriculum		PSOs			
Sl. No.	Course name	1	2	3	4
27.	Prod & Op Management	1	1	2	2
28.	IC Engines and Gas Turbines	1	2	3	
29.	Machining Principles & M/C Tools	1	2	3	
30.	Machine Design	1	2	3	
31.	Power Plant Engineering	1	2	2	
32.	Adv Manufacturing Tech	1	1	1	
33.	Economics for Engineers		3		
34.	Electrical Machines	2		3	
35.	Applied Fluid Mechanics	1	3	3	
36.	Air Conditioning & Refrigeration	1	2	3	
37.	Mechatronics	2	3	3	
38.	Fluid Power Control	2	3	3	
39.	Materials Handling	2	3	3	
40.	Finite Element Method	2	3	3	
41.	Turbo Machinery	2	2	2	
42.	Maintenance Engg	2	2	2	
43.	Renewable Energy Systems	2	2	2	
44.	Tribology	2	2	2	
45.	Quantity Production Method	1	3	2	
46.	Advanced Welding Technology	1	2	2	
47.	Comp Methods in Engineering	2	3	3	
48.	CAD/CAM	1	2	2	
49.	Industrial Robotics	1	2	2	
50.	Energy Conservation &Mgmt	1	1	2	1
51.	Quality & Reliability Engineering	2	2	2	
52.	Software Engineering	2	3	2	
53.	Industrial Instrumentation		3	3	
54.	Operations Research		3	3	
55.	Biomechanics & Biomaterials			3	
56.	Safety & Occupational Health	2	2	2	
57.	Automation & Control	1	2	2	
58.	Water Resource Engineering	2	2	2	
59.	Automobile Engineering	1	2	1	
60.	Project : Part I	1	1	1	1
61.	Project Part II :	1	1	1	1
62.	Workshop practice Lab	1	2		
63.	Physics Lab	3		3	
64.	BEEE Lab	2	3	2	
65.	Eng Lang & Tech Comm Lab				3
66.	N.S.S	1	2		
67.	Engineering drawing	1	2		
68.	Basic Compu& of CP Lab	2	3	2	
69.	Chemistry Lab			3	
70.	BEEE Lab	2	3	2	
71.	Tech Report Writing & Lang Lab			3	
72.	Physics Lab2			3	
73.	Machine Drawing –I	1	2		
74.	Workshop PracticeII	1	2		
75.	Applied Mechanics Lab	1	2		
76.	Numerical Methods Lab			3	
77.	Fluid Mechanics & Hydraulics Lab	1	2		

Curriculum		PSOs			
Sl. No.	Course name	1	2	3	4
78.	Manufacturing Technology Lab	1	1		
79.	Material Testing Lab	1	2	3	
80.	Machine DrawingII	1	2	2	
81.	Applied Thermo& H T Lab	1	2		
82.	Design PracticeI	1	1	2	
83.	Metrology & Measurement Lab	1	2	2	
84.	Machining & Machine Tools Lab	1	1	2	
85.	IC Engine Lab	2	2	3	
86.	Design PracticeII	1	1	3	
87.	Dynamics of Machines Lab	1	2	2	
88.	Advanced Manufacturing Lab	1	1	2	
89.	Electrical Machines	1	2	2	
90.	Applied Fluid Mechanics	2	3	3	
91.	Air Conditioning & Refrigeration	1	2	3	
92.	Mechatronics	2	3	3	
93.	Fluid Power Control	2	3	3	
94.	Seminar	1	1	1	1
95.	Viva Voce on Vocational Training	1	2	3	
96.	Group Discussion	1	1	1	1
97.	Comprehensive viva	1	1	1	1

3.2 Attainment of Course Outcomes: (50)

3.2.1 Describe the assessment processes used to gather the data upon which the evaluation of the course outcome is based. (10)

A teacher compiles the data of mid-term (I&II) end semester assessment in his or her subject. The teacher then enters the marks and the grades through the online software provided by MAKAUT (formerly WBUT).. Four hard copies are signed, two for examination section one for department and one for self. This record is maintained by examination section.

Assessment of course outcomes					
Assessments		Frequency / Sem.	Theory Courses (%)	Practical Courses (%)	Project Courses (%)
Written Examination	Internal test I & II	2	15	----	----
	Attendance	1	5	----	----
	Teachers' assessment & quiz	3	10	----	----
	End semester	1	70		
Practical examination (Experiments, Practical records and Viva-voce	Viva-voce on lab subject	1	----	20	----
	Organization of experiments			5	
	Actual data generation & conducting of expt.	1/ expt		10	
	Data analysis/ synthesis and conclusion	Do		20	
	Attendance & regularity	Do		5	
	Preparedness for conduct of experiment	Do		10	
	Initiative for learning & interacting	Do		10	
	Presentation of lab report, regularity in submission & content	Do		15	
Project examination	Project report	1	----		50
	Power point presentation& Viva-Voce	1	----		50

3.2.2 Record of attainment of course outcomes of all the courses with respect to sets attainment levels: (40)

Attainment of Course Outcome: Core Courses (Theory & Practical)

Theory:

Sl. No.	Course name	Course code	Attainment
1.	English Lang & Technical Communication	HU101	2.5
2.	Physics – 1	PH101	1.5
3.	Mathematics-1	M101	2.5
4.	Basic Electrical & Electronic Engg – 1	ES101	1
5.	Engg. Mechanics	ME101	2
6.	Basic Computer& Principles of C P	CS201	3
7.	Chemistry-1	CH201	1.6
8.	Mathematics-2	M201	2.75
9.	Basic Electrical & Electronic Engg-II	ES201	1
10.	Engg Thermodynamics & Fluid Mechanics	ME201	2
11.	Applied Thermodynamics	ME 301	2
12.	Values & Ethics in Profession	HU-301	2
13.	Physics-2	PH-301	2
14.	Basic Env. Engg& Elementary Biology	CH301	2
15.	Strength of Materials	ME 302	2
16.	Engineering Materials	ME 303	2
17.	Numerical Methods	M(CS)401	2
18.	Mathematics-3	M-402	2
19.	Fluid Mechanics & Hydraulic Machines	ME 401	2
20.	Mechanisms	ME 402	2
21.	Primary Manufacturing Processes	ME 403	2
22.	Principles & Practices of Management	HU511	2
23.	Dynamics of Machines	ME 501	2
24.	Heat Transfer	ME 502	2
25.	Design of Machine Elements	ME 503	2
26.	Metrology & Measurement	ME504	2
27.	Production & Operations Management	HU 611	2
28.	IC Engines and Gas Turbines	ME 601	2
29.	Machining Principles & Machine Tools	ME 602	2
30.	Machine Design	ME 603	2
32.	Power Plant Engineering	ME 701	2
33.	Advanced Manufacturing Technology	ME 702	2
38.	Economics for Engineers	ME 801 (HU)	2

Practical:

Sl. No	Course name	Course code	Attainment
1	Workshop practice Lab	ME 192	3
2	Physics Lab	PH 191	3
3	Basic Electrical & Electronic Engg Lab-I	ES 191	3
4	English Lang & Technical Comm Lab	HU 191	3
5	Engineering drawing	ME 292	3
6	Basic Computer & Principles of C P Lab	CS 291	3
7	Chemistry Lab	CH 291	3
8	Basic Electrical & Electronic Engg Lab-II	ES 291	3
9	Technical Report Writing & Lang Lab Practice	HU 381	3
10	Physics Lab-2	PH 391	3
11	Machine Drawing –I	ME 391	2
12	Workshop Practice-II	ME 392	3
13	Applied Mechanics Lab	ME 393	3
14	Numerical Methods Lab	M(CS) 491	3
15	Fluid Mechanics & Hydraulics Lab	ME491	2

Sl. No	Course name	Course code	Attainment
16	Manufacturing Technology Lab	ME 492	3
17	Material Testing Lab	ME493	3
18	Machine Drawing-II	ME 494	3
19	Applied Thermodynamics & H T Lab	ME 592	3
20	Design Practice-I	ME 593	3
21	Metrology & Measurement Lab	ME594	3
22	Machining & Machine Tools Lab	ME 691	3
23	IC Engine Lab	ME 692	3
24	Design Practice-II	ME 693	3
25	Dynamics of Machines Lab	ME 694	3
26	Advanced Manufacturing Lab	ME 791	3

Attainment of Course Outcome: Professional Elective Courses (Theory & Practical):

S. No.	Course name	Course code	Attainment
1.	Electrical Machines	ME505A	2
2.	Applied Fluid Mechanics	ME 505B	NA
3.	A. C. & Refrigeration	ME604A	2
4.	Mechatronics	ME604B	NA
5.	Fluid Power Control	ME604C	NA
6.	Materials Handling	ME605A	2
7.	Finite Element Method	ME605B	NA
8.	Turbo Machinery	ME605C	NA
9.	Maintenance Engg	ME703A	NA
10.	Renewable Energy Systems	ME703B	2
11.	Tribology	ME703C	NA
12.	Quantity Production Method	ME704A	NA
13.	Advanced Welding Technology	ME704B	2
14.	Computational Methods in Engg	ME704C	NA
15.	CAD/CAM	ME802A	NA
16.	Industrial Robotics	ME802B	NA
17.	Energy Conservation & Mgmt	ME802C	2

Sl No.	Course name	Course code	Attainment
1.	Electrical Machines	ME 595A	3
2.	Applied Fluid Mechanics	ME 595B	NA
3.	A/C& Refrigeration	ME 695A	3
4.	Mechatronics	ME 695B	NA
5.	Fluid Power Control	ME 695C	NA

Attainment of Course Outcome: Free Elective Courses (Theory& Practical):

S. No.	Course name	Course code	Attainment
1.	Software Engineering	ME 705A	NA
2.	Industrial Instrumentation	ME 705B	NA
3.	Operations Research	ME705C	2
4.	Biomechanics & Biomaterials	ME 705D	NA
5.	Safety & Occupational Health	ME803A	NA
6.	Automation & Control	ME803B	NA
7.	Water Resource Engineering	ME803C	NA
8.	Automobile Engineering	ME803D	2

Attainment of Course Outcome: Projects & Seminars.

S. No.	Course name	Course code	Attainment
1.	Project : Part I	ME 881	3
2.	Project: Part II	ME 882	3

Sl No.	Course name	Course code	Attainment
1.	Seminar-I	ME 581 (Sessional)	3
2.	Viva Voce on Vocational Training	ME 782	3
3.	Group Discussion	ME783	3
4.	Comprehensive viva	ME 883	3

3.3 Attainments of Programme outcomes and programme specific outcomes: (50)

3.3.1 Describe assessment tools and processes used for assessing the attainment of each Programme Outcomes and Programme specific Outcomes (10)

A teacher compiles the marks of internal class tests (I&II) and end semester assessments of practical examination marks. The teacher then uploads the internal assessment and practical examination marks in the exam software. Three hard copies are signed, two for examination cell and one for department. This record is maintained by examination cell.

Semester examination papers are evaluated externally by the MAKAUT (formerly WBUT affiliated university). The final assessment is then collected and the attainments are tabulated.

The following table describes the tools by which POs and PSOs are attained. It also indicates the frequency of assessment process.

Use of Rubrics for Evaluation and Assessment of POs

Direct Assessment methods are formative as well as summative	
For some of the POs that are abstract, rubrics has been designed using performance indicators and shared with the students in advance. This helps students understand against which parameter their work will be judged with the "scoring rules". These rubrics can be used by students in, revising, and judging their own work and progress.	
Assignments (10) Quiz(Lab/optional) Class test (15)	The assignment, Quiz in the labs and class test are a qualitative performance assessment tool designed to assess students' knowledge of engineering practices, framework, and problem solving. An analytic rubric was developed to assess students' knowledge with respect to the learning outcomes associated with the scenario tool.
Group discussion/ Brainstorming (Lab)	This is designed to assess student's analytical capacity along with the capability to communicate with others in labs.
End semester exam (Theory -70)	End examinations are metric for assessing all the POs and attainments of all POs in end semester exam are same.
End semester exam (Lab practical - 100)	This is mainly to assess student's practical knowledge with their designing capabilities.
Course Evaluation & Attendance (5)	At the end of every semester, students give feedback for the course taught to them. In this feedback survey students tell how effective course was in order to achieve POs.

Direct Assessment methods are formative as well as summative	
Indirect Assessment methods	
Student exit survey	To evaluate the success of programme in providing students with opportunities to achieve the programme outcome every year
Employer Survey	Provide information about our graduate's skills and capability. – after every 2 years
Course outcomes survey	At the end of each semester, a course assessment report is prepared where the statistics of students understanding about the particular course is analyzed. This process is considered to be an indirect method for assessing the POs.
Alumni Survey	Collect variety of information about program satisfaction, from graduate's end. –after every years

3.3.2 Provide results of evaluation of each PO and PSO: (40)

Attainment Level of PO & PSO (Direct Attainment)

High: (3) **Medium: (2)** **Low: (1)**

Course Attainment	Programme Outcome (PO)											
	1	2	3	4	5	6	7	8	9	10	11	12
HU 101	0.83	1.25	1.08	1.67	0.83		0.83		1.67	2.36	1.11	
PH 101	1.17	1.17	1.	1.17	1	0.5	-	-	-	-	0.5	1.25
M 101	2.5	2.5	1.81	2.08	-	-	-	-	-	-	-	-
ES 101	1	1	1	1	-	0.67	-	-	-	-	0.67	0.67
ME 101	1.85	1.63	1.43	1.57	-	1.00	-	-	-	-	-	-
CH 201	1.6	1.07	1.2	1.2	1.2	1.07	1.07	-	-	-	1.07	1.33
ES 201	1	1	1	1	-	0.67	-	-	-	-	0.67	0.67
CS 201	2.4	2.33	2.17	2.17	2.8	2	-	-	3	3	3	2.2
M 201	2.75	2.75	1.99	2.29	-	-	-	-	-	-	-	-
ME 201	2	1.73	-	1.33	-	-	1.33	-	-	1.33	-	-
ME 301	3	3	0	0	2	0	2	0	0	0	0	2
ME 302	2.5	2.33	3	2	0	2	0	0	0	0	0	0
ME 303	3	2.33	2	2.67	2.5	2	2	0	2	0	3	2.5
ME 401	3	3	3	3	3	0	0	2	0	2	0	2
ME 402												
ME 403	3	2	2	0	0	2	3	0	2	0	1	2.666667
ME 501	3	2.75	2.667	1	0	0	0	0	0	0	0	2.75
ME 502	3	3	3	3	3	2	0	0	0	0	0	0
ME 503	3	3	2.75	3	3	2	0	0	0	0	3	2
ME 505A	3	2	2		1	1		1		2	1	1
ME 601	3	3	0	0	2	0	3	0	0	0	0	2
ME 602	2	2.75	3	3	3	2	3	0	2	2	2.25	2.25
ME 603	3	3	2.75	3	3	2	0	0	0	0	3	2
ME 604A	3	1	0	2	0	1	1	1	0	0	0	1
ME 701	0	2	2	2	2	0	3	2.75	3	0	0	2
ME 702	2.25	3	3	3	3	2	2.5	0	2	3	2	2.75
ME 703B	3	3	0	0	2	2	3	0	0	2	0	2
ME 704B	3	3	2.5	0	2	1	2	0	0	0	0	3

ME 705C	3	3	3	3	2.71	1	1	0	3	0	2.71	3
ME 802D	0	3	0	0	2	2	0	0	1	1	2	2
ME 803D	3	3	0	0	3	0	0	0	0	0	0	0

Course Attainment	Programme specific outcome (PSO)			
	1	2	3	4
ME 101	2.666	0	0	0
ME 201	2.66667	2	0	0
ME 301	2	0	0	0
ME 302	2.5	2.4	1	0
ME 303	3	0	0	2
ME 401	2.75	0	0	0
ME 403	2	2	3	0
HU511				
ME 501	2.75	1	0	0
ME 502	2	0	0	0
ME 503	3	2	2	2.5
ME 505A	1	1	2	1
HU 611				
ME 601	2	0	0	0
ME 602	0	3	2.5	2
ME 603	3	2	2	2.5
ME 604A	1.667	0	3	1
ME 701	2	0	0	0
ME 702	2	3	2.25	2
ME 703B	0	2	0	0
ME 704B	0	2	2	0
ME 705C	2.6	2.5	1.86	2
ME 803D	0	2	0	0

Attainment Level of PO & PSO (Indirect Attainment)

High: 3 **Medium: 2** **Low: 1**

Curriculum		Programme Outcome (POs)												PSOs			
S. No.	Course name	a	b	c	d	e	f	g	h	i	j	k	l	1	2	3	4
1.	Student Exit Surveys	3	3	3	2	3	2	2	1	3	3	3	3	3	2	2	3
2.	Employer Surveys	3	3	3	2	3	2	2	1	3	3	3	3	3	2	2	3
3.	CO Surveys	3	3	3	2	3	2	2	1	3	3	3	3	3	2	2	3
4.	Alumni Surveys	3	3	3	2	3	2	2	1	3	3	3	3	3	2	2	3
Indirect attainment		3	3	3	2	3	2	2	1	3	3	3	3	3	2	2	3

CRITERION 4:

Students performance

CRITERION 4	Students performance	150

4. Students performance: (150)

Admission/ Intake in the programme:

Item (Information to be provided cumulatively for all the shifts with explicit headings, whenever applicable)	2015-16 CAY	2014-15 CAY m1	2013-14 CAYm2	2012-13 CAYm3
Sanctioned intake strength in the program (N)	120	120	120	120
Total number of admitted students in first year minus number of students migrated to other programs at the end of 1st year (N1)	75	101	125	123
Number of admitted students in 2nd year in the same batch via lateral entry (N2)	30	20	22	10
Separate division students, if applicable(N3)	Nil	Nil	Nil	Nil
Total number of admitted students in the program (N1+N2+N3)	105	121	147	133

Number of students Graduate without Backlog:

Year of entry	(N1+N2+N3)	Number of students who have successfully Completed without any BLACKLOG in any semester/year			
		1st year	2nd year	3rd year	4th year
CAY (2015-16)	102 (=72+30+0)	25	N/A	N/A	N/A
CAYm1 (2014-15)	115 (=96+19+0)	53	46 (=44+2)	N/A	N/A
CAYm2 (2013-14)	141 (=122+19+0)	83	53 (=49+4)	38 (=37+1)	N/A
CAYm3 (LYG) (2012-13)	128 (=119+09+0)	87	78 (=76+2)	71 (=69+2)	71 (=69+2)
CAYm4 (LYGm1) (2011-12)	67 (=60+07+0)	39	42 (=38+4)	36 (=34+2)	36 (=34+2)
CAYm5 (LYGm2) (2010-11)	64 (=57+07+0)	38	36 (=34+2)	36 (=34+2)	36 (=34+2)

Note: N/A- Not Applicable.

Number of students who have successfully graduated:

Year of entry	(N1+N2+N3)	Number of students who have successfully graduated			
		1st year	2nd year	3rd year	4th year
CAY (2015-16)	102 (=72+30+0)	102	N/A	N/A	N/A
CAYm1 (2014-15)	115 (=96+19+0)	96	115 (=96+19)	N/A	N/A
CAYm2 (2013-14)	141(=122+19+0)	122	141(=122+19)	141(=122+19)	N/A
CAYm3 (LYG) (2012-13)	128(=119+09+0)	119	128 (=119+9)	128 (=119+9)	113(=106+07+0)
CAYm4 (LYGm1) (2011-12)	67 (=60+07+0)	60	67 (=60+7)	67 (=60+7)	61(=55+06+0)
CAYm5 (LYGm2) (2010-11)	64 (=57+07+0)	57	64 (=57+7)	64 (=57+7)	62(=56+06+0)

Note: N/A- Not Applicable.

4.1 Enrollment ratio: (20)

(Enrolment Ratio=N1/N)

Item (Students enrolled at the first Year level on average basis during the period of assessment)	Marks
>=90% students enrolled	20
>=80% students enrolled	18
>=70% students enrolled	16
>=60% students enrolled	14
Otherwise	0

Year	2015-16	2014-15	2013-14
Sanction	120	120	120
Admitted	75	101	125
Ratio	0.625	0.84	1.04
%	62.50%	84.17%	104.17%
Average Enrolment Ratio	83.61%		

4.2 Success rate in the stipulated period of the programme:(40)

4.2.1 Success rate without backlogs in any semester or year of study: (25)

SI = (Number of students who have graduated from the program without backlog)/ (Number of students admitted in the first year of that batch and admitted in 2nd year via lateral entry and separate division, if applicable)

Average SI = Mean of Success Index (SI) for past three batches

Success rate without backlogs in any year of study = 25 × Average SI

Item	LYG (CAYm3) (2012-13)	LYGm1 (CAYm4) (2011-12)	LYGm2 (CAYm5) (2010-11)
Number of students admitted in the corresponding First Year + admitted in 2nd year via lateral entry and separate division, if applicable	128 (=119+09+0)	67 (=60+07+0)	64 (=57+07+0)
Number of students who have graduated without backlogs in the stipulated period	71 (=69+2)	36 (=34+2)	36 (=34+2)
Success Index (SI)	0.5546875	0.537313433	0.5625
Average SI	0.551500311		
Success Rate = 25 X average SI	13.79		

Success rate without backlogs in any year of study = 25 × Average SI = 25 x 0.5515 = 13.79

4.2.2 Success rate within stipulated period: (15)

SI = (Number of students who graduated from the program in the stipulated period of course duration)/ (Number of students admitted in the first year of that batch and admitted in 2nd year via lateral entry and separate division, if applicable)

Average SI = mean of Success Index (SI) for past three batches Success rate = 15 ×

Average SI

Item	LYG (CAYm3) (2012-13)	LYGm1 (CAYm4) (2011-12)	LYGm2 (CAYm5) (2010-11)
Number of students admitted in the corresponding First Year + admitted in 2nd year via lateral entry and separate division, if applicable	128 (=119+09+0)	67 (=60+07+0)	64 (=57+07+0)
Number of students stipulated period who have graduated in the stipulated period	113 (=106+07+0)	61 (=55+06+0)	62 (=56+06+0)
Success Index (SI)	0.8828125	0.91044776	0.96875
Average Success Index	0.92		
Success Rate = 15 X average SI	**13.81**		

4.3 Academic performance in the third year : (15)

*Academic Performance = 1.5 * Average API (Academic Performance Index)*

***API**=((Mean of 3rd Year Grade Point Average of all successful Students on a 10 point scale) or (Mean of the percentage of marks of all successful students in Third Year/10))x(number of successful students/number of students appeared in the examination)*

Academic Performance	CAY (2015-16)	CAYM1 (2014-15)	CAYm2 (2013-14)
Mean of CGPA or Mean Percentage of all successful students (X)	8	7.75	7.77
Total no. of successful students (Y)	38 (=37+1)	71 (=69+2)	36 (=34+2)
Total no. of students appeared in the examination (Z)	53 (=49+4)	78 (=76+2)	42 (=38+4)
API = X* (Y/Z)	5.735849057	7.05448718	6.66
Average API = (AP1 + AP2 + AP3)/3	6.483445412		
Academic Performance = 1.5 * Average API	9.725168118		

4.4 Academic performance in the second year : (15)

*(Academic Performance Level = 1.5 * Average API (Academic Performance Index)*
***API** = ((Mean of 2nd Year Grade Point Average of all successful Students on a 10 point scale) or (Mean of the percentage of marks of all successful students in Second Year/10)) x (number of successful students/number of students appeared in the examination)*

Successful students are those who are permitted to proceed to the Third year)

Academic Performance	CAY (2015-16)	CAYm1 (2014-15)	CAYm2 (2013-14)
Mean of CGPA or Mean Percentage of all successful students (X)	7.43	7.65	7.64
Total no. of successful students (Y)	46 (=44+2)	53 (=49+4)	78 (=76+2)
Total no. of students appeared in the examination (Z)	72 (=53+19)	102(=83+19)	94 (=85+9)
API = X* (Y/Z)	4.746944444	3.975	6.33957447
Average API = (AP1 + AP2 + AP3)/3	5.020506304		
Academic Performance = 1.5 * Average API	7.530759456		

4.5 Placement and Higher Studies Entrepreneurship: (40)

Assessment Points = 40 × 0.64 = 25.6

Item	CAY (2015-16)	CAYm1 (2014-15)	CAYm2 (2013-14)
Total No. of Final Year Students (N)	128	67	64
No. of students placed in companies or Government Sector (x)	71	34	31
No. of students admitted to higher studies with valid qualifying scores (GATE or equivalent State or National Level Tests, GRE, GMAT etc.) (y)	15	9	5
No. of students turned entrepreneur in engineering/technology (z)	2	1	1
x + y + z =	88	44	37
Placement Index : (x + y + z)/N	0.69	0.66	0.58
Average placement= (P1 + P2 + P3)/3	$\frac{0.69 + 0.66 + 0.58}{3} = 0.64$		
Assessment Points = 40 * average placement	25.6		

Assessment Points = 40 * average placement = $40 \times 0.64 = 25.6$

4.6 Professional activities: (20)

4.6.1 Professional societies /chapters and organizing engineering events: (5)

(The Department shall provide relevant details)
Institution of Engineers (India) student chapters are in place.

Various programs like seminars (both state as well as national level), technical fests, student quizzes, and debate competition have been organized.

Sl. No.	Theme/Topic	Resource person Name, Designation, Name of the company	Date (From-to)	Source of Funding	Beneficiaries
1.	Industry – Academic Workshop On "Press Tool Technology For Mass Production" (in association with Indo-Danish Tool Room)	Mr. Shubhashish Ghosh Indo-Danish Tool Room, Jamshedpur	12th Aug, 2015	BBIT	Students & Faculty
2.	Adv. Manufacturing Technology	Dr. Golam Kibria, Aliah University	1st, 2nd& 8th July 2015	BBIT	Faculty Members
3.	Electro Discharge Machining	Dr. Mukandar Sekh Aliah University	7th Jul 2015	BBIT	Faculty Members
4.	Recent Advances in Rolling Technology (in association with Institution of Engineers -India)	Production Engineering Divisional Committee, WBSC, IEI in association with Budge Budge Institute of Technology	3rd July, 2015	Production Engineering Divisional Committee, WBSC, IEI in association with Budge Budge Institute of Technology	Faculty Members
5.	"Cutting Tool For Value Addition In Global Mfg Scenario"	Mr. Anik De, Manager, M/S Ceratizit Mr. Somnath Chakarborty , Manager, M/S Ceratizit	October 18, 2014	BBIT	Students & Faculty
6.	Seminar on Design of Mechanical System	IEI in association with Budge Budge Institute of Technology	June 09, 2014	IEI in association with Budge Budge Institute of Technology	Students & Faculty
6.	Seminar On Mechanical Engg– Manufacturing & Power Generation	Prof (Dr) Tapan Pal, Professor, Jadavpur University Prof. (Dr.) SankhaDeb, IIT,Kgp. Er. Samir Banerjee, CESC, Budge Budge.	15th September, 2012	BBIT	Students & Faculty

4.6.2 Publication of technical magazines, newsletters , etc. : (5)

- Departmental Wall magazine is published (semester-wise).
- College magazines are also being published on a regular basis.

4.6.3 Participation in inter-institute events by students of the programme of study: (10)

Sl. No.	Details of Paper/Award	Organized By
1	Students presented a national conference paper on "Free Energy Concept: Energy deduced from Magnetic repulsion"	National Conference on "Engineering Solutions to Sustainable Development" by BBIT
2	Students presented a national conference paper on "Comparison between mechanical properties of a 3D printed	National Conference on "Engineering Solutions to

	object when the process parameters are varied"	Sustainable Development" by BBIT
3	Students have participated in Tech Fest	Every year IIT, Kharagpur and IIT Guwahati

Co-curricular Activities	Extra-curricular Activities
NSS Annual	Sports
Industrial Training	Football Tournament
Spoken Tutorial	Cricket Tournament
Soft skill training & Grooming classes	Volley Ball Tournament
Departmental Seminars	Annual Fest

Budge Budge Institute of Technology encourages the faculty members and Students to take part in co-curricular activities along with their regular academic commitments to keep them exposed to recent developments in the area of their interest and to share their experiences among peer groups.

- The campus has large area for sports comprising of full size football & cricket ground, separate cricket practice pitches, area/courts for badminton, volleyball, lawn tennis (2), basketball, kabaddi etc. A modern swimming pool is also situated in the campus along with a fully equipped gymnasium. Moreover, facilities for indoor games like table tennis, carom, chess etc. are also provided.
- Budge Budge institute of technology organizes yearly intra and inter college tournaments of cricket, football and volley ball
- Students also organize "VERVE" the college fest every year which includes intra and inter college competitions on different technological, sporting as well as cultural events. The Verve series had made its mark in the year of 2010 and with every passing year it is reaching new heights and VERVE 2K16 was no exception.
- Students of this institute also take part in various technical, games & sports and cultural competitions which are organized by other institutes.eg:

CRICKET:

1. Participated in Cricket Premier League, 2016 organized by Jalpaiguri Gov. Engineering College, March, 2016.
2. Participated in Inter-College Cricket Tournament organized by IIEST, Shibpur, and March, 2016 and emerged as the winners.
3. Organized and participated in BBIT CHAMPIONS TROPHY, Organized by BBIT, April, 2016 and emerged as the winner.
4. Participated in Stallions Cup, 2016 organized by Netaji Subhas Engineering College May, 2016.

FOOTBALL:

1. Organized and participated in Gulabi Devi Football Tournament, 2016, September, 2016 and Emerged as Champions.
2. Participated in Inter College football tournament organized by Future Institute of Engineering and Management.
3. Participated in Poto Cup,2016 organized by Pailan Engineering College , May 2016

MISCELLANEOUS EVENTS:

1. Organized a sports fest named IDROTT as a part of the yearly College Fest "VERVE" which had sports events like Gully Cricket, Football, Basketball, Volleyball, Kabaddi, carrom, etc. April, 2016
2. Future Institute of Engineering and Management, Feb 2016

Event 1: Fashion show.

Event 2: Street Dance.

3. Heritage Institute of Technology, March 2016

Event 1: War of bands,

Event 2: Fashion show

4. BBIT

Event: Panel discussion on governance vigilance week

Organizer: Employees provident fund organization

5. IIT KHARAGPUR, February, 2015.

Event1: Model exhibition

Event 2: Extempore, debate, quiz, catapult building.

6. Pailan college of Management and Technology. March 2015

Event 1: Robot race.

Event 2: counter strike, Position 1st

7. BIMS, Batanagar. December2014

Event: counter strike, Position 1st

8. Modern Institute of Technology, April 2016,

Event: Counter Strike, Position1st

- Cultural activities include debating, quizzing, music, photography etc., where students have excelled.
- NSS for all first year students is compulsory. Faculty members impart training to students and regular camps are conducted. First year Students undergo regular drills as per the NSS curriculum.

Faculty members conduct classes and teach intra-moral awareness and enhance safety as well as medical knowledge of the students like first-aids, firefighting etc.

- Annual Days like Independence Day, Republic Day, as well as Teachers Day, Fresher's Welcome, Viswakarma Puja, Sara Swati Puja, Eid-ul-fitr etc. are observed.
- Classes on soft skills and grooming are regularly conducted by the in-house resources and also using external agencies.
- Departmental seminars are organized regularly by all core Departments for the students and the faculties as well.viz.
  - A seminar on "MEMS Based RFIC Design" (Key Speaker: Dr. Tarun Kanti Bhattacharyya) was held on 30th June 2015.
  - A seminar on "Electromagnetics and Advanced Nano Technology" (Key Speaker: (Dr.) Anirban Bhattacharya) was held on 24th September, 2015.
  - A seminar on "HCI and Intelligent Product Development" (Key Speaker: Subhasis Bhaumik) was held 11th April, 2016.
  - A seminar on "Communication: Past, Present & Future" Prof (Dr.) Bhaskar Gupta was held on 19th April, 2016.
  - "Automobile security using Biometrics" by Modassir Bashir and Sanjoy Kr. Mondal published in NCESSD- 2015, PP-13-16, and ISBN – 978-93-83010-24-0. Published by JBBL
  - Departmental FDP was held in 7th Jul 2015 on "Advanced Manufacturing Technology" conducted by Dr. Mukandar Sekh, Asst. Professor, and Aliah University.
  - Departmental FDP was held in 1st, 2nd & 8th Jul 15 on "Advanced Manufacturing Technology" conducted by Dr. Golam Kibria., Asst. Professor, and Aliah University.
  - A workshop was conducted on "Press Tool Technology for Mass Production" on 12th Aug, 2015 organized by Dept. of Mech. Engg in association with Indo-Danish Tool Room, Jamshedpur.
  - A seminar on "Application of Software Engineering in modern technology" (Key Speaker: Prof. D.M. Kar) was held on 27th April, 2016.
  - A seminar on "Cloud Computing" (Key Speaker: Mr. Anirbam Mukherjee) was held on 26th Feb, 2016.
  - A seminar on "Robotics" (Key Speaker: Dr. Dip Narayan Ray and Mr. Dilip Kumar Biswas) was held on 28th August,2015
  - A seminar on "Signal Processing & System Security" (Key Speaker: Dr. Dipnarayan Roy) was held on 28th August, 2015.

- Departmental Seminar has been organized by Civil Engineering Department on 12th September 2015 at BBIT College Campus and Prof. (Dr.) Sudip Kumar Roy, Professor, Department of Civil Engineering, Indian Institute of Engineering Sciences and Technology (IIEST, Shibpur), delivered scholarly lecture on Transportation Engineering and Traffic Engineering to the teachers and students of BBIT.
- A Seminar on "Quantum Structures of Silicon: Potential Material for Photonics and Photovoltaic" (Speaker: Dr. Syed Minhaz Hossain, IIEST, Shibpur) was held on 12.08.2015.
- A Seminar on "Our Universe" (Speaker: Prof. Narayan Banerjee, IISER, Kolkata) was held on 13.04.2016.
- "Faculty Development Programme" conducted by Dr. Arna Seal held on 4th July, 2015 at BBIT.
- A seminar on "STAAD.PRO" for 3rd and 4th year Civil Engineering students was held on 26th Feb, 2015.
- A seminar on "Pile Foundation" presented by Mr. B. Mukherjee of KND Engineering & Technologies for 3rd and 4th year Civil Engineering students on March, 2015.
- On 28th Feb 2015 a Seminar on "Applications of Signal Processing and System security" was organized by CSE department. Speakers: Prof. (Dr.) Sitanshu Kumar Das (C.U) and Prof. (Dr.) Suvrojit Das (NIT Durgapur). More than 200 students and faculty had participated in the seminar.
- A seminar on "Detection of failure and fault diagnosis in rotating electrical machines" by Prof. (Dr.) Nirmal Kumar Deb and Prof. (Dr.) Debasish Chatterjee was held on 18th Oct 2014.
- A seminar on "Generation and utilization of electric power" by Er. Partha Sarathi Bhattacharyya and Prof. (Dr.) Debasish Chatterjee was held on 24th April 2015.
- A seminar on "Detection Control, Automation and Advanced Robotics - 2015" by Prof. Alok Kole, and Prof. Subhasis Bhaumik was held on 30th Jan 2015.
- Mr. Arindam Saha, Asst. Professor attended a seminar on "Teaching Signal Processing & Control Systems using MATLAB and Simulink" on 7th November 2014 at the Park Kolkata.
- A talk on "MEMS Based RFIC Design" was presented by Dr. Tarun Kanti Bhattacharyya (Professor, Department of Electrical and Electronics Communication Engineering, Advanced Technology Development Centre and Professor-in-charge, Advanced VLSI Laboratory, National MEMS Design Centre, IIT-Kharagpur) on 30th June, 2015 as part of Faculty Development Programme
- A Seminar was conducted on "Cutting Tool for Value Addition in Global Manufacturing Scenario" on 18th October 2014.

- Prof. Dr. Ambarish Ghosh& Prof. Dr. Sudip kr. Roy from IIEST, Shibpur on Recent trends in Geotechnical & Transportation Engineering.
- Seminar on "Modern Trends in Power System" was conducted at B.B.I.T seminar hall on 12.04.2014.
- Mr. Sabyasachi Bhattacharyya and Ms. Parna Kundu, Asst. Professor participated in a Two-week ISTE
- Workshop on Signals & Systems conducted by Indian Institute of Technology Kharagpur from 2nd to 12th January, 2014.
- Mr. Souvick mondal has attended a Short Term Course on "Faculty Development Programme for Effective Teaching", organized by Indian Institute of Technology (IIT), Kharagpur, and held on 10th July to 12th July, 2014.
- Prof (Dr.) P.K.Banerjee, Ex. Prof, ETCE, JU, delivered a lecture on Computer Security which covered all the processes and mechanisms by which computer-based equipment, information and services are protected from unintended or unauthorized access, change or destruction, and are of growing importance in line with the increasing reliance on computer systems of most societies worldwide.
- A students' seminar on EMERGING TRENDS IN ELECTRONICS AND COMPUTATION-2013 was held on 31st August, 2013 at BBIT.
- A students' seminar on EMERGING TRENDS IN ELECTRONICS AND COMPUTATION-2013 was held on 30th October, 2013 at BBIT.
- A students' seminar on Modern Communication System was held on 2nd April, 2014 at BBIT.

CRITERION 5:

Faculty information and contribution

CRITERION 5	Faculty information and contribution	200

5. Faculty information and contribution. (200)

Faculty information for all shifts for three assessment years is provided in the prescribed format in Annexure II

BUDGE BUDGE INSTITUTE OF TECHNOLOGY
DEPARTMENT OF MECHANICAL ENGINEERING
SESSION: 2015 - 16

SL NO.	Name of the Faculty Member	DOB	Qualification			Designation (all the joining the institution)	Date of Joining the institution	Distribution of Teaching Load (%)				Sponsored Research (Funded Research)	Consultancy and Product Development	Specialization
			Degree (starting from highest degree)	University	Year of Graduation			1st Year	UG		PG			
									In program	Other Program				
1	Prof (Dr) C.V. Reddy		Ph. D	JNTU	1987	Professor	15-08-15	100					Y	Thermal Engg
2	Prof (Dr) Nikhil Chandra Das	07-04-50	Ph. D	JU	1985	Professor	01-08-14		100				Y	Mfg Technology
3	Prof (Dr) N C Dey Sarkar	01-01-51	Ph. D	JU	1972	Professor	01-08-13		100					Prod Technology
4	Prof. (Dr.) Prasenjit Chatterjee	18-05-82	Ph. D	JU	2006	Assoc.Prof	24-09-15		50	25				Production Management
5	Prof. Dipak Kr. Bandopadhyay	01-01-47	MME	JU	1967	Asst. Prof	20-08-14		100					Mfg, Laser Tech
6	Prof. Gadadhar Das	05-10-48	MME	JU	1971	Asst. Prof	01-11-13		100					App Mechanics
7	Prof. Atreyo Chowdhury	12-10-87	M. Tech	IIT, Gwahati	2010	Asst. Prof	01-02-12		100	50				Thermal Engg
8	Prof. Debajit Banerjee	16-01-79	M.E	JU	2002	Asst. Prof	01-01-10		100					P T & Prod Mgmt
9	Prof. Jayanta Mistri	02-04-86	M. Tech	WBUT	2010	Asst. Prof	03-07-12	44	56					Production Engg
10	Prof. Samriddhya Ray Chowdhury	25-12-87	M. E	BESU	2010	Asst. Prof	08-01-13	50	50					Production Engg
11	Prof. Arindam Mitra	02-04-85	M. E	BESU	2007	Asst. Prof	07-04-12		100					Thermal Engg
12	Prof. Pritam Kumar Rana	01-03-84	M.E.	BESU	2010	Asst. Prof	15-07-14		100					Material Science
13	Prof. Mihir Mouchum Hazarika	01-03-88	M.E.	BESU	2010	Asst. Prof	01-07-13		100					Materials Science
14	Prof. Rinku Shaw	02-01-88	M. Tech,	WBUT	2011	Asst. Prof	21-01-14	22	78					Mfg Technology
15	Prof. Abhijit Roy	22-04-87	M. Tech	NIT, Rourkela	2010	Asst. Prof	01-08-14	72	28					Production Engg
16	Prof. Abhishek Samanta	20-04-89	M.E (JU)	JU	2010	Asst. Prof	07-01-15		100					Automobile Engg
17	Prof. Kaushik Mondal	05-01-91	M.E (JU)	BESU	2012	Asst. Prof	15-07-14		100					Heat Power
18	Prof. Rituparna Biswas	21-11-90	M.E,	BESU	2012	Asst. Prof	14-07-15		100					App. Mechanics
19	Prof. Koushik Mishra	15-09-90	M.E,	JU	2012	Asst. Prof	14-07-15		100					Production Engg
20	Prof. Sujit Banerjee	20-10-78	M. Tech	JU	2008	Asst. Prof	01-07-13		100					Material Handling
21	Prof. Pinku Debnath	01-12-87	Ph. D	NIT, Silchar	2010	Asst. Prof	05-11-15	28	72					Thermal Engg
22	Prof. Subham Biswas	05-01-89	M. E.	JU	2012	Asst. Prof	01-07-15		100					Production Management
23	Prof. Debakar Ghosh	04-05-85	M. Tech	JU	2006	Asst. Prof	14-02-15		100					Thermal
24	Prof (Dr) Shyamal Kumar De	05-06-46	Ph. D	REC, Durgapur	1969	Assoc. Prof	01-11-12		100					Machine Design
25	Prof. Joy Mondal	21-09-87	M. Tech	BESU	2011	Asst. Prof	15-07-14		100					Machine Design
26	Prof Mumtaz Alam Ansari	30-01-82	M. Tech	B. Bhave Univ	2009	Asst. Prof	01-02-16	22	78					Thermal Engg
27	Prof. Sunandan Mukherjee	16-07-85	M. Tech	JU	2008	Asst. Prof	14-02-15		100					Production Technology
28	Dr Krishna Hazra	02-03-63	Ph. D	JU	1987	Assoc. Prof	07-01-16		25	50				Thermal Engg

BUDGE BUDGE INSTITUTE OF TECHNOLOGY
DEPARTMENT OF MECHANICAL ENGINEERING
SESSION: 2014 - 15

SL NO.	Name of the Faculty Member	DOB	Qualification			Designation (all the designations since joining the institution)	Date of Joining the institution	Distribution of Teaching Load (%)				Sponsored Research (Funded Research)	Consultancy and Product Development	Specialization
			Degree (starting from highest degree)	University	Year of Graduation			1st Year	UG		PG			
									In program	Other Program				
1	Prof. (Dr.) Suday Kumar Ghosh	06-08-68	Ph. D	BESU	1994	Professor	01-05-13		100					Thermal Engg
2	Prof (Dr) N C Dey Sarkar	01-01-51	Ph. D	JU	1972	Professor	01-08-13		100					Prod Technology
3	Prof (Dr) Nikhil Chandra Das	07-04-50	Ph. D	JU	1985	Professor	01-08-14		100				Y	Mfg Technology
4	Prof. (Dr.) Dipes Chakraborty	16-05-71	Ph. D	IIT, Kgp	1994	Assoc.Prof	15-01-14		100					Thermal Engg
5	Prof (Dr) Shyamal Kumar De	05-06-46	Ph. D	REC, Durgapur	1969	Assoc.Prof	01-11-12		100					Machine Design
6	Prof. (Dr.) Hriday Ranjan Gupta	07-09-50	Ph. D	BESU	1970	Assoc.Prof	01-07-11		100					Thermal Engg
7	Prof. Dipak Kr. Bandopadhyay	01-01-47	MME	JU	1967	Asst. Prof	20-08-14		100					Mfg, Laser Tech
8	Prof. Gadadhar Das	05-10-48	MME	JU	1971	Asst. Prof	01-11-13	22	78					App Mechanics
9	Prof. Sanjib Kundu	21-03-85	M. Tech	BESU	2011	Asst. Prof	01-07-11		100					Material Science
10	Prof. Krishnendu Mukherjee	01-09-72	M.E.	JU	1998	Asst. Prof	10-01-12		100					Prod Technology
11	Prof. Atreyo Chowdhury	12-10-87	M. Tech	IIT, Gwahati	2010	Asst. Prof	01-02-12		50	50				Thermal Engg
12	Prof. Jayanta Mistri	02-04-86	M. Tech	WBUT	2010	Asst. Prof	03-07-12	16	84					Production Engg
13	Prof. Atul Mishra	03-11-88	M. Tech	JU	2009	Asst. Prof	07-04-12		100					Production Engg
14	Prof. Saikat Datta	30-08-83	MME	JU	2006	Asst. Prof	07-03-12		100					App Fluid
15	Prof. Samriddhya Ray Chowdhury	25-12-87	M. E	BESU	2010	Asst. Prof	08-01-13	41	59					Production Engg
16	Prof. Arindam Mitra	02-04-85	M. E	BESU	2007	Asst. Prof	07-04-12		100					Thermal Engg
17	Prof. Pritam Kumar Rana	01-03-84	M.E.	BESU	2010	Asst. Prof	15-07-14		100					Material Science
18	Prof. Mihir Mouchum Hazarika	01-03-88	M.E.	BESU	2010	Asst. Prof	01-07-13	47	53					Materials Science
19	Prof. Debajit Banerjee	16-01-79	M.E	JU	2002	Asst. Prof	01-01-10	33	67					P T & Prod Mgmt
20	Prof. Sujit Banerjee	20-10-78	M. Tech	JU	2008	Asst. Prof	01-07-13		100					Material Handling
21	Prof. S N Mukhopadhyay	01-02-57	MS	USA		Asst. Prof	01-08-14		100					Thermal Engg
22	Prof. Abhijit Roy	22-04-87	M. Tech	NIT, Rourkela	2010	Asst. Prof	01-08-14	69	31					Production Engg
23	Prof. Debayan Mondal	05-07-77	M.E.	BESU	2003	Asst. Prof	09-09-14		100					Thermal Engg
24	Prof. Rinku Shaw	02-01-88	M. Tech,	WBUT	2011	Asst. Prof	21-01-14		100					Mfg Technology
25	Prof. Joy Mondal	21-09-87	M. Tech	BESU	2011	Asst. Prof	15-07-14	22	78					Machine Design
26	Prof. Kaushik Mondal	05-01-91	M.E (JU)	BESU	2012	Asst. Prof	15-07-14		100					Heat Power

BUDGE BUDGE INSTITUTE OF TECHNOLOGY
DEPARTMENT OF MECHANICAL ENGINEERING
SESSION: 2013 - 14

SL NO.	Name of the Faculty Member	DOB	Qualification			Designation (all the designations since joining the institution)	Date of Joining the institution	Distribution of Teaching Load (%)				Sponsored Research (Funded Research)	Consultancy and Product Development	Specialization
			Degree (starting from highest degree)	University	Year of Graduation			1st Year	UG		PG			
									In program	Other Program				
1	Prof. (Dr.) Suday Kumar Ghosh	06-08-68	Ph. D	BESU	1994	Professor	01-05-13		100					Thermal Engg
2	Prof (Dr) N C Dey Sarkar	01-01-51	Ph. D	JU	1972	Professor	01-08-13		100					Prod Technology
3	Prof (Dr) Shyamal Kumar De	05-06-46	Ph. D	REC, Durgapur	1969	Assoc.Prof.	01-11-12		100					Machine Design
4	Prof. (Dr.) Hriday Ranjan Gupta	07-09-50	Ph. D	BESU	1970	Assoc.Prof.	01-07-11	83.3	16.7					Thermal Engg
5	Prof. Gadadhar Das	05-10-48	MME	JU	1971	Asst. Prof	01-11-13		100					App Mechanics
6	Prof. Bankim Pattanayak	04-09-58	M. Tech	IIT, Kgp	1980	Asst. Prof	01-08-10		100					Thermal Engg
7	Prof. Sanjib Kundu	21-03-85	M. Tech	BESU	2011	Asst. Prof	01-07-11	66.7	33.33					Material Science
8	Prof. Krishnendu Mukherjee	01-09-72	M.E.	JU	1998	Asst. Prof	10-01-12		100					Prod Technology
9	Prof. Atreyo Chowdhury	12-10-87	M. Tech	IIT, Gwahati	2010	Asst. Prof	01-02-12		50	50				Thermal Engg
10	Prof. Jayanta Mistri	02-04-86	M. Tech	WBUT	2010	Asst. Prof	03-07-12	94	6					Production Engg
11	Prof. Atul Mishra	03-11-88	M. Tech	JU	2009	Asst. Prof	07-04-12		100					Production Engg
12	Prof. Saikat Datta	30-08-83	MME	JU	2006	Asst. Prof	07-03-12		100					Applied Fluid
13	Prof. Samriddhya Ray Chowdhury	25-12-87	M. E	BESU	2010	Asst. Prof	08-01-13		50					Production Engg
14	Prof. Arindam Mitra	02-04-85	M. E	BESU	2007	Asst. Prof	07-04-12	80.5	19.5					Thermal Engg
15	Prof. Pritam Kumar Rana	01-03-84	M.E.	BESU	2010	Asst. Prof	15-07-14		100					Material Science
16	Prof. Mihir Mouchum Hazarika	01-03-88	M.E.	BESU	2010	Asst. Prof	01-07-13		75					Materials Science
17	Prof. Debajit Banerjee	16-01-79	M.E	JU	2002	Asst. Prof	01-01-10		100					P T & Prod Mgmt
18	Prof. Sujit Banerjee	20-10-78	M. Tech	JU	2008	Asst. Prof	01-07-13		100					Material Handling

5.1 *Student-Faculty Ratio (SFR): (20)*

S:F ratio = N/F; ***N****=No. of students= 3x where x is (approved intake + 20% lateral entry intake+ separate division, if any)*

F = No. of faculty = (a + b – c) for every assessment year

a: *Total number of full-time regular Faculty serving fully to 2nd, 3rd and 4th year of the this program*

b: *Total number of full-time equivalent regular Faculty(considering fractional load) serving this program from other Program(s)*

c: *Total number of full time equivalent regular Faculty(considering fractional load) of this program serving other program(s)*

Regular Faculty means:

- Full time on roll with prescribed pay scale. An employee on contract for a period of not less than two years AND drawing consolidated salary not less than applicable gross salary shall only be counted as a regular employee.
- Prescribed pay scales means pay scales notified by the AICTE/Central Government and implementation as prescribed by the State Government. In case State Government prescribes lesser consolidated salary for a particular cadre then same will be considered as reference while counting faculty as a regular faculty.

Year	X	N	As per AICTE F= N/15	As per NBA F = (a + b – c)	SFR= N/F	Faculty in ME Dept.
CAY (2015-16)	144 144 144	432	28.8	F = 22.5 + 5.5 – 5.5 = 22.5	19.20	28
CAYm1 (2014-15)	144 144 72	360	24	F = 21.5 + 4.5 – 4.5 =21.5	16.74	26
CAYm2 (2013-14)	144 72 72	288	19.2	F = 15 + 3 – 3 =15	19.20	18
Average SFR for three assessment years					18.38	

5.2 Faculty Cadre Proportion: (25)

The reference Faculty cadre proportion is 1(F1):2(F2):6(F3)
F1: Number of Professors required = 1/9 x Number of Faculty required to comply with 15:1 Student-Faculty ratio based on no. of students (N) as per 5.1
F2: Number of Associate Professors required = 2/9 x Number of Faculty required to comply with 15:1 Student-Faculty ratio based on no. of students (N) as per 5.1
F3: Number of Assistant Professors required = 6/9 x Number of Faculty required to comply with 15:1 Student-Faculty ratio based on no. of students (N) as per 5.1

Year	Professors		Associate Professors		Assistant Professors		Total Available Faculty
	Required F1	Available	Required F2	Available	Required F3	Available	
CAY	3.20	3	6.40	3	19.20	22	28
CAY*m*1	2.67	3	5.33	3	16.00	20	26
CAY*m*2	2.13	2	4.27	2	12.80	14	18
Average Numbers	RF1 = 2.67	AF1 = 2.67	RF2 = 5.33	AF2 = 2.67	RF3 = 16.00	AF3 = 18.67	
AF1/RF1	1.00	Cadre Ratio Marks	$= \left[\left(\frac{AF1}{RF1}\right) + \left(\frac{AF2}{RF2} \times 0.6\right) + \left(\frac{AF3}{RF3} \times 0.4\right)\right] \times 12.25$				
AF2/RF2	0.50						
AF3/RF3	1.17		$=21.64 \approx 22$				

5.3 Faculty Qualification: (25)

FQ =2.5 x [(10X +6Y)/F)] where x is no. of regular faculty with Ph.D., Y is no. of regular faculty with M. Tech, F is no. of regular faculty required to comply 1:15 Faculty Student ratio (no. of faculty and no. of students required are to be calculated as per 5.1)

	X	Y	F	FQ=2.5 x [(10X +6Y)/F)]
CAY	7	21	28.80	17.01
CAY*m*1	6	20	24.00	18.75
CAY*m*2	4	14	19.20	16.15
Average Assessment				17.30 ≈ 18

5.4 Faculty Retention (25)

Item	Marks
>=90% of required Faculty members retained during the period of assessment keeping CAY$m2$ as base year	25
>=75% of required Faculty members retained during the period of assessment keeping CAY$m2$ as base year	20
>=60% of required Faculty members retained during the period of assessment keeping CAY$m2$ as base year	15
>=50% of required Faculty members retained during the period of assessment keeping CAY$m2$ as base year	10
<50% of required Faculty members retained during the period of assessment keeping CAY$m2$ as base year	0

No. of regular faculty members retained keeping CAYm2 (2013-14) as base year = 11

No. of regular faculty members in CAYm2 (2013-14) = 18

Therefore, Faculty retention is $= \frac{11}{18} \times 100\% = \mathbf{61.11\%}$

5.5 Innovations by the Faculty in Teaching and Learning: (20)

- Faculty members provide quality study materials to enrich students.
- Mode of teaching in this institute is not only limited to the traditional Chalk & Talk methods, but also an amalgamation of the modern technology (e.g. power point presentation, audio-visual teaching etc.) with the traditional one.
- The course files are distributed among the students by the subject teacher well in advance of the commencement of the class.
- Faculty shares the study materials among the students via e-mail, websites, hand-outs etc.
- The biggest resource for self-learning is obviously the college library. The college library not only possesses plenty of books to meet the students' syllabus-oriented needs, but it also houses numerous books by eminent national and international authors on a variety of topics which students may regularly access to sharpen and broaden their knowledge. The library also possesses a number of magazines and periodicals related to different branches of science and technology which the students may readily access.
- The library also subscribes to a host of online and printed journals which are also made readily available to the students.
- The library also includes a computer room with internet access which is often used by students to access various forms of e-materials for their self-development.

- Students are encouraged to visit NPTEL lectures, browse different internet sites to increase their knowledge base about the subject. Moreover, through these activities students acquire relevant knowledge which is beyond the syllabus as per the university curriculum.
- This apart, students are also endowed with various resource materials by the teachers for their self-development and they are also encouraged by them to participate in various competitions of technical innovations for which again they have to participate in innovative thinking and experimentations.
- The Tech-Fest organized by the college also serves to create opportunities for students' self-development based on extra-syllabus technological knowhow.
- The Department of Humanities regularly organizes Soft Skill classes for various departments, based on availability and requirement, to enhance the students' communication skills, grooming and body language to equip them for the professional world.

5.6 Faculty as participants in Faculty development/training activities/STTPs: (15)

Name of the Faculty	Max. 5 per Faculty		
	CAY	CAY*m*1	CAYm2
Prof. (Dr.) C.V. Reddy	5		
Prof. (Dr.) Nikhil Chandra das	5	5	
Prof. (Dr.) N C Dey Sarkar	5	5	5
Prof. (Dr.) Shyamal Kumar De	5	5	5
Prof. Dipak Kr. Bandopadhyay	5	5	
Prof. Gadadhar Das	5	5	5
Prof. Arindam Mitra		5	5
Prof. Debajit Banerjee	5	5	5
Prof. Jayanta Mistri	5	5	5
Prof. Samriddhya Ray Chowdhury	5	5	5
Prof. Rinku Shaw		5	
Prof. Debayan Mondal		5	
Prof. Abhijit Roy	5	5	
Prof. Abhishek Samanta	5	5	
Prof. Kaushik Mondal	5	5	
Prof. Rituparna Biswas	5		
Prof.Kaushik Mishra	5		
Prof. Pritam Kumar Rana	5		
Prof. Mihir Mouchum Hazarika		5	
Prof. Atreyo Chowdhury	5	5	
Dr. Prosenjit Chatterjee	5		
Prof. Sujit Banerjee		5	
Prof. Debakar Ghosh		5	
Prof. Joy Mondal		5	
Prof. Pinku Debnath	5		
Sum	**90**	**95**	**35**
***RF*= Number of Faculty required to comply with 15:1 Student-Faculty ratio as per 5.1**	**28.80**	**24.00**	**19.20**

Name of the Faculty	Max. 5 per Faculty		
	CAY	CAY*m*1	CAYm2
Assessment = 3 × (Sum/0.5RF)	18.75	23.75	10.9375
(Marks limited to 15)	15	15	10.94
Average assessment over three years (Marks limited to 15) =	13.65 ≈ 14		

5.7 Research and Development: (30)

5.7.1 Academic Research (10)

Sl. No.	Category	Number / quantity	Details	Done by
1.	Number of quality publications in refereed/SCI Journals during the assessment period.	4	International journals	Prof Dr Shyamal Kr De
		1		Prof. Deepak K Bandyopadhyay
		1		Prof. Jayanta Mistri
		1		Prof. Koushik Mishra
		1		Prof. Abhishek Samanta
2.	Ph.D. guided /Ph.D. awarded during the assessment period while working in the institute	NIL		

5.7.2 Sponsored Research (5)

As institution is just completed seven years and became eligible for accreditation, hence it became difficult for the faculty to get funded projects from the government departments like DST without accreditation. But currently we have received NAAC Accreditation and proposal is under preparation during 2017.

5.7.3 Development activities: (10)

Product Development

Research laboratories

Instructional materials

Working models/charts/monograms etc.

- Product Development :

Sl. No.	Project Title	Research Laboratory
1.	Upgradation of the battery operated rickshaw	Research & Development Cell
2.	Working Model of Robot	Research & Development Cell
3.	Working Model of Drone	Research & Development Cell

- Department has a project lab through which student as well as faculty undertake research.
- Model, charts and instruction materials etc are made available for students as well as teachers.

5.7.4 Consultancy (from Industry): (5)

(Provide a list with Project Title, Funding Agency, Amount and Duration)

Funding amount (Cumulative during assessment years):

Amount > 10 Lacs =5 Marks

Amount >= 8 Lacs and <= 10 lacs – 4 Marks Amount >= 6 Lacs and < 8 lacs – 3 Marks Amount >= 4 Lacs and < 6 lacs – 2 Marks

Amount >= 2 Lacs and < 4 lacs – 1 Mark Amount < 2 Lacs – 0 Mark

- The department has undertaken small consultancy projects and completed successfully to earn a good-will of the industry, such that our students will get training as well quality projects.

Sl. No.	Name of the consultancy	Area of consultancy	Revenue
1	JKB gas pvt ltd, Budge Budge	**Bung hole for LPG gas cylinder**	**1,12,000/-**
2	IOC Bottling Plant, Budge Budge	**Load testing of conveyor belt**	**For good-will**
3	Urmila Devi Jaganath Gupta Charitable trust	**TMT bar load testing**	**15,000/-**
4	JKB gas pvt ltd, Budge Budge	**Fatigue Analysis of Pressure Vessel (Cylinder)**	**2,74,000/-**
5	JKB gas Pvt ltd, Budge Budge	**Hazard and Safety Assessment for Plant**	**45,000/-**

5.8 Faculty Performance Appraisal and Development System (FPADS): (30)

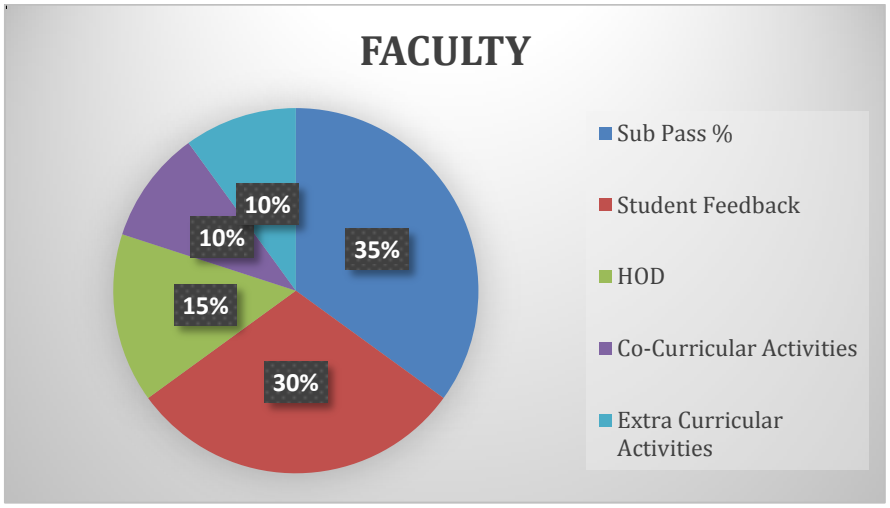
FACULTY appraisal report consists of the appraisal PERCENTAGE for the different entities of the College like Student, FACULTY and Associate Director and the following feedback has been carried out

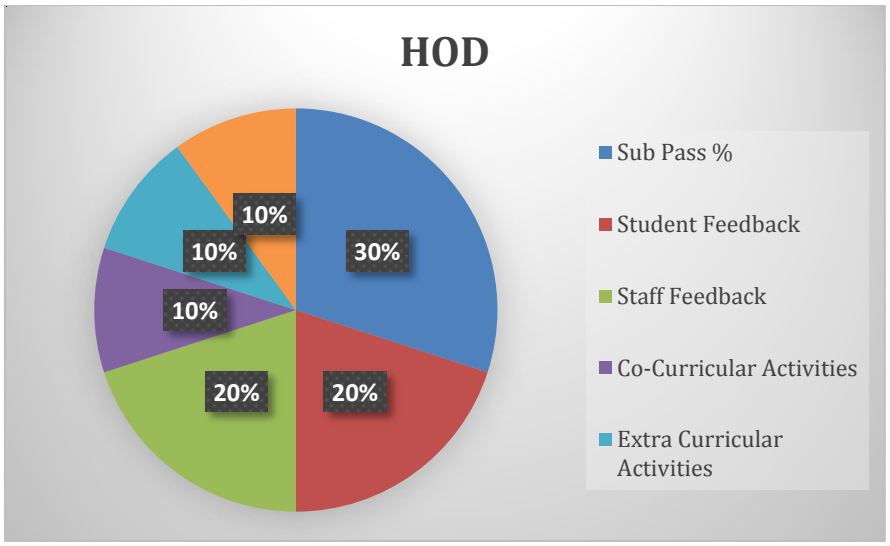
1. Student on FACULTYs (already discussed above)
2. FACULTYs self-appraisal (Department wise)
3. FACULTYs on HOD (Department wise)
4. FACULTYs on Director & Associate Director
5. HOD on FACULTYs (Department wise)
6. Director and Associate Director on FACULTYs.

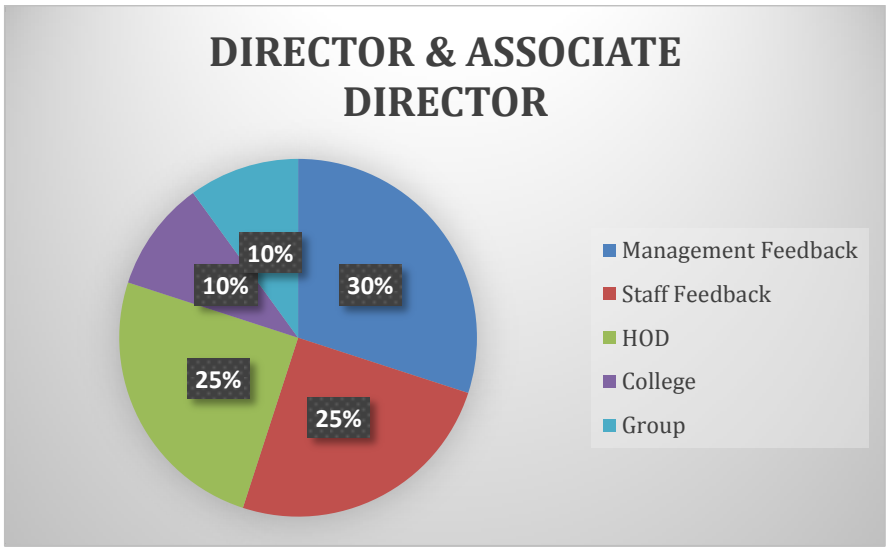
Methodology of appraisal

Based on the feedback forms carried out following methodology is adapted:

Table: Weightage Matrix							
Category	**Sub Pass %**	**Student Feedback**	**HOD**	**Co-Curricular Activities**	**Extra-Curricular Activities**		**Total**
FACULTY	35	30	15	10	10		100
Category	**Sub Pass %**	**Student Feedback**	**FACULTY Feedback**	**Director & Associate Director Feedback**	**Co-Curricular Activities**	**Extra-Curricular Activities**	**Total**
HOD	30	20	20	10	10	10	100
Category	**Sub Pass %**	**Management Feedback**	**FACULTY Feedback**	**HOD**	**College**	**Group**	**Total**
Director & Associate Director		30	25	25	10	10	100


FACULTY
35%
30%
15%
10%
10%
Sub Pass %
Student Feedback
HOD
Co-Curricular Activities
Extra Curricular Activities


HOD
30%
20%
20%
10%
10%
10%
Sub Pass %
Student Feedback
Staff Feedback
Co-Curricular Activities
Extra Curricular Activities


DIRECTOR & ASSOCIATE DIRECTOR
30%
25%
25%
10%
10%
Management Feedback
Staff Feedback
HOD
College
Group

5.9 Visiting/Adjunct/Emeritus Faculty etc.: (10)

Sl. No.	Eminent Academicians, Scientists and Visitors With designation and Affiliation	Specialization	Duration
1.	Prof. (Dr.) Tapan Kumar Pal Professor, Jadavpur University	Field of Welding and its Metallurgical	15th September, 2012
2.	Dr. Sankha Deb Professor, IIT Khargpur	Manufacturing Process Engineering	15th September, 2012
3.	Engr. Samir Bandopadhyay Manager, CESC Generating Station, Budge Budge	Erection and Commissioning of 132 KV, 33 KV and 6.6 KV Switch gears and transformers	15th September, 2012
4.	Mr. Anik De Manager, M/S Ceratizit	D&M of carbide dies and Plastic mould	18th October, 2014
5.	Mr. Somnath Chakraborty Manager, M/S Ceratizit	Computer Aided Design software for developing CNC tool holders.	18th October, 2014
6.	Dr. Subrata Bhowmik, Sr. Lead Engineer & Project Manager, Petrofac UK Limited (4 hours)	Matlab & Simulink	5th July , 2014
7.	Dr. Mukandar Sekh Aliah University	Wire EDM	6th & 7th July 2015
8.	Dr. Golam kibria Aliah University	Laser Technology	1st,2nd,3rd & 8th July 2015
9.	Interaction with Manager of M/S, J.K.B Gas PTV.LTD. More than 60 hours.	Press Works (Cutting & Forming)	2014- 2015.
10.	Interaction with retired Prof. Dipak Kr. Bandyopadhyay, of Jadavpur University. More than 50 hours.	Machine Tools.	2013-2014
11.	Dr. Subrata Bhowmik, Principal Scientist, National Subsea Research Institute London, UK	Robotics & Mechatronics: Application to Oil & gas Industry	Nov, 2016
12.	Mr. T. K. Hazra Former Director, WEBREDA	Visiting Professor	5th Jan, 2013 to June 2016

CRITERION 6:

Facilities and Technical Support

CRITERION 6	Facilities and Technical Support	80

6. FACILITIES AND TEC1NICAL SUPPORT (80)

6.1 Adequate and well equipped laboratories, and technical manpower: (30)

Sr. No.	Name of the Laboratory	No. of students per setup (Batch Size)	Name of the Important equipment	Weekly utilization status (all the courses for which the lab is utilized)	Technical Manpower support		
					Name of the technical staff	Designation	Qualification
1.	Basic Engg Drawing & Machine Drawing Lab	30	Drawing Table, Board, stool and computer	30 Hrs	Ms Indira Ghosh Mr. Abhijit Roy Choudhury	Technical Assistant	Diploma
2	Workshop	60	Lathe, Milling M/C, Shaping M/C, Drill M/C, Grinding M/C (surface), Power Press, Power Saw, Transformer Welding Machine, Fitting instruments, Carpentry instruments	27 Hrs	Mr. Santanu Chattopadhyay Mr. Mithu Miah Mr. Krishna Ch Seth Mr. Manik Majhi Mr. Sankar De	Technical Assistant	Diploma
3	Applied Mechanics Lab	30	UTM, Charpy, Izod, Torsion Testing M/C, 1ardness Testing M/C,	24 Hrs	Mr. Santanu Chattopadhyay	Technical Assistant	Diploma
4	Fluid Mechanics & Hydraulics Lab	30	Closed Circuit pitot tube Apparatus, Reciprocating Pump Test Rig (variable speed), Hydraulic Ram test Rig with S.S tank, Discharge Through Venturimeter & Orificemeter with S.S tank, Losses due to friction in pipe line with S.S tank, Reynold's apparatus with S.S tank, Metacentric Height apparatus with S.S tank, Centrifugal blower test rig, with variable speed D.C. motor, Double Stage air compressor test rig, Pelton wheel turbine test rig (1KW), Francis Turbine test rig (1 KW), Centrifugal pump, Discharge Over Notches, Discharge over Weir	12 Hrs	Mr. Ritam Bhattacharya Mr. Prosanta Das	Technical Assistant	Diploma
5	Manufacturing Technology Lab	30	Transformer Welding Machine, MAG Welding Machine, Sport Welding Machine, Gas Welding Set, Smithy Furnace, Anvil, Open Hearth, Molding Shop, Universal Sand Testing Machine, Sand Rammer ,	6 Hrs	Mr. Santanu Chattopadhyay Mr. Mithu Miah Mr. Krishna Ch Seth Mr. Manik Majhi Mr. Sankar De	Technical Assistant	Diploma

Sr. No.	Name of the Laboratory	No. of students per setup (Batch Size)	Name of the Important equipment	Weekly utilization status (all the courses for which the lab is utilized)	Technical Manpower support		
					Name of the technical staff	Designation	Qualification
			Universal 1ardness Tester, Green Compression Tester, Moister Content, Sieve Shaker M/C, Casting set up.				
6	Material Testing Lab	30	Fatigue Testing M/C, Cupping Testing M/C Spring Testing M/C Muffle Furnace, Magna Flux, DP test.	12 Hrs	Mr. Santanu Chattopadhyay	Technical Assistant	Diploma
7	Applied Thermodynamics & 1eat Transfer Lab	30	Thermal Conductivity Of Metal Rod, Heat Transfer In Forced Convection, Emissivity Measurement Apparatus, Parallel/ Counter Flow Heat Exchanger, Shell & Tube Heat Exchanger, Heat Transfer From A Pin-Fin, Thermal Conductivity of Insulating Powder, Thermal Conductivity of Insulating Slab, Separating & Throttling Calorimeter, Singal Stage Air Compressor Test Rig.	12 Hrs	Mr. Kaustav Sarkar	Technical Assistant	Diploma
8	Design Practice	30	Drawing Table, Board, stool and computer	12 Hrs	Ms Indira Ghosh Mr. Abhijit Roy Choudhury	Technical Assistant	Diploma
9	Metrology & Measurement Lab	30	Adjustable Snap Gauge, Angle plate Bore Gauge, Combination Square sets, Depth Micrometer, Digital Indicator, Fixed Snap Gauge, Gear tooth Vernier, Granite surface Plate, Horizontal Precision level, Matrix screw Pitch Gauge, Magnetic Base, Outside Micrometer Radian Gauge, Ring Gauge, Sine Bar, Square frame Spirit Level, Screw plug gauge, Thickness Gauge, Height Gauge, Profile Protector.	12 Hrs	Mr. Manik Majhi Mr. Prosanta Das	Technical Assistant	Diploma
10	Machining & Machine Tools Lab	30	Lathe, Milling Machine, Shaping machine, Dynamo meter, Temperature gun.	12 Hrs	Mr. Santanu Chattopadhyay Mr. Mithu Miah Mr. Krishna Ch Seth Mr. Manik Majhi Mr. Sankar De	Technical Assistant	Diploma
11	IC Engine Lab	30	Load Test On 4-Stroke Petrol Engine,	12 Hrs	Mr. Kaustav Sarkar	Technical Assistant	Diploma

Sr. No.	Name of the Laboratory	No. of students per setup (Batch Size)	Name of the Important equipment	Weekly utilization status (all the courses for which the lab is utilized)	Technical Manpower support		
					Name of the technical staff	Designation	Qualification
			Load Test On 4-Stroke Diesel Engine, Bomb Calorimeter, Valve Timing Diagram By 4-Stroke Diesel Engine, Single Cylinder 4-Stroke Petrol Engine Test.				
12	Dynamics Of Machines Lab	30	Motorised Gyroscopes, Simple Pendulum, Compound Pendulum Bi Filar Susension, Cam Analyser, Governor Apparatus.	12 Hrs	Mr. Abhijit Roy Choudhury	Technical Assistant	Diploma
13	Air Conditioning & Refrigeration	30	Air Conditioning Test Rig, Refrigeration Test Rig.	12 Hrs	Mr. Kaustav Sarkar	Technical Assistant	Diploma
14	Advanced Manufacturing Lab	30	CNC Lathe, CNC Milling.	12 Hrs	Mr. Santanu Chattopadhyay Mr. Prosanta Das	Technical Assistant	Diploma
15	Deign Of A Mechanical System	30		12 Hrs	Ms Indira Ghosh Mr. Abhijit Roy Choudhury	Technical Assistant	Diploma
16	Thermal Power Engineering lab	30	Lancashire Boiler Model, Babcock & Wilcox Boiler Model, 4- Stroke Petrol Engine Model, 4- Stroke Diesel Engine Model, 2-Stroke Petrol Engine Model	6	Mr. Kaustav Sarkar	Technical Assistant	Diploma

6.2 Additional facilities created for improving the quality of learning experience in laboratories: (25)

Sr. No.	Facility Name	Details	Reason(s) for creating facility	Utilization	Areas in which students' are expected to have enhanced learning	Relevance to POs/PSOs
1.	Smart Class Room	Fully equipped shared Smart Class room with LCD projector and software's with the seating capacity of 120.	• In Smart classes, we use all interactive modules like videos/ presentations and these visually attractive methods of teaching becomes appealing to students who are already struggling with the traditional method of teaching in a classroom. In fact, smart classes are almost like watching videos as sometimes, animated visuals are used to teach a point. This kind of visual is both eye-catching and young students can easily relate	Per Semester 10hrs	Subjects can be easily analyzed and visualized	PO5
2.	Seminar Hall	Fully equipped shared seminar hall with Computer, Projector, Student Desk, White Board, Air conditioner, Fan, Cushion chair, Microphone, Speaker, LED	• To present technical talk/ project seminars/ research papers/ workshops/ industry interaction presentation. • Overall development of students like cultural, sports activities etc.	Per Semester 12 hrs	• To bridge the band gap between academic and industry curriculum. • To upgrade students to industry standard. • Cultural and sports activities.	PO5
3.	Lab Manuals along with instruction classes for all the labs	All the laboratories are having Lab Manuals.	• To create an awareness about the experiment and to educate the need of conducting the same. • Students can understand concept of the experiment better. • To document the same using the relevant data.	Throughout the semester	• Design of Electronic circuit and testing. • Better usage of software tools.	PO1
4.	e-Journals, e-books facility	e-learning materials, journal and magazine are subscribed	• For research/ project/internship activities. • To know about recent trends in science and technology. • Update the subject knowledge using various books and journals.	Throughout the semester	Engineering and Technology, Automotive, Advanced Manufacturing etc.	PO2
5.	English	Language lab is	To increase communication	Throughout	Better Communication	PO10

Sr. No.	Facility Name	Details	Reason(s) for creating facility	Utilization	Areas in which students' are expected to have enhanced learning	Relevance to POs/PSOs
	language Laboratory	dedicated for the students for their grooming class and language learning class	skill among students.	the semester	skill and understanding English language	
6.	Video's From NPTEL etc.	Displayed in the smart class rooms.	Understanding the Video oriented Teaching and learning	Throughout the semester	• Better Understanding the subject. • In depth knowledge beyond syllabus.	PO5
7.	Internet & Wi-Fi	• Name of the Internet provider: BSNL & PSPL • Available bandwidth:10 & 05 mbps • Access speed: 10 & 05 mbps • Availability of Internet in an exclusive lab: yes (as required) • Availability in most computing labs: yes	High speed internet connection to access the internet	Throughout the semester	Update the knowledge	PO5
8.	Surface Grinding Machine	1. Table size: 700X200 mm 2. Traverse: x=450 mm y=250 mm z= 250 mm	To show the process of getting high degree of surface finish and accuracy	12 Hrs/Week	**Manufacturing:** To enhance the Knowledge of mfg process for getting high degree surface finish and accuracy	POs: 1, 3, 5 PSOs: 1,4
9.	Power Press	1. Table size: 300X200mm 2. Capacity: 50 Tones	To show the mass prod process with high degree of interchangeability	12 Hrs/Week	**Production Engg:** To enhanced the Knowledge of mass production system,	POs: 1, 3, 5 PSOs: 1,4
10.	Vertical Milling cum Drilling Machine	1. Table size: 600X150mm 2. Traverse: x=600 mm y=150 mm z= 250 mm	To show the process of dissimilar operations in the same machine	12 Hrs/Week	**Machine Shop:** To learn dissimilar operation on same machine.	POs: 5, 12 PSOs: 1,4
11.	VMC	1. Table size: 700X200mm 2. Traverse: x=650 mm y=200 mm z= 250 mm 3. Control: FANUC	To show the real life production method used in manufacturing unit for multi operation on the same work piece in a same setting.	12 Hrs/Week	**Advanced CNC Machining area:** Critical operations with high degree of accuracy.	POs: 5, 12 PSOs: 1,4

6.3 Laboratories: Maintenance and overall ambiance: (10)

1. Do's and Don'ts and Safety measures rules are displayed in each laboratory.
2. Well Technical Staff are available.
3. Servicing of each laboratory is doing frequently.
4. In all necessary PC systems, regular software like Microsoft office, browser, lab software etc. have been installed and maintained.

Ambiance:

1. Department has Full furnished State of Art laboratories with well-equipped equipment which shall cater to UG course as per curriculum requirements.
2. Conditions of chairs/benches are in good condition.
3. Department has experienced faculty to educate them in all the fields of engineering.
4. Laboratories are conducted every week. As per the university curriculum.
5. Labs are equipped with sufficient hardware and licensed software to run program specific curriculum and off program curriculum.
6. Laboratory manual are distributed to students.
7. Lighting system is very effective in every room.
8. Each Lab is equipped with white/black board.
9. Exclusively, a project lab has been provided for the students to carry out their mini and major project work.

6.4 Project laboratory: (5)

Sr. No.	Name of the Laboratory	No. of students per setup (Batch Size)	Name of the Important equipment
1.	ME – Project Laboratory (a dedicated laboratory for students' project work)	30	Computers, desks, board and chairs
2	Basic Engg Drawing & Machine Drawing Lab	30	Drawing Table , Board, stool and computer
3	Workshop	60	Lathe, Milling M/C, Shaping M/C, Drill M/C, Grinding M/C (surface), Power Press, Power Saw, Transformer Welding Machine, Fitting instruments, Carpentry instruments
4	Applied Mechanics Lab	30	UTM, Charpy, Izod, Torsion Testing M/C, Hardness Testing M/C
5	Fluid Mechanics & 1ydraulics Lab	30	Closed Circuit pitot tube Apparatus, Reciprocating Pump Test Rig (variable speed), Hydraulic Ram test Rig with S.S tank, Discharge Through Vanturimeter & Orificemeter with S.S tank, Losses due to friction in pipe line with S.S tank, Reynold's apparatus with S.S tank, Metacentric Height apparatus with S.S tank, Centrifugal blower test rig, with variable speed D.C. motor, Double Stage air compressor test rig, Pelton wheel turbine test rig (1KW), Francis Turbine test rig (1 KW), Centrifugal pump, Discharge Over Notches, Discharge over Weir
6	Manufacturing Technology Lab	30	Transformer Welding Machine, MAG Welding Machine, Sport Welding Machine, Gas Welding Set, Smithy Furnace, Anvil, Open Hearth, Molding Shop, Universal Sand Testing Machine, Sand Rammer , Universal Hardness Tester , Green Compression Tester, Moister Content , Sieve Shaker M/C, Casting set up.
7	Material Testing Lab	30	Fatigue Testing M/C, Cupping Testing M/C, Spring Testing M/C, Muffle Furnace, Magna Flux, DP test.
8	Applied Thermodynamics & 1eat Transfer Lab	30	Thermal Conductivity Of Metal Rod, Heat Transfer In Forced Convection, Emissivity Measurement Apparatus, Parallel/Counter Flow Heat Exchanger, Shell & Tube Heat Exchanger, Heat Transfer From A Pin-Fin, Thermal Conductivity of Insulating Powder, Thermal Conductivity of Insulating Slab, Separating & Throttling Calorimeter, Singal Stage Air Compressor Test Rig.
9	Design Practice	30	Drawing Table, Board, stool and computer
10	Metrology & Measurement Lab	30	Adjustable Snap Gauge, Adjustable Snap Gauge, Angle plate, Bore Gauge, Combination Square sets, Depth Micrometer, Digital Indicator, Fixed Snap Gauge, Gear tooth Vernier, Granite surface Plate, 1orizontal Precision level, Matrix screw Pitch Gauge, Magnetic Base, Outside Micrometer, Radian Gauge, Ring Gauge, Sine Bar, Square frame Spirit Level, Screw plug gauge, Thickness Gauge, Vernier Height Gauge, Profile Protector.
11	Machining & Machine Tools Lab	30	Lathe, Milling Machine, Shaping machine, Dynamo meter, Temperature gun.
12	IC Engine Lab	30	Load Test On 4-Stroke Petrol Engine, Load Test On 4-Stroke

Sr. No.	Name of the Laboratory	No. of students per setup (Batch Size)	Name of the Important equipment
			Diesel Engine, Bomb Calorimeter, Valve Timing Diagram By 4-Stroke Diesel Engine, Single Cylinder 4-Stroke Petrol Engine Test.
13	Dynamics Of Machines Lab	30	Motorized Gyroscopes, Simple Pendulum, Compound Pendulum, Bi-Filer Suspension, Cam Analyzer, Governor Apparatus.
14	Air Conditioning & Refrigeration	30	Air Conditioning Test Rig, Refrigeration Test Rig.
15	Advanced Manufacturing Lab	30	CNC Lathe, CNC Milling.
16	Deign Of A Mechanical System	30	Computer, Drawing Board, Drawing Table
17	Thermal Power Engineering lab	30	Lancashire Boiler Model, Babcock & Wilcox Boiler Model, 4-Stroke Petrol Engine Model, 4- Stroke Diesel Engine Model, 2-Stroke Petrol Engine Model,

6.5 Safety measures in laboratories: (10)

Budge Budge Institute of Technology (BBIT) strives to be a model for environmental, health and safety excellence in teaching, research, extension, and the management of its facilities.

In pursuit of this goal, appropriate policies and procedures must be developed and followed to ensure this community operates in an environment free from recognized hazards.

Faculty, staff, and students are responsible for compliance with established policies and are encouraged to enculturate practices that ensure safety, protect health, and minimize the institution's impact on the environment.

Role of Laboratory Practice in Engineering Education

Engineering education is incomplete without laboratory practice. The overall goal of engineering education is to prepare students to practice engineering and in particular to deal with the nature of problems faced by the society. The laboratory practice has been an important part of professional and engineering undergraduate education; the laboratory is an ideal place for active learning. Students learn in a real world environment, function as team members, discuss the planning of experiments, and share ideas about the analysis and interpretation of data. Most engineering instruction took place in the laboratory and it demands the active use of knowledge and skill.

Laboratory Safety in BBIT Institute

- Adequate safety and hygienic conditions prevail in all places of workshop.
- Housekeeping and cleanliness of the Lab is maintained at regular intervals.
- Proper use and maintenance of laboratory equipment for laboratory safety.
- Laboratory apparatus are regularly inspected to ensure proper maintenance.
- All the Laboratory equipments and scientific instruments are positioned as per plan to ensure protection.

- Sufficient space is available for easy and free movement in the Lab.
- Proper illumination is available in the Lab.
- For the safety of Laboratory, electrical devices are periodically inspected that the electrical equipments are sure to be in good condition and any power cords are not frayed or have exposed wiring.
- For first aid, a medical unit exists to close workshop. This unit operates during college hours. For major injuries/accidents, a Hospital (JIMS) is located nearby to the college campus and in exigencies; its services can be availed. An ambulance is available round the clock at the campus for the same.
- Sufficient arrangement of dry sand is available at an accessible place.
- Students are advised and trained, all the safety details in the form of Do's & Don'ts
- An Emergency alarm is available at the workshop.

Safety Guidelines

- GENERAL SAFETY

People who work in scientific laboratories are exposed to various hazards. Most workplaces have hazards that are well recognized (those of ordinary fire, for example) with well-defined actions to control the situation. Laboratories, however, involve a greater variety of possible hazards and some of these hazards need precautions not ordinarily encountered. An introduction to safe practices for a variety of widely used laboratory procedures is listed below:

1. No running or jumping in a laboratory is permitted. Stored items or equipment shall not block access to the fire extinguisher(s), safety equipment, or other emergency items. Stairways, hallways, passageways/aisles and access to emergency equipment and/or exits must be kept dry and unobstructed; i.e., no storage, no equipment, phone or other wiring. No combustible material such as paper, wooden boxes, pallets, etc., shall be stored under stairwells or in hallways. Hallways shall be kept free of boxes and materials so that exits and normal paths of travel are not blocked.
2. Eating or drinking within laboratories is not permitted. In all laboratories specific office areas may be designated for food in coordination with the Safety Committee. They must be physically separated from any laboratory operations. In the specified office areas no consumables, reagents or any tools should be shared with work areas.
3. No food or beverage may be stored in the cold rooms/Laboratory refrigerators and freezers.

- Electrical Safety

The typical laboratory requires a large quantity of electrical power. This increases the likelihood of Electrically-related problems and hazards.

The following recommendations are basic to a sound electrical safety program in the laboratory.

1. All electrical equipment shall be properly grounded.

2. Sufficient room for work must be present in the area of breaker boxes. All the circuit breakers and the fuses shall be labelled to indicate whether they are in the "on" or "off" position, and what appliance or room area is served. Fuses must be properly rated.
3. Equipment, appliance and extension cords (junction boxes) must be in good condition and must be routinely dusted..
4. Extension cords shall not be used as a substitute for permanent wiring.
5. Electrical cords or other lines shall not be suspended unsupported across rooms or passageways. Do not route cords over metal objects such as emergency showers, overhead pipes or frames, metal racks, etc. Do not run cords through holes in walls, ceilings, doorways or windows. Do not place under carpet, rugs, or heavy objects. Do not place cords on pathways or other areas where repeated abuse can cause deterioration of insulation.
6. Multi-outlet plugs shall not be used unless they have a built-in circuit breaker. This causes overloading on electrical wiring, which will cause damage and possible overheating.
7. All building electrical repairs, splices, and wiring shall be performed by the Electrical Department.

- Handling Glassware

1. Glass breakage is a common cause of injuries in laboratories. Only glass in good condition should be used.
2. Clean all glassware before sending for repair. Glassware that has been in contact with infectious agents shall be disinfected before disposal or repair.
3. Protect hands with leather gloves when inserting glass tubing. Hold elbows close to the body to limit movement when handling tubing.
4. Use glassware of the proper size. Allow at least 20% free space. Grasp a three-neck flask by the middle neck, not a side neck.
5. Conventional laboratory glassware must never be pressurized or used with vacuum.

- Safe Handling of Chemicals

- Gathering General Information on Chemicals
- Handling and Transportation of Chemicals

Many laboratory accidents occur by carrying chemicals from one place to another or transferring them from one container to another. The chemicals used in a laboratory are often corrosive, toxic or flammable and any accident involving these has the potential for personal injury. Therefore, it is good practice to assume that all chemicals are potentially hazardous.

- Chemical Storage

Proper storage of chemicals is necessary to maximize employee safety with regard to chemical compatibility, spill control, fire/explosion control, to provide security, identification, and provide a "user friendly" system with respect to point-of-use.

- Chemical Spills

Any chemical is a possible threat to your personal health and your colleagues. In case of accident causing the release of hazardous chemicals a calm and determined action is required to prevent an escalation of the emergency situation.

Thus, for any individual incident, isolation of the spill and/or securing the area is best prior to or simultaneously with contacting concerned personnel. This should be done according to all available

information on the chemical nature of the spill. Under all circumstances, a laboratory coat, safety glasses, and gloves should be used for self-protection

- Compressed Gas Safety

The contents of any compressed gas cylinder shall be clearly identified for easy, quick, and complete determination by any laboratory worker.

Basic Working Principles in Bio-safety laboratories

- The primary principle of biological safety is containment. This refers to a series of safety procedures which have to be conducted to reduce or eliminate human and environmental exposure to potentially harmful biological agents.
- While working in laboratories one might handle specimens, cultures and agents without full knowledge of the biohazard risk; these materials may contain infectious agents. To minimize exposure, observe universal precautions when handling any biological specimen.

While working in any of the above defined bio-safety levels it is required of any personnel to follow the regulations listed below:

-Wash your hands thoroughly

-Before and after working with any biohazard

-After removing gloves, laboratory coat, and other contaminated protective clothing

-Before eating, drinking or applying cosmetics

-Before leaving the laboratory area

-Do not touch your face when handling biological material

-Never eat, drink or apply cosmetics in the work area

CRITERION 7:

Continuous Improvement

CRITERION 7	Continuous Improvement	50

7. CONTINUOUS IMPROVEMENT (50)

7.1 Actions taken based on the results of evaluation of each of the POs & PSOs: (20)

Identify the areas of weaknesses in the program based on the analysis of evaluation of POs & PSOs attainment levels. Measures identified and implemented to improve POs & PSOs attainment levels for the assessment years.

Analysis and proposed action:

- Based on the analysis of evaluation of POs & PSOs attainment levels, to progress the outcomes of the programme the library facility is improved. The stock of the books and related journals are enhanced.
- To grow interest among the students, audio-visual teaching–learning process is also introduced, where the students can easily visualize as well as understands the particular topic properly, which in turn will improve the outcome of the programme.
- The project based courses are done by forming a group of students. Now, these project groups are formed by the department to ensure that every student is involved in doing a part of the project work. This process will be able to identify the weak and strong students. Care is being taken for encouraging the students who are comparatively weaker. Project Review Committee interacts with the students to verify the continuous progress.

POs & PSOs Attainment Levels and Actions for improvement – CAY

POs Attainment Levels and Actions for improvement – CAY

POs	Target Level	Attainment Level	Observations
PO1: Engineering knowledge			
PO – 1	2.61	1.84	Attainment can be improved on the basis of the following observations. **Observations:** **1.** Some lateral entry students are not exposed to fundamental in the mathematics /Science subjects before joining their engineering course. **2.** Some students find it difficult to understand mathematical based engineering subjects. **3.** Engineering Subject involving analysis as well as design at times confuses few students.
Action: **1.** Additional classes are being conducted to introduce engineering concepts over science. **2.** Tutorial classes to explain application of scientific theories in Engineering. **3.** More practical approach of teaching has been emphasized. **4.** More problems are given for practice.			
PO2: Problem analysis			
PO – 2	2.34	1.61	Attainment can be improved on the basis of the following observations. **Observations:** **1.** Few lateral entry Students has less orientation in basic of engineering mathematics **2.** Students sometimes find it difficult to solve the engineering problems **3.** Basic procedural steps for design are not well conceived mainly by lateral entry students.

Action: **1.** Additional classes are being conducted to introduce fundamental concepts on Mechanical Engineering. **2.** More stress on tutorial classes for problem solving **3.** More problems of assignment and the monitoring the same on a regular basis. **4.** Students are encouraged to raise questions which are solved in the classes.			
PO3: Design/development of solutions			
PO – 3	2.16	1.43	Attainment can be improved on the basis of the following observations. **Observations :** **1.** Some students from lateral entry find it difficult to solve the engineering problems mathematically. **2.** Lack of adequate knowledge of design and development oriented problems by lateral entry students.
Action: **1.** Material /Manufacturing Processes are taught with the help of video presentations (such as NPTEL). **2.** Additional classes are being conducted to introduce Mechanical Engineering fundamental. **3.** More design oriented classes are taken in the tutorial classes **4.** Emphasis on practical approach of teaching for problem solution.			
PO4: Conduct investigations of complex problems			
PO – 4	2.13	1.65	Attainment can be improved on the basis of the following observations. **Observations :** **1.** Lack of mind set towards investigation if the problems apparently appear to be difficult for few students. **2.** Some students find it difficult to use mathematical tools to solve the complex engineering problems **3.** Some students take more time for solving investigative problem.
Action: **1.** Additional classes are being conducted to motivate the students to be more analytical and result oriented. **2.** More emphasis on use of mathematical tools for problem solving. **3.** More practical session on solving analytical and design problems. **4.** Conduction of Science Fest and motivating students to prepare/built prototype models.			
PO5: Modern tool usage			
PO – 5	2.25	1.42	Attainment can be improved on the basis of the following observations. **Observations :** **1.** Use of CADD tools by some students for doing project works as a part of their Degree program. **2.** Students were needed to be counseled to use the Design/Analysis tools for better opportunity for placements and/or higher studies.
Action: **1.** Special classes are being conducted using modern tools. **2.** Students were given individual systems to work on software. **3.** Use of projector for presentation in class rooms.			
PO6 : The engineer and society			
PO – 6	1.73	1.25	Attainment can be improved on the basis of the following observations. **Observations :** **1.** Many of the students do not consider social issues in their habits or study. **2.** Students are not always aware that they are the part of the common society and they are destined to serve the society.

			3. Students often do not understand that all academic excellence will go in vain if it is not contributing to the benefit of the society.
Action: **1.** Emphasis on the management subject **2.** Project works on environment and social problems like projects related with biogas and biodiesel.			
PO7: Environment and sustainability			
PO – 7	2.17	1.52	Attainment can be improved on the basis of the following observations. **Observations :** **1.** Students are not properly concerned with the environmental issues. **2.** Students lack the understanding that technological development cannot sustain without environmental concern for sustainability.
Action: **1.** Additional classes are being conducted to introduce Environment and sustainability. **2.** Project works are linked to improve Environment and sustainability.			
PO8: Ethics			
PO – 8	1.5	0.54	Attainment can be improved on the basis of the following observations. **Observations :** **1.** Some students tend to ignore ethics in engineering, education and management. **2.** Students are not clear about the ethical practices in engineering education.
Action: **1.** More stress on the compulsory subjects "Values & Ethics in Engineering". **2.** More examples on practices of ethics are being practiced by students in extra classes.			
PO9 : Individual and team work			
PO – 9	1.68	0.85	Attainment can be improved on the basis of the following observations. **Observations :** **1.** Few students are not showing interest in Real time projects. **2.** Students find it difficult to solve the application oriented/practical engineering problems. **3.** Sometimes, absence of correlation among the team members during the project work.
Action: **1.** Proper counseling to motivate students to do projects of importance **2.** Students are encouraged to collaborate for industry oriented project. **3.** Students are allowed to visit the nearby testing centers to conduct any tests/experiments. **4.** Students are asked to give individual demonstration and presentation periodically to show their progress.			
PO10 : Communication			
PO – 10	1.52	0.93	Attainment can be improved on the basis of the following observations. **Observations :** **1.** Moderate communication skill. **2.** Moderate presentation skill
Action: **1.** Expert classes on soft skill development **2.** Exclusive stress on seminar class **3.** Regular classes of English communication **4.** Group discussion / debate/ quiz competition at a regular intervals			

PO11 : Project management and finance			
PO – 11	1.33	0.76	Attainment can be improved on the basis of the following observations. **Observations :** **1.** Few students are having less interest in project management **2.** Some students are unaware of the impact of project management in Mechanical Engineering
Action: **1.** Special classes on project management **2.** Assignments are given on project management			
PO12 : Life-long learning			
PO – 12	1.86	1.46	Attainment can be improved on the basis of the following observations. **Observations :** **1.** Few students find it difficult to understand concepts for lifelong learning **2.** Some students are not aware that learning is a never ending process which needs to be carried out through the concept of subjects taught in their engineering course.
Action: **1.** Motivate students to do hand on experiments and project of their own interest. **2.** Practical application oriented teaching are appended to supplement concept building.			

PSOs Attainment Levels and Actions for improvement – CAY

PSOs	Target Level	Attainment Level	PSO Statement
PSO 1	2.4	2.10	• Students will learn basic & fundamentals of engineering and mechanical engineering in specific. • Students will build confidence in solving real life problems in mechanical engineering
Action: a) Students are encouraged to read fundamental research paper. b) Encouraged for discovery / innovation.			
PSO 2	2.1	1.81	• Students will have specialization in the selected area of mechanical engineering • Students can also show their proficiency and build career in this specific field.
Action: Students are encouraged for specialization.			
PSO 3	2.1	1.87	• Students can diversify their knowledge domain in different engineering disciplines. • Students can get confidence in solving the problem of multi-disciplinary area.
Action: Students are encouraged to know outside world, i.e. other than mechanical subject.			
PSO 4	2.4	1.77	• Students learn to identify the project. • Students gain knowledge of preparing BOM including BOF items. • Students gain clear idea of starting an activity, and competition of the same for an event. • Students learn to prepare DPR. • Students improve their presentation skills and MIR.

Action: Students are encouraged to get confidence in doing a complete project from starting to end product.

7.2 Academic Audit and actions taken thereof during the period of Assessment: (10)

The purpose of an academic audit is to encourage departments or programs to evaluate their **"education quality processes"** – the key faculty activities required to produce, assure, and regularly improve the quality of teaching and learning.

GUIDELINES

1. One subject expert **(ACADEMIC)** nominated by the Director on the recommendation of the Head of concerned Department.

a. Experts should be from (i) IISc / IITs / NITs / other reputed academic Institutions.

2. Internal test and end semester question papers, and Internal test answer scripts will be audited. Two copies of the academic audit report (in the format provided) have to be submitted to Associate Director's office by HoDs.
3. Twelve courses (both question paper and answer scripts) for B.Tech/MBA programmes will be audited on random basis for each programme.
4. Each expert will audit ten / twelve subjects; five / six in the morning and five / six in the afternoon. Minimum of three answer scripts (one high score, one average score and one low score) will be audited for each subject.
5. Each expert will be paid Rs 4,000/- (2 × Rs 2,000/-) as sitting fee for two sittings (morning and evening).
6. HoDs will be requested to take care of hospitality (guest room, pick up and drop, food, etc.).
7. TA/DA and remuneration will be paid as per the norms.

7.3 Improvement in Placement, Higher Studies and Entrepreneurship (10)

Item	2015-16	2014-15	2013-14
Total no of final year students	128	67	64
Number of students placed in companies or government Sector (quality placement)	71	34	31
Pay Packages	1.50 – 6.00 LPA	1.50 – 4.00 LPA	1.20 – 2.50 LPA
Number of Students who opted for higher studies with valid qualifying scores/ranks	15	9	5
Total number of students turned Entrepreneur of Engineering & Technology	2	1	1

7.4 Improvement in the quality of students admitted to the program: (10)

Item		CAY 2015-16	CAY*m*1 2014-15	CAY*m*2 2013-14
National Level Entrance Examination (AIEEE)	No. of Students admitted	18	23	11
	Opening Score/Rank	167806	216944	49479
	Closing Score/Rank	1068329	1169132	339132
State/University/Level Entrance Examination/Others (WBJEE)	No. of Students admitted	57	78	114
	Opening Score/Rank	18347	2990	10926
	Closing Score/Rank	101644	113269	78987
State/University/Level EntranceExamination/ others (DIRECT ADMISSION)		0	0	12
Name of the Entrance Examination for Lateral Entry or lateral entry details (JELET)	No. of Students admitted	31	20	22
	Opening Score/Rank	754	16	1041
	Closing Score/Rank	9202	7466	8000
Average CBSE/Any other Board Result of admitted students (Physics, Chemistry & Mathematics)		61.49	57.63	62.24

CRITERION 8:

First Year Academics

CRITERION 8	First Year Academics	50

8. FIRST YEAR ACADEMICS (50)

8.1 First Year Student-Faculty Ratio (FYSFR) (5)

Assessment = (5 × 15)/Average FYSFR (Limited to Max. 5) Data for first year courses to calculate the FYSFR:

Year	Number of students (approved intake strength)	Number of faculty members (considering fractional load)	FYSFR
CAY (2015-16)	420	28	14.85
CAY*m*1 (2014-15)	420	29	14.71
CAY*m*2 (2013-14)	420	28	14.89
Average	14.82		
Assessment= (5 × 15)/Average FYSFR (Limited to Max. 5)	**5**		

8.2 Qualification of Faculty Teaching First Year Common Courses (5)

Assessment of qualification = (5x +3y)/RF,
x= Number of Regular Faculty with Ph.D,
y = Number of Regular Faculty with Post-graduate qualification
RF= Number of faculty members required as per SFR of 15:1, Faculty definition as defined in 5.1

Year	*x*	*Y*	*RF*	Assessment of faculty qualification $(5x + 3y)/RF$
CAY (2015-16)	15	38	28	6.75
CAY*m*1 (2014-15)	13	43	28	6.93
CAY*m*2 (2013-14)	10	37	28	5.75
Average Assessment			**6.48**	

8.3 First Year Academic Performance (10)

Academic Performance = ((Mean of 1st Year Grade Point Average of all successful Students on a 10 point scale) or (Mean of the percentage of marks in First Year of all successful students/10)) x (number of successful students/number of students appeared in the examination)

Successful students are those who are permitted to proceed to the second year.

	CAY	CAYm1	CAYm2
	2015-2016	2014-15	2013-14
No of Students appeared	257	327	433
No of successful students	257	327	433
Mean Grade Point	6.35	6.60	7.05
Academic Performance, AP	**6.35**	**6.60**	**7.05**

8.4 Attainment of Course Outcomes of first year courses (10)

8.4.1 Describe the assessment processes used to gather the data upon which the evaluation of Course Outcomes of first year is done (5)

8.4.1.1

- ✓ Attainment of the course outcomes for particularly the first year courses is done primarily by direct attainment. Two internal tests of 30 marks are conducted in each semester as per the University schedule and the best of two is considered for final internal assessment mark.
- ✓ The performance of each student in internal assessment with respect to the COs is recorded.
- ✓ End semester University exam performance of the students for the maximum marks of 70 is considered for external exam performance.
- ✓ The fractional weightage of internal and end semester examinations are considered for final evaluation of attainments in accordance with University.
- ✓ For laboratory assessment, the overall performance of the student is assessed as per the following divisions :
  - ➢ Attendance: 20 marks
  - ➢ Class performance during the whole semester : 20 marks
  - ➢ Lab. Examination : 40 marks
  - ➢ Viva voce : 20 marks

Viva **Assessment of course outcomes**				
Assessments		**Frequency / Sem.**	**Theory Courses (%)**	**Practical Courses (%)**
Written Examination	Internal test I & II	2	15	----
	End semester	1	70	----
Practical examination (Experiments, Practical records and Viva-voce)	Attendance & regularity			20
	Presentation of lab report, regularity in submission & content	Min. of 6 experiments are to be done as per University		20
	Viva-voce on lab subject			20
	Laboratory exam, data analysis and conclusion			40

8.4.1.2 Relevance of the tools used:

In order to find out the attainment of the first year students, internal marks and the semester marks are taken into consideration. Weightage of the internals and end semester to calculate the attainment are in accordance to the University guidelines (direct analysis). To calculate the attainment of the first year students, feedback from employers, alumni and exit interviews of the students has not been considered (indirect analysis).

However, for the practical courses, attendance and presentation of laboratory reports are considered as a tool for continuous evaluation and viva-voce and laboratory examination are considered as a part of end semester evaluation procedure. The overall grade obtained by the students is considered to arrive at the attainment of COs and POs for practical courses.

8.4.2 Record the attainment of Course Outcomes of all first year courses (5)

Program shall have set attainment levels for all first year courses.

(The attainment levels shall be set considering average performance levels in the university examination or any higher value set as target for the assessment years. Attainment level is to be measured in terms of student performance in internal assessments with respect the COs of a subject plus the performance in the University examination)

Subject Code	Subject Name	Attainment Level (AL)
HU101	Eng Lang & Tech Comm	2.5
PH101	Physics – 1	1.5
CH101	Chemistry – 1	2.0
PH201	Physics – 1	3.0
M101	Mathematics-1	2.5
ME101	Engg. Mechanics	2.0
ES101	BEEE – 1	1.0
PH191	Physics Lab	3.0
ES191	BEEE Lab – 1	3.0
ME192	Workshop Practice-I	3.0
HU181	Eng Lang & Tech Comm Lab	3.0
CS201	Basic Comp & Principles of C P	3.0
CH201	Chemistry-1	1.6
M201	Mathematics-2	2.75
ME201	Engg Thermo & Fluid Mech	2.0
ES201	BEEE-II	1.0
CS291	Basic Comp & Principles of C P Lab	3.0
CH291	Chemistry Lab	3.0
ES291	BEEE Lab	3.0
ME291	Workshop Practice-II	3.0
ME191	Engg Drawing and Computer Graphics	3.0
ME292	Basic Engg Drawing and Computer Graphics	3.0

8.5 Attainment of Program Outcomes from first year courses (20)

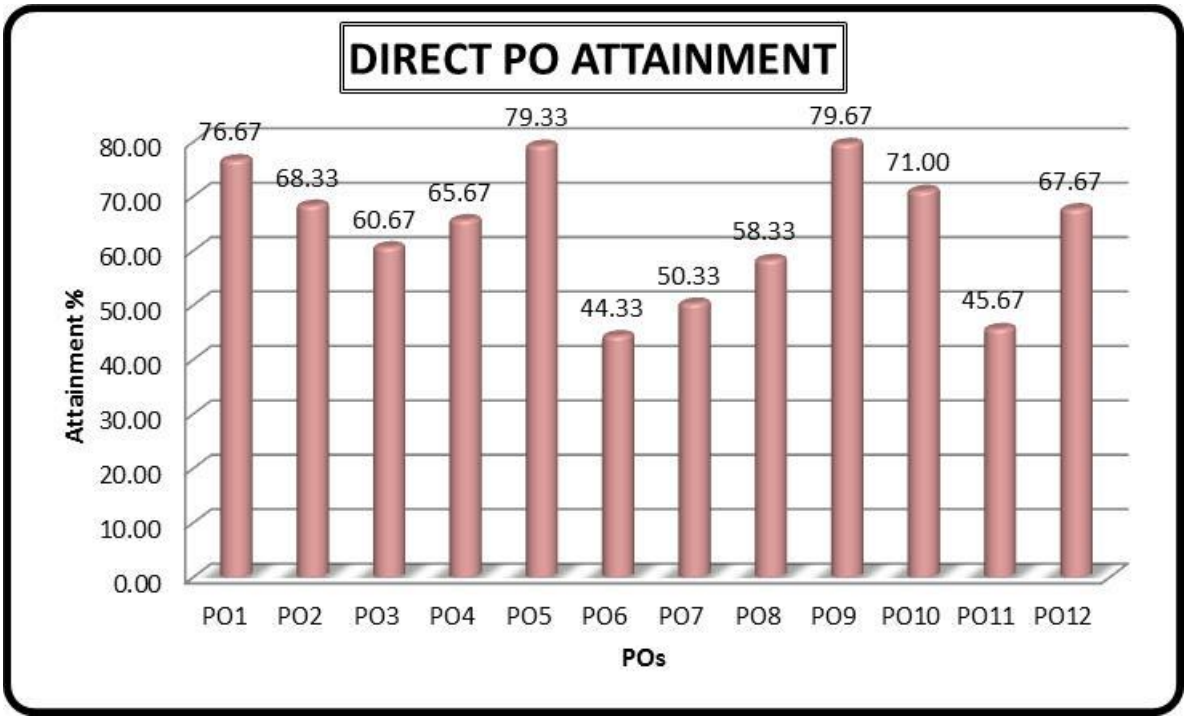
8.5.1 Indicate results of evaluation of each relevant PO and/or PSO, if applicable (15)

PO attainment was calculated according to the reference "IOSR Journal of Research & Method in Education", e-ISSN: 2320–7388,p-ISSN: 2320–737X Volume 6, Issue 4 Ver. IV (Jul. - Aug. 2016), PP 13-18 by Bhimasen Soragaon, K S Mahesh

In brief, overall direct CO-PO mapping of each subject was used to obtain a "Programme level Course-PO matrix". CO attainment was also calculated for each subjects considering internal and end semester results of the students. These two parameters were used to obtain PO attainment of each subject or of each PO, as described in the mentioned paper.

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
HU101	0.83	1.25	1.08	1.67	0.83	-	0.83	-	1.67	2.36	1.11	-
CH101	2.00	1.33	1.50	1.50	1.50	1.33	1.33	-	-	-	1.33	1.67
PH101	1.17	1.17	1.00	1.17	1.00	0.50	-	-	-	-	0.50	1.25
M101	2.50	2.50	1.81	2.08	-	-	-	-	-	-	-	-
ME101	1.85	1.63	1.43	1.57	-	1.00	-	-	-	-	-	-
ES101	1.00	1.00	1.00	1.00	-	0.67	-	-	-	-	0.67	0.67
PH191	2.82	2.77	2.67	2.67	2.80	1.97	2.00	-	3.00	2.75	-	2.07
ES191	2.83	2.78	2.69	2.69	2.80	-	-	1.75	3.00	-	2.17	2.06
ME192	3.00	-	2.00	-	3.00	-	-	-	2.00	1.00	1.00	3.00
HU181	2.86	2.73	2.49	2.50	2.80	1.88	2.00	1.50	3.00	2.50	2.33	2.07
CS201	2.40	2.33	2.17	2.17	2.80	2.00	-	-	3.00	3.00	3.00	2.20
CH201	1.60	1.07	1.20	1.20	1.20	1.07	1.07	-	-	-	1.07	1.33
PH201	2.33	2.33	2.00	2.33	2.00	1.00	-	-	-	-	1.00	2.50
M201	2.75	2.75	1.99	2.29	-	-	-	-	-	-	-	-
ME201	2.00	1.73	-	1.33	-	-	1.33	-	-	1.33	-	-
ES201	1.00	1.00	1.00	1.00	-	0.67	-	-	-	-	0.67	0.67
CS291	2.89	2.84	2.73	2.74	2.80	1.95	-	-	3.00	2.63	2.00	2.04
CH291	2.92	2.87	2.79	2.79	2.80	1.96	2.00	2.00	3.00	2.63	1.50	2.03
ES291	2.91	2.86	2.77	2.78	2.80	-	-	1.75	3.00	-	2.00	2.04
ME291	3.00	-	2.00	-	3.00	-	-	-	2.00	1.00	1.00	3.00
ME191	3.00	-	1.00	-	3.00	-	-	-	1.00	-	1.00	3.00
ME292	3.00	-	1.00	-	3.00	-	-	-	1.00	-	1.00	3.00
Direct Attainment	2.30	2.05	1.82	1.97	2.38	1.33	1.51	1.75	2.39	2.13	1.37	2.03

Direct attainment level of a PO is determined by taking average across all courses addressing that PO. All the calculations of attainment levels are documented.



8.5.2 Actions taken based on the results of evaluation of relevant POs (5)

PO Attainment Levels and Actions for improvement - CAY – Mention for relevant POs

(The attainment levels by direct (student performance) are to be presented through Program level Course-PO matrix as indicated)

POs	Target Level	Attainment Level	Observations
PO1: Engineering knowledge			
PO1	2.78	2.30	Attainment can be improved on the basis of the following observations. **Observations:** **1.** Some students find it difficult to understand mathematical based subjects. **2.** Science subjects involving analysis as well as design at times confuse few students.
Action : **1:** Additional tutorial classes for basic science have been arranged for the first year students. **2.** More practical oriented approaches for teaching basic Science and Engineering fundamentals are taken.			
PO2: Problem analysis			
PO2	2.58	2.05	Attainment can be improved on the basis of the following observations. **Observations:** **1.** Students sometimes find it difficult to solve numerical problems because of lack of knowledge of basic mathematics.
Action : **1**: Additional tutorial classes for numerical problems have been arranged for the first year students.			

2: Several practical experiments are conducted to improve their analytical approaches.			
PO3: Design/development of solutions			
PO3	2.22	1.82	Attainment can be improved on the basis of the following observations. **Observations:** **1.** Some students find it difficult to understand mathematics based engineering subjects. **2.** Lack of adequate knowledge of design and development oriented problems for the first year students.
Action : **1:** Remedial/tutorial classes are recommended.			
PO4: Conduct investigations of complex problems			
PO4	2.49	1.97	Attainment can be improved on the basis of the following observations. **Observations :** **1.** Lack of mind set towards investigation if the problems apparently appear to be difficult for few students. **2.** Some students find it difficult to use mathematical tools to solve the complex engineering problems **3.** Some students take more time for solving investigative problem.
Action : **1:** Students are counseled and advised to follow internet on relevant issues.			
PO5: Modern tool usage			
PO5	2.57	2.38	Attainment can be improved on the basis of the following observations. **Observations :** **1.** Students are having lack of knowledge of choosing and applying appropriate techniques, resources for conducting experiments.
Action : **1:** Maximum utilization of resources so far as first year laboratories are concerned, are been emphasized.			
PO6 : The engineer and society			
PO6	1.77	1.33	Attainment can be improved on the basis of the following observations. **Observations :** **1.** Many of the students do not consider social issues in their habits or study. **2.** Students are not always aware that they are the part of the common society and they are destined to serve the society. **3.** Students often do not understand that all academic excellence will go in vain if it is not contributing to the benefit of the society.
Action : **1:** Course to create the social awareness among the students , are offered during the programme which will help them to improve their thought / initiative regarding societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.			
PO7: Environment and sustainability			

PO7	1.86	1.51	Attainment can be improved on the basis of the following observations. **Observations :** **1.** Few students are not concerned about the environmental issues and their impacts on professional world. **2.** Students lack the concept of sustainability.
Action : **1:** Courses relevant to environmental sustainability will be conducted subsequently in the following year. **2:** NSS programme is conducted by the college as a part of University course curriculum to increase societal and environmental awareness.			
PO8: Ethics			
PO8	1.75	1.75	**Observations :** **1.** Few students are not clear about the ethical practices in engineering education.
Action : **1:** Students are given real life case studies to debate on ethical decision and judgments. **2:** The first year students are introduced to the role and significance of ethics in the engineering profession.			
PO9: Individual and team work			
PO9	2.42	2.39	Attainment can be improved on the basis of the following observations. **Observations :** **1.** Few students are not accustomed to work in multidisciplinary setups. **2.** Sometimes, Lack of co-ordination among the students when they are working as a team.
Action : **1:** Students are encouraged to participate in team/group activities. **2:** Students are asked to give individual presentation periodically.			
PO10 : Communication			
PO10	2.26	2.13	Attainment can be improved on the basis of the following observations. **Observations :** **1.** Few students are not having good communication and presentation skills
Action : **1:** Classes on English communication, soft skills, analytical aptitude, and technical skills are arranged by the college every year apart from regular classes as per schedule. **2:** Group discussion / role play/ debate/ quiz competitions are arranged at a regular intervals			
PO11: Project management and finance			
PO11	1.67	1.37	Attainment can be improved on the basis of the following observations. **Observations :** **1.** Few students are having less interest in engineering and management principles and their applications.
Action : **1:** Students will subsequently enter into project management and financial courses in their coming semesters			
PO12 : Life-long learning			

PO12	**2.38**	2.03	Attainment can be improved on the basis of the following observations. **Observations :** **1.** Students are sometimes not prepared to undertake any independent endeavor. **2.** The concept of life-long learning needs to be inculcated amongst the students.
Action : **1:** Seminars by eminent professionals have been arranged for helping the students to strive for excellence by constant knowledge upgradation, setting short and long term goals. **2:** Motivate students to do hand on experiments of their own interest. **3:** Students are being counseled in make them understand the concept of life-long learning.			

CRITERION 9:

Student Support Systems

CRITERION 9	Student Support Systems	50

9. STUDENT SUPPORT SYSTEMS (50)

9.1 Mentoring system to help at individual level (5)

Objective

To provide guidance to students towards achieving professional fulfillment and assessment of his/her academic progress as well as personal growth.

Mentor Management Committee – Duties & Responsibilities

- At BBIT the mentorship programme is mentioned in the semester routines to ensure students awareness regarding the same
- The mentorship programme at BBIT comprises of a 1:15 ratio; that is, each mentor is allocated 15 students under his/her mentorship
- Agreeing to the parameters of the mentoring role
- Allocate responsibilities within the Committee to certain work areas
- Recruit, interview and select (including taking up references) Academic Mentors in an equality conscious manner
- Make sure those selected have performed to an academically satisfactory standard and have a comprehensive understanding of the subject
- Inviting those identified to serve as Academic Mentors
- Ensure all those selected to be Academic Mentors completed a comprehensive training programme
- Ensuring there are relevant student representatives present to guarantee students views are being reflected
- Mentoring potential future Academic Mentors in order to sustain and grow the Mentoring population
- Dealing with any issues/problems arising from the mentoring process or relationship
- Ensuring continued support and development for Academic Mentor
- Ensuring all Mentees receive documentation and guidance on what the mentoring relationship involves and who to contact if there are problems
- Giving feedback to the Director, Dean of Students, Senior Tutors and other Support Staff of BBIT

Mentor: Roles & Responsibilities at BBIT

- Support the Mentee to make an ' Action Plan' outlining their motivation and goals
- Meet on a one to one or group basis to review the Mentee's progress towards their desired goals
- Use questioning techniques to facilitate the Mentee's own thought processes in order to identify solutions and actions
- Utilize active listening and communication skills to ensure the needs of the Mentee are being met within the Mentoring relationship
- Share relevant Academic experiences/problems you have overcome(if appropriate)
- Facilitate and encourage autonomous and enquiry-based learning, providing the Mentee with the tools to find their own answers

Mentee: Roles & Responsibilities at BBIT

- A desire and ability to engage in the mentoring process
- The time and commitment to pursue their goals
- An understanding of the role and boundaries of the Mentor
- Being punctual and prepare for meetings
- Must respect the confidentially of the relationship
- Mentees must take ownership of the process

Composition

The Mentoring Committee is composed of all the members of Humanities and is headed by the HOD of Humanities

SL.NO:	NAME OF THE MEMBER	DESIGNATION	DEPARTMENT
1	Prof. Priyanka Chatterjee	Convener	HOD- Humanities
2	Prof. Pradip Kumar Mandal	Member	HU
3	Prof. Mili Mitra Roy	Member	HU
4	Prof. Tithi Chakraborty	Member	HU
5	Prof.Rajashi Sengupta Mothey	Member	HU
6	Prof. Anusriya Mukherjee	Member	HU

9.2 Feedback analysis and reward /corrective measures taken, if any (10)

Three types of Feedback systems are followed:

1. **DIRECT FEEDBACK FROM THE STUDENTS**

Every department have constituted Class Committees for Each semester with FACULTYs and student Members .Student members are invited to express their view on Subjects on the Academic Environment of the department and the feedback is collected by the chairman of the Committee and submitted to the HOD for further actions.

STUDENT FEEDBACK

A. Significance of Student Feedback

The Institute aims to offer the best possible environment and learning experience to encourage students to perform to their full potential.

The teacher plays an important role as a facilitator, spectator and an evaluator. The students need to be guided for all front so to enhance students overall appearance. The teacher must put forth all parameters of development towards the students. Teacher should motivate the students and maintain a positive/ healthy attitude for learning. Teacher should watch, take part, evaluate, command and advise individual student as per their requirement.

Students play a critical part in the process of evaluation, development and enhancement of this learning experience.

Feedback from students allows the Institute to evaluate how its service provision is viewed by the most important group of the Institute, namely its students.

BBIT has put an increasing importance on the need for involvement of students in the quality assurance of higher education through student feedback process. Student involvement requires that students act as collaborators in, rather than merely passive receivers of, teaching and learning.

The method suggests correcting mistakes in the learning process.

B. The Process of obtaining Student Feedback

Students are invited, by means of email providing a link, to complete a brief online feedback form, or on an anonymous basis, towards the end of selected study-units.

This process occurs on half-yearly basis during the spread of one academic year. The process of student feedback is conducted once each at the end of odd/ even semester in one academic year.

In each case, feedback is collected after students have been assessed on particular unit/ parameter, prior to publication of semester results.

C. Focus of the Student Feedback Form

The student feedback-form focuses on the following issues:

- General questions on the study-unit
- Comparison between study-unit description and actual delivery
- Lecturing methodology
- Lecturer attributes
- Method of assessment
- Administration and resources
- Additional comments (if any)

D. Objectives of Student Feedback on Study-units

Student feedback on study-units has the following main objectives:

I. To provide students with the opportunity to comment on the quality of learning experiences, as required in preparation for and as part of review processes;
II. To assess the success of academic provision in relation to the expectations of students;
III. To provide feedback to lecturers in order to improve delivery and/or content of the study-unit.

E. Anonymity of Student Feedback

The student feedback exercise is entirely confidential and anonymous.

The procedures below have been put in place to maintain anonymity and to ensure that students are not adversely affected by the feedback they submit:

Students who complete the form are not asked at any stage for their names or any other personal details which may be used to identify them;

Student response data is grouped together for the entire class for the purpose of data analysis. It is therefore impossible to associate comments and responses provided with any individual student. Lecturers receive a report which summarizes all the information collated as percentage values;

Lecturers receive the aggregated results of student feedback after they have submitted the grades for study-units being reviewed. This ensures that the grades of students, even though not identifiable on an individual basis, are not affected as a group by the feedback which is submitted;

Only those study-units attended by a considerable number of students are included in the student feedback exercise;

Participation in student feedback is on an entirely voluntary basis.. There is also no penalty for abstaining from submission of feedback, since all grades are published irrespective of participation or non-participation in the student feedback exercise. Nonetheless, students are strongly encouraged to provide their feedback and use this opportunity to voice their opinions,

since the validity of this exercise, and thus the continuing improvement of teaching at the Institute, relies on a high response rate.

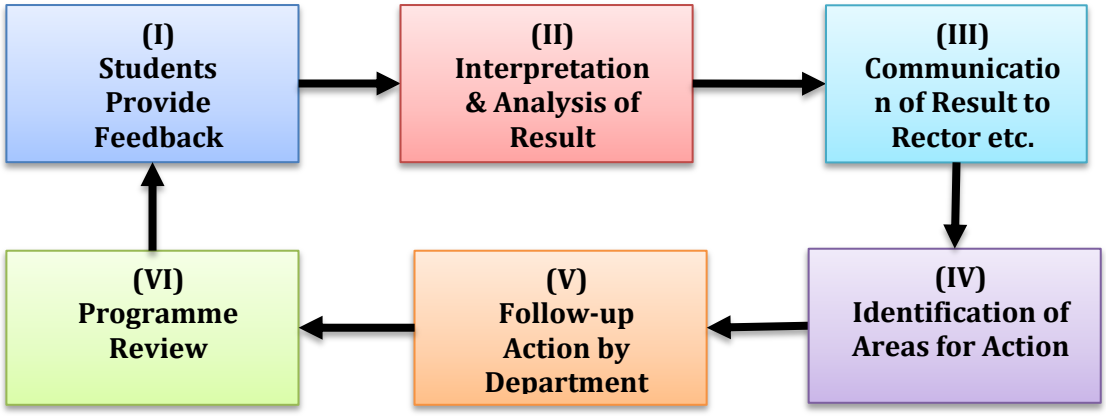
F. How is Student Feedback used in the Quality Assurance Process?

After each semester, only a selection of study-units are evaluated to avoid student fatigue associated with this exercise, however all study-units will ultimately be evaluated over a definite period. Results of the feedback process are made available to the lecturers of the study-units concerned. The Heads of Departments and the Rector, and areas for appropriate follow-up action are identified and communicated to the respective Departments. The results of the student feedback process, as well as the recommendations and the action taken on the basis of such recommendations are important considerations for the Programme Review which each Department is required to undertake.

Beside in the process the teacher should negotiate with the student and ask them how they would like to be corrected. He/ she can prepare a note of common mistakes and deal with them in the future classes.

The teacher should ensure that the students are not losing their motivation by being corrected on the spot right after the process.

The Student Feedback Process



2. FACULTY APPRAISAL

Introduction

FACULTY appraisal report consists of the appraisal PERCENTAGE for the different entities of the College like Student, FACULTY and Associate Director and the following feedback has been carried out

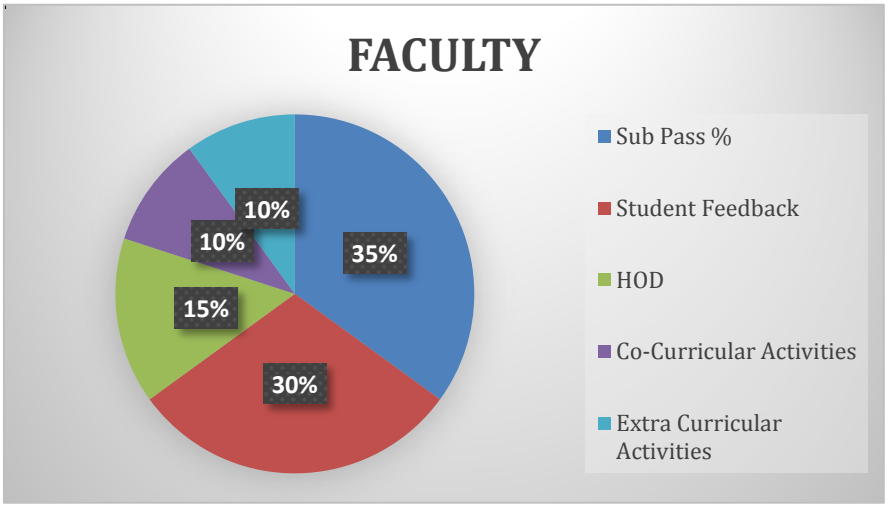
1) Student on FACULTYs (already discussed above)
2) FACULTYs self-appraisal (Department wise)
3) FACULTYs on HOD (Department wise)
4) FACULTYs on Director & Associate Director

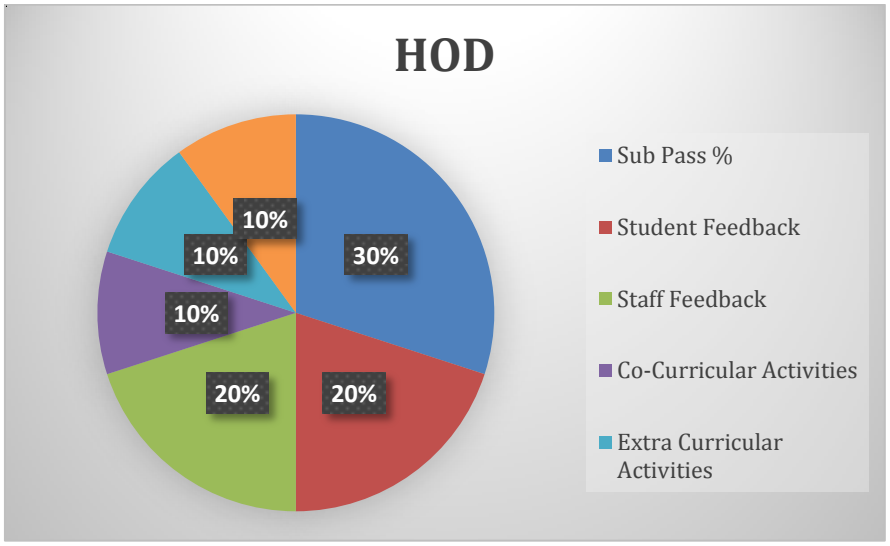
5) HOD on FACULTYs (Department wise)
6) Director & Associate Director on FACULTYs

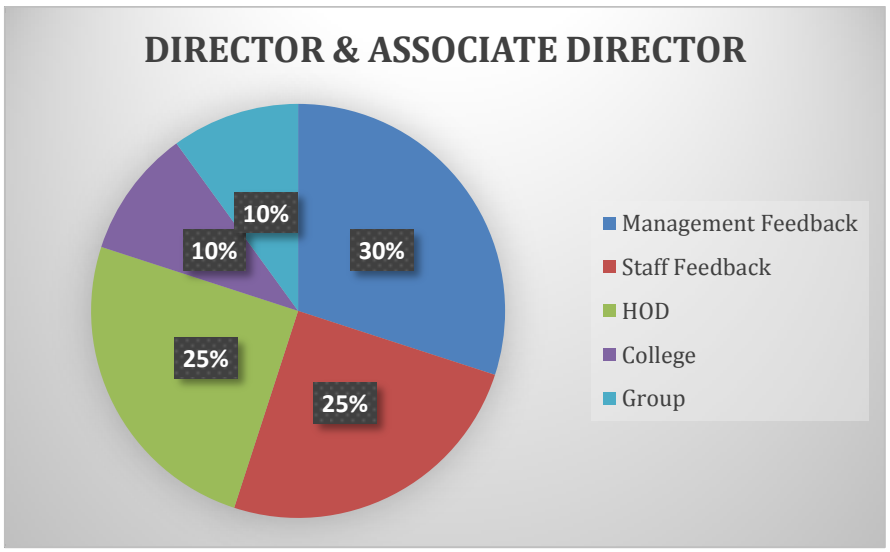
Methodology of appraisal

Based on the feedback forms carried out following methodology is adapted

Table: Weightage Matrix							
Category	**Sub Pass %**	**Student Feedback**	**HOD**	**Co-Curricular Activities**	**Extra-Curricular Activities**		**Total**
FACULTY	35	30	15	10	10		100
Category	**Sub Pass %**	**Student Feedback**	**FACULTY Feedback**	**Director & Associate Director Feedback**	**Co-Curricular Activities**	**Extra-Curricular Activities**	**Total**
HOD	30	20	20	10	10	10	100
Category	**Sub Pass %**	**Management Feedback**	**FACULTY Feedback**	**HOD**	**College**	**Group**	**Total**
Director & Associate Director		30	25	25	10	10	100







9.3 Feedback on facilities (5)

FEEDBACK ON FACILITIES FROM STAKEHOLDERS

The college has formal and informal mechanisms to obtain feedback from stakeholders through various committees, associations, organization, etc. The aim of the college is to provide the best facilities for the students. The feedback forms are circulated among a handful of students, parents, alumni and the feedback is obtained from them. The obtained forms are thoroughly analyzed by a group of faculty, with representation from each department. The committee then takes autonomous decisions and forwards the observation to the head of the institution for approval. It is then implemented in the best possible way for the benefit of students.

STUDENT'S FEEDBACK:

The final year students are provided with feedback forms for the benefit of the betterment of the institution.

Merits: The students have given overall thumbs up for the facilities provided. They were satisfied with the faculties and overall computing and library facilities provided at the college.

Demerits: The students however felt that the number of computers needs to be increased for browsing information. They have also requested for high speed Wi-Fi access throughout the college for better sharing of information. They have also requested to extend the library working hours during exam-time.

ALUMNI FEEDBACK:

The alumni feedback was collected from passed out students and following were the overall feedback received.

Merits: Overall the alumni have given a feedback that there were ample ambience for them to improve their communication skills, personality development, self-motivation, confidence, good mentoring and good academic support extended by faculty.

Demerits: Encouragement received in the aspect of higher studies and foreign education is required. Required more focus on practices which would improve the ability of the student to identify the problems in their respective branch of engineering.

EMPLOYERS FEEDBACK:

Merits: Overall the recruiters felt that the students are good in soft skills and fair in technical skills. A special note was made regarding the team building, interpersonal relationship and the good attitude of the students. The labs too are in synchronization with the needs of the industry.

Demerits: Certain domain specialization courses had to be conducted by the university such as Automotive Basic Engineering fundamentals can be taken much care.

A. INFRASTRUCTURE

1. CLASS ROOM

i) **Size:** Almost **97%** of the students rated **Very Satisfactory and Satisfactory**. An insignificant proportion of students i.e. **03% rated Dissatisfactory**.

ii) **Lighting and Ventilation:** Almost **91%** of the students rated **Very Satisfactory and Satisfactory**. An insignificant proportion of students i.e**. 00%** rated Dissatisfactory.

iii) **Audio & Video Quality in Smart Classroom:** Almost 72**%** of the students rated **Very Satisfactory and Satisfactory**. An insignificant proportion of students i.e. **7% rated** Dissatisfactory. Almost 21**%** Student rated as **needs to be improved.**

iv) **Quantity of Furniture:** Almost **86%** of the students rated **Very Satisfactory and Satisfactory**. An insignificant proportion of students i.e. **01%** rated **Dissatisfactory**. Almost **10%** Student rated as **needs to be improved.**

v) **Cleanliness:** Almost **87% of** the students rated Very **Satisfactory and Satisfactory**. An insignificant proportion of students i.e. **2%** rated **Dissatisfactory**.

ACTION: The Speakers in Smart Classrooms were replaced with better quality ones.

2. COMPUTER LABS

i) **No of Computers:** Almost **76%** of the students rated Very **Satisfactory and Satisfactory**. An insignificant proportion of students i.e**. 6 % rated Dissatisfactory.** Almost 18 **% Student** rated as **needs to be improved.**

ii) **Availability of Software:** Almost **63%** of the students rated **Very Satisfactory and Satisfactory**. An insignificant proportion of students i.e. **14%** rated Dissatisfactory. Almost **23%** Student rated as **needs to be improved**.

iii) **Maintenance:** Almost **63% of** the students rated Very **Satisfactory and Satisfactory**. An insignificant proportion of student's i.e. **12 %** rated **Dissatisfactory**. Almost **2 4 % Student** rated as **needs to be improved**.

iv) **Connectivity:** Almost 58**% of** the students rated Very **Satisfactory and Satisfactory**. An insignificant proportion of student's i.e. **17 % rated Dissatisfactory**. Almost 2 **5 % Student** rated as **needs to be improved**.

v) **Anti-Virus:** Almost **37%** of the students rated Very **Satisfactory and Satisfactory**. A significant proportion of students i.e. **53%** rated **Dissatisfactory**.

ACTION: Anti-Virus has been installed in all the computers of computer lab and running DEPARTMENT successfully. Speed of Connectively in IT lab has improved now with JIO connection.

3. Wi-Fi

i) **Accessibility of Wi-Fi in your institute with adequate bandwidth:** Almost **28%** of the students rated **Very Satisfactory and Satisfactory**. A significant proportion of students **46%** rated **Dissatisfactory**. Almost **26%** Student rated as **needs to be improved**.

ii) **Reliability of Wi-Fi:** Almost **30%** of the students rated **Very Satisfactory and Satisfactory**. A significant proportion of students **46%** rated **Dissatisfactory**. Almost **24%** Student rated as **needs to be improved**.

iii) **Availability of Support Staff to entertain student's queries:** Almost **54%** of the students rated **Very Satisfactory and Satisfactory**. An insignificant proportion of students **31%** rated **Dissatisfactory**. Almost **15%** Student rated as **needs to be**

improved.

ACTION: Wi-Fi connectivity in hostel has improved now with more number of routers.

4. FOOD

i) **Food Prices:** Almost **58%** of the students rated **Very Satisfactory and Satisfactory**. A small proportion of students i.e. **24%** rated **Dissatisfactory.**

ii) **Hygienic & Good Quality Food:** Almost **44 %** of the students rated Very **Satisfactory and Satisfactory**. A small proportion of students i.e. **24% rated** Dissatisfactory. A significant proportion of 32**% Student** rated as **needs to be improved**.

iii) **Quantity:** Almost **67%** of the students rated **Very Satisfactory and Satisfactory**. An insignificant proportion of students i.e. **15%** rated Dissatisfactory.

iv) **Timings:** Almost **78%** of the students rated **Very Satisfactory and Satisfactory**. An insignificant proportion of students i.e. **7%** rated **Dissatisfactory**. Almost **15%** Student rated as **needs to be improved**.

v) **Menu:** Almost **32 %** of the students rated **Very Satisfactory and Satisfactory**. A small proportion of students i.e. **28%** rated **Dissatisfactory**. A significant proportion of **40%** Student rated as **needs to be improved**.

vi) **Service:** Almost **65 %** of the students rated **Very Satisfactory and Satisfactory**. An insignificant proportion of students i.e. **12% rated** Dissatisfactory. Almost 23**%** Student rated as **needs to be improved**.

vii) **Adequate sitting arrangement:** Almost 74 **% of** the students rated Very **Satisfactory and Satisfactory**. An insignificant proportion of student's i.e. **09 % rated** Dissatisfactory. Almost **17%** Student rated as **needs to be improved.**

ACTION: Mess/Canteen is now managed by a joint committee with students , faculty and admin officers. Hygiene and quality of food and menu has improved under the supervision of this joint committee.

5. WASHROOM & DRINKING WATER

i) **No of Washrooms:** Almost **85%** of the students rated **Very Satisfactory and Satisfactory**.

ii) **Cleanliness of Washroom all the time:** Almost **65%** of the students rated Very **Satisfactory and Satisfactory**.

iii) **Availability of ample water supply & Soaps in washrooms:** Almost **65%** of the students rated Very **Satisfactory and Satisfactory**. An insignificant proportion of student's i.e. **20%** rated **Dissatisfactory**.

iv) **Quality of drinking Water:** Almost **85%** of the students rated **Very Satisfactory and Satisfactory**. An insignificant proportion of students i.e. **05%** rated Dissatisfactory.

ACTION: Liquid Soap is now available in the washrooms.

6. LABS

i) **Number of machines in your labs:** Almost **75 %** of the students rated **Very Satisfactory and Satisfactory**. An insignificant proportion of students i.e**. 10%** rated **Dissatisfactory**. Almost **15%** Student rated as **needs to be improved**.

ii) **Technology of machines:** Almost **77%** of the students rated **Very Satisfactory and Satisfactory**. An insignificant proportion of student's i.e. **0 8 % rated** Dissatisfactory. Almost **1 5 % Student** rated as **needs to be improved**.

iii) **Type of machines in your workshop:** Almost **77 %** of the students rated **Very Satisfactory and Satisfactory**. An insignificant proportion of students i.e. **06 %** rated **Dissatisfactory**. Almost **17%** Student rated as **needs to be improved**.

iv) **Maintenance of machines in lab:** Almost 75**% of** the students rated Very **Satisfactory and Satisfactory**. An insignificant proportion of students i.e. **06%** rated **Dissatisfactory**.

v) **Availability of technician to assist students:** Almost **66%** of the students rated **Very Satisfactory and Satisfactory**. An insignificant proportion of students i.e. **15%** rated **Dissatisfactory**.

ACTION: No action proposed.

7. WORKSHOPS

i) **Are you satisfied with the kind of technical workshops being held in your college:** Almost **69%** of the students rated **Very Satisfactory and Satisfactory**. An insignificant proportion of students i.e. **15%** rated **Dissatisfactory**.

ii) **Are you satisfied with the learning you get from technical workshops:** Almost 68**%** of the students rated **Very Satisfactory and Satisfactory**. An insignificant proportion of students i.e. **16%** rated **Dissatisfactory**.

ACTION: Regular technical workshops are now being conducted by the respective departments.

8. GYM

i) **Variety of Gym Equipment:** Almost **42%** of the students rated **Very Satisfactory and Satisfactory**. **19%** rated needs to be improved. **39%** rated dissatisfactory.

ii) **Timings:** Almost **44%** of the students rated **Very Satisfactory and Satisfactory**. An insignificant proportion of students' i.e. **35%** rated **Dissatisfactory**.

iii) **Fees:** Almost **52%** of the students rated **Very Satisfactory and Satisfactory**.

iv) **Availability of Gym Instructor:** Almost **36%** of the students rated **Very Satisfactory and Satisfactory**. **46% rated** Dissatisfactory.

ACTION: The Gym has been reset with latest equipment.

B. COURSE-CURRICULUM & EXAMINATION

i) **Starting time of Classes in Morning:** Almost **83 %** of the students rated **Very Satisfactory and Satisfactory**.

ii) **Duration of hour lectures in a day:** Almost **85 %** of the students rated Very **Satisfactory and Satisfactory**. Almost **08%** Student rated as **needs to be improved.**

iii) **Total no of lectures in a week:** Almost **87%** of the students rated **Very Satisfactory and Satisfactory**. Almost **07%** Student rated as **needs to be improved**.

iv) **Assignment plan of each subject:** Almost **71%** of the students rated **Very Satisfactory and Satisfactory**. Almost **19%** Student rated as **needs to be improved**.

v) **Assessment criteria of assignments:** Almost **73 %** of the students rated Very **Satisfactory and Satisfactory**. Almost **15%** Student rated as **needs to be improved**.

vi) **Course Coverage in Exam:** Almost 72**%** of the students rated **Very Satisfactory and Satisfactory**. Almost **16%** Student rated as **needs to be improved**.

vii) **Pattern of INTERNAL Exam:** Almost **81%** of the students rated **Very Satisfactory and Satisfactory**. Almost **10%** Student rated as **needs to be improved**.

viii) **Encouragement in participation in technical events:** Almost 64 **% of** the students rated Very **Satisfactory and Satisfactory**. An insignificant proportion of students i.e. **16 % rated Dissatisfactory**. Almost **18%** Student rated as **needs to be improved**.

ix) **Availability of enough study material:** Almost **49%** of the students rated **Very Satisfactory and Satisfactory**. A significant proportion of 30**%** Student rated as **needs to be improved**. **20%** rated dissatisfactory**.**

x) **Opportunity to participate in class discussion:** Almost 71 **% of** the students rated Very **Satisfactory and Satisfactory**.

xi) **Evaluation criteria followed in BBIT in terms of SGPA & CGPA:** Almost **78 %** of the students rated **Very Satisfactory and Satisfactory**. An insignificant proportion of students i.e. **13%** rated **Dissatisfactory**. Almost **08%** Student rated as **needs to be improved**.

xii) **Clearing of doubts during class:** Almost **81% of** the students rated Very **Satisfactory and Satisfactory**. Almost **14%** Student rated as **needs to be improved**.

xiii) **Number of elective subjects being offered:** Almost **82%** of the students rated **Very Satisfactory and Satisfactory**. Almost **10%** Student rated as **needs to be improved**.

xiv) **Attendance policy followed by BBIT:** Almost **74 %** of the students rated **Very Satisfactory and Satisfactory**. An insignificant proportion of students i.e**. 13% rated Dissatisfactory.** Almost **13%** Student rated as **needs to be improved**.

xv) **Re-exam policy followed by BBIT for Medical cases:** Almost **75%** of the students rated **Very Satisfactory and Satisfactory**... Almost **10%** Student rated as **needs to be improved**.

xvi) **Effectiveness of financial penalty for improving punctuality:** Almost **7 5 %** of the students rated **Very Satisfactory and Satisfactory**. An insignificant proportion of students i.e. **10 %** rated **Dissatisfactory**. Almost **13%** Student rated as **needs to be improved**.

ACTION: We are procuring books as per demand raised by DEPARTMENTS.

C. FACULTY

i) **Faculty inspires to perform well:** Almost **79%** of the students rated **Very Satisfactory and Satisfactory**. Almost **14%** Student rated as **needs to be improved**.

ii) **Enthusiasm in teaching from faculty members:** Almost **76 %** of the students rated **Very Satisfactory and Satisfactory**. Almost **16%** Student rated as **needs to be improved**.

iii) **Overall personality development of students:** Almost **71 %** of the students rated **Very Satisfactory and Satisfactory**. Almost **21%** Student rated as **needs to be improved**.

iv) **Individual attention during workshops and lab sessions:** Almost 7 **1 % of** the students rated **Very Satisfactory and Satisfactory**. Almost **20%** Student rated as **needs to be improved**.

v) **Availability of faculty for discussion on non-academic issues:** Almost **79%** of the students rated **Very Satisfactory and Satisfactory**. Almost **16%** Student rated as **needs to be improved**.

vi) **Guidance on project:** Almost 7 **7 % of** the students rated **Very Satisfactory and Satisfactory**. Almost **15%** Student rated as **needs to be improved**.

vii) **Helpfulness of administration department towards studies:** Almost **72%** of the students rated **Very Satisfactory and Satisfactory**. Almost **13%** Student rated as needs to be improved.

ACTION: The workload of all the faculty has been met and Attendance is through software & all the faculty are involved in mentoring the students also.

D. EXTRA-CURRICULAR ACTIVITIES & SPORTS

i) **Support and promotion of sports activities by college authorities:** Almost 52 **%** of the students rated **Very Satisfactory and Satisfactory**. A significant proportion of students i.e. **27%** rated **Dissatisfactory**. Almost **22%** Student rated as **needs to be improved**.

ii) **Enough space available to play sports in college:** Almost **49%** of the students rated Very **Satisfactory and Satisfactory**. A significant proportion of student's i.e. **23%** rated **Dissatisfactory**. Almost **28%** Student rated as **needs to be improved.**

iii) **Number of competitions being held department wise:** Almost **51%** of the students rated **Very Satisfactory and Satisfactory**. A significant proportion of student's i.e. **23%** Rated **Dissatisfactory**. Almost **25%** Student rated as **needs to be improved.**

iv) **Availability of extra time to prepare for college fest:** Almost **46 %** of the students rated **Very Satisfactory and Satisfactory**. A significant proportion of student's i.e. **28%** Rated **Dissatisfactory**. Almost **26%** Student rated as **needs to be improved.**

v) **Motivation from college authorities to participate & other college's fest:** Almost **58%** of the students rated **Very Satisfactory and Satisfactory**. A small proportion of Students i.e. **20%** rated **Dissatisfactory**. Almost **22%** Student rated as **needs to be improved.**

ACTION: Basketball & Volley ball court has been made available. Table tennis is being played by many students. Cricket & Football grounds are however available in BBIT campus which our students use. Regular games and Inter Dept. tournaments are organized for students' welfare.

9.4 Self-Learning (5)

- Value added lab sessions beyond syllabus are conducted to expose the students to software / hardware trends not included in their curriculum.
- Hobby lab enables students to do something on their own, test them- know by doing discussions, brainstorming and problem solving focused on outputs of learning and academic careers.
- Professional skill development courses are arranged.
- Do it yourself.
- Engaged to work in Industries during vacation and have Industrial training
- Language lab facilities provided – This enables students to prepare to take up the GATE, IELTS, TOEFL, and GRE examinations.
- Industrial visits, arranged by the Departments.
- Technical talks.
- Seminars for senior students.

GENERATION OF SELF-LEARNING FACILITIES AND MOTIVATION:

- For lab courses, the lab manuals are issued, and certificates given based on a test at the end of the session.
- Intranet facilities are provided
- Wi Fi zone enables the students to use the facility any time (even beyond college hours)
- Browsing centre open for 12 Hrs. a day
- Students motivated by sending them to write research papers and present papers in conferences. College bears the expenditure.
- Learning material are put on the Intranet – students are encouraged to do exercises
- Labs are open to students to experiment on their ideas
- Encouraging students to put innovation on web

AVAILABILITY OF LEARNING BEYOND SYLLABUS CONTENTS AND PROMOTION:

- Intranet facility provides learning of subjects not necessity in the curriculum
- Problem solving techniques
- Social service field work offers service learning opportunities to students
- Literature on professional ethics, personality development, even English literature are put on the Intranet

9.5 Career Guidance, Training, Placement (10)

Training & Placement Cell (TPC) is to place the student in competitively good companies by identifying their knowledge skills, attitude matrices of every individual student, creating job profiles for them, identifying areas of training & various methods as per the training requirement, formulate sequence of activities to meet the training schedules for appropriate placement. TPC always involves in the following activities:

- Assist students develop /clarify their academic and career interests, and their short and long term goals through individual counseling and group sessions
- Provide resource and activities to facilitate the career planning process
- Organizing pre-placement training for students (Soft-skills, Aptitude, Technical and Mock Interviews)
- Empower students with life-long career decision-making skills
- Up gradation of the students skill sets commensurate with the expectations of the industry

1. **Pre-placement Training**

- Aptitude Tests
- English Grammar and Verbal Ability
- Training for group works and team effectiveness
- Training for Communicative English / Developing Business Communication Skills
- Training on Personality Development
- Mock Interviews
- Mock GDs
- Resume Preparation
- Model Campus Interview Tests

2. **Tie-up with Training Institute and Industry**

A. Tie-up for Student Assessment

- Cocubes
- Aspiring Minds
- Ardent Computech
- C-Axis

B. Other institutions for Online Assessment

- Mettle
- Monster

C. Tie-up for Placement Service / Support

- NVL
- Cocubes
- Aspiring Minds
- Monster

D. Tie-up for Campus Placement

- CYIENT LTD.

3. **Motivational Workshop on Career Guidance**

Sl. No.	Company Name	Date	Speakers	Stream	Topic
1.	Bharat Lubricants Industries	28/11/13	Mr. Netai Bhaduri, Works Manager	M.E	Career Development
2.	Indian Navy	06/08/14	1. Major Gulshan Kumar Sehgal 2. Lt. Col S R Bhattacharya	All Stream	Defense Career

Sl. No.	Company Name	Date	Speakers	Stream	Topic
3.	M/s. Videocon d2h	7/8/15	Mr. Abhijit Chakraborty, Regional Manager-East	M.E	Career Development
4.	M/s. Tractors India Ltd.	9/11/15	Mr. Pradyot B Datta, Manager - HR	ME & EE	How to face Campus Drive
5.	1. M/s.KND Engineering Technologies Ltd. 2. Five Stein India Projects Pvt. Ltd. 3. Haldia Petrochemicals Ltd. 4. JMC Projects Ltd.	10/10/15	1. Mr. Balaram Mukherjee, Director 2. Nayana, Rokade, DGM _ HR & Admin 3. Mr. Bivas Roychowdhury, Sr. Manager –HR & Admin 4. Subroto Mukherjee, Manager – HR & Admin.		Industry-Academic Interface on 'Recent Advancement In Science, Technology and Employability'
6.	M/s. J.K Gas Pvt. Ltd	23/7/15	Mr. J. K. Kar	ME & EE	Technical Session
7.	M/s. Haldia Petrochemicals Ltd.	07/03/16	Mr. Bivas Roychowdhury, Sr. Manager –HR & Admin	All Streams	7 Habits Of Highly Effective People
8.	M/s. Tech Mahindra	16/05/16	Mr. Supratit Dhali, Regional Manager - HR	ME/CSE/ ECE/EE	Career Development
9.	Focus Academy Of Career Enhancement (An IIM Graduates Enterprise)	24/6/16 25/6/16	Mr. Neeraj Tiwari, Trainer	All Streams	Assessment of Cognitive and Behavioral Skill Development

4. Industrial Training :

All the students are sent to the industry during Summer and Winter vacation to get the practical exposure from the industry and it is mandatory for all students.

List of 2014 PoB		
Company	**No. of Students**	**Duration**
New Allenbery Works	6	4 Weeks
Bharat Lub Industries Pvt Ltd	19	2 Weeks
Tata Power	1	4 Weeks
Eastern Railway	1	4 Weeks
JKB Gas Pvt Ltd	19	4 Weeks
EXIDE INDUSTRIES	1	4 Weeks
Garden Reach Shipbuilders & Engineers Ltd	1	4 Weeks
Bristol Petroleum Pvt. Ltd	16	4 Weeks
Total	**64**	

List of 2015 PoB		
Company	**No. of Students**	**Duration**
Bharat Lub Industries Pvt Ltd	9	4 Weeks
Vista Mind	1	4 Weeks
Bhava Reasearch Centre	1	4 Weeks
JKB Gas Pvt. Ltd.	17	4 Weeks
Steel Authority of India Ltd	1	4 Weeks
Tata Steel	1	4 Weeks
EMT Megatherm Pvt Ltd	17	4 Weeks
Gun and Shel Fcatory, Cossipore	1	4 Weeks
Bristol Petroleum Pvt. Ltd	14	4 Weeks
Tata Hitachi Construction Machinery Co.Ltd	1	2 Weeks
Mackintosh Burn Ltd	2	4 Weeks
Ardent Computech Pvt Ltd	1	2 Weeks
Damodar Valley Corporation	1	3 Weeks
Total	**67**	

List of 2016 PoB		
Company	**No. of Students**	**Duration**
Indian Oil Corporation Limited	1	4 Weeks
Tata Steel Ltd.	2	2 Weeks
Indian Railways	2	2 Weeks
N.F Railway	1	4 Weeks
Garden Reach Shipbuilders & Engineers Ltd	12	4 Weeks
Tools & Dyne	1	4 Weeks
Bristol Petroleum Pvt. Ltd	17	4 Weeks
Ardent Infotech Pvt. Ltd.	21	2 Weeks
Webskitters Academy	5	4 Weeks
CMC Academy	2	4 Weeks
Hooghly Alloys & Steels Co .Pvt. Ltd	1	4 Weeks
Damodar Valley corporation	5	2 Weeks
Jamalpur Locomative Workshop Jamalpur	1	4 Weeks
NTPC	2	2 Weeks
Haldia	2	4 Weeks
JKB GAS PVT LTD	21	4 Weeks
Eastern India Powertech Ltd	1	4 Weeks
SSK Tools Engg Works	1	2 Weeks
Emt Megatherm Pvt Ltd	10	4 Weeks
SS Dee	1	4 Weeks
Steel Authority Of India Limited	2	2 Weeks
Gun and Shell Factory Cossipore	1	2 Weeks
Soil & Enviro Industries Pvt Ltd.	1	2 Weeks
Air India Engineering Services Ltd	1	2 Weeks
Everest	1	4 Weeks
Bharat Lub Industries Pvt. Ltd.	13	4 Weeks
Total	**128**	

5. Industrial Visit for ME Students

SL NO.	Name of the Companies	Date of Visit	PoBs
1	Bristol Petroleum Pvt. Ltd	22/8/13, 23/8/13	2014
2	Bharat Lab Industries Pvt. Ltd.	4/11/13 to 7/11/13	2014
3	Bristol Petroleum Pvt. Ltd	6/11/14, 7/11/14	2015
4	JKB Gas Pvt. Ltd.	8/9/14 to 11/9/14	2015
5	JKB Gas Pvt. Ltd.	19/8/15, 20/8/15	2016
6	Bristol Petroleum Pvt. Ltd.	19/11/15, 20/11/15	2016

6. Placement Policy

A. Placement Policy for Students

1. STUDENTS ARE REQUIRED TO REGISTER THEMSELVES WITH THE TRAINING AND PLACEMENT CELL (T & P CELL) AS PER THE STIPULATED TIME PERIOD TO AVAIL FURTHER SUPPORT EXTENDED FOR PLACEMENT RELATED ACTIVITIES. ALL STUDENTS ARE REQUIRED TO READ, UNDERSTAND AND ADHERE TO ALL THE TERMS LAID DOWN BY THE T & P CELL.

   i. MINIMUM 75% ATTENDANCE IS MANDATORY IN TRAINING CLASSES.

   ii. ATTENDANCE IS MANDATORY IN ANY CAMPUS RECRUITMENT DRIVE FOR REGISTERED STUDENTS.

   iii. STUDENTS NEED TO SUBMIT THEIR UPDATED RESUME WITH PASTED COLOR PHOTOGRAPH, PHOTOCOPY OF ALL TESTIMONIALS AND CERTIFICATES.

2. ONCE REGISTERED, STUDENTS WILL NOT BE ALLOWED TO WITHDRAW THEIR CANDIDATURE FROM A PARTICULAR CAMPUS RECRUITMENT DRIVE. EXCEPTIONS CAN BE MADE ONLY AFTER THE CONSENT OF THE PLACEMENT COMMITTEE/ CONCERNED AUTHORITY. ANY STUDENT, WHO WITHDRAWS CANDIDATURE, REJECTS OFFER AT ANY STAGE, ABSENTS FROM ANY ROUNDS DURING RECRUITMENT PROCESS WITHOUT SUFFICIENT REASON, WILL NOT BE ALLOWED TO SIT FOR FURTHER CAMPUS DRIVES

3. NO FURTHER ATTEMPTS WILL BE PERMITTED TO THE STUDENTS WHO HAVE ALREADY SECURED ONE JOB OFFER. THUS, STUDENTS CAN HAVE ONLY ONE JOB OFFER. ALL THE STUDENTS WHO SECURE AN OFFER WILL HAVE TO COMPULSORILY JOIN THE COMPANY. THESE SELECTED STUDENTS MAY BE CONSIDERED IN FURTHER CAMPUS DRIVE BASED ON DIFFERENT FACTORS THAT WILL BE DECIDED BY THE PLACEMENT COMMITTEE/CONCERNED AUTHORITY ON CASE TO CASE BASIS.

4. THE DECISION REGARDING MAKING JOB OFFERS IS LEFT TO THE DISCRETION OF THE COMPANIES PARTICIPATING IN THE RECRUITMENT DRIVE. AT THE END OF ACADEMIC YEAR, IF ANY STUDENT, WHO IS NOT PLACED, T & P CELL WILL EXTEND SUPPORT TO SUCH STUDENTS ONLY FOR OFF CAMPUS RECRUITMENT DRIVES, TILL SCOPES AVAILABLE IN THE NEXT SESSION.

5. GROOMING CLASSES ARE ORGANIZED FOR STUDENTS WITH A VISION TO MAKE THEM EFFICIENT AND MORE SKILLED BEFORE PARTICIPATING IN UPCOMING RECRUITMENT DRIVES.

6. STUDENTS, WHO MISS TWO (2) CONSECUTIVE CAMPUS DRIVES, WILL NOT BE ALLOWED TO SIT FOR NEXT TWO (2) CAMPUS DRIVES.

7. STUDENTS SHOULD INTIMATE THE VALID REASON TO THE T & P CELL IN CASE OF ABSENTEEISM IN ANY TRAINING & PLACEMENT RELATED ACTIVITIES.

8. ATTENDING TRAINING CLASSES IS MANDATORY FOR PLACEMENT SUPPORT FROM T & P CELL

9. STUDENTS HAVE TO FURNISH AN UNDERTAKING FROM THEIR PARENTS CONFIRMING THAT EVERY REGISTERED STUDENT WILL MAINTAIN MINIMUM 75% ATTENDANCE DURING ALL THE TRAINING CLASSES. FAILING TO WHICH, NO FURTHER PLACEMENT SUPPORT WILL BE OFFERED FROM THE T & P CELL. PLACEMNT COMMITTEE/ AUTHORITY WILL HOLD NO REPONSIBILITY TOWARDS PLACING THOSE STUDENTS.

B. Placement Policy for participating industries

1. THE TRAINING AND PLACEMENT CELL (TPC) WILL INVITE THE PROSPECTIVE INDUSTRIES FOR THE RECRUITMENT OF FINAL YEAR STUDENTS FROM AUGUST / SEPTEMBER OF EVERY ACADEMIC CALENDAR.

2. AS PER THE CRITERIA AND PARMETER OF THE COMPANY, TPC OF THE INSTITUTE WILL SHARE THE DETAILED DATABASE OF THE RESPECTIVE FINAL YEAR STUDENTS OPTING FOR PLACEMENT, ALONG WITH MUTUALLY CONVENIENT DATE FOR THE CAMPUS RECRUITMENT DRIVE.

3. ON THE RECEIPT OF DETAILED CAMPUS DRIVE (DATE OF CAMPUS EVENT, JOB DESCRIPTION, STIPEND AND SALARY DETAILS,ELIGIBLE STUDENTS, ELIGIBILITY CRITERIA, REQUIRED DOMAIN KNOWLEDGE, NO. OF REQUIREMENTS, SELECTION PROCESS, REQUIREMENT OF INFRASTRUCTURE FOR CONDUCTING CAMPUS DRIVE, TRAVEL PLAN, DETAILS OF VISITING OFFICIALS & OTHER DETAILS (IF ANY)), TPC WILL INFORM THE RESPECTIVE STUDENT THROUGH OFFICIAL NOTICE AND ASK THEM TO REGISTER WITH TPC IN PERSON WITHIN A STIPULATED TIME FRAME.

4. AS PER THE GIVEN DETAILS BY THE EMPLOYER, THE INSTITUTE WILL MAKE NECESSARY ARRANGEMENTS FOR CAMPUS DRIVE.

5. A PRE-PLACEMENT TALK (PPT) WILL BE ARRANGED ON THE DAY OF CAMPUS EVENT WHERE THE PARTICIPATING COMPANY WILL ADDRESS THE ATTENDED STUDENTS REGARDING THEIR COMPANY AND JOB DETAILS

6. THE COMPANY WILL TRY TO COMPLETE THE WHOLE PROCESS (ONLINE / WRITTEN TEST, GD, TEHNICAL AND HR INTERVIEW) AS PER THEIR GIVEN SCHEDULE AND WILL ANNOUNCE THE RESULT AS SOON AS POSSIBLE (PREFERABLY ON THE SAME DAY)

7. THE ORGANISATION THAT IS UNABLE TO FINALISE THE RESULT OF SELECTED STUDENT ON THE SAME DAY AND WISH TO HAVE ONE MORE ROUND OF INTERVIEW AT THEIR OFFICE MAY DO SO WITH.

7. Placement Committee for Career Guidance (Placement, Higher Study and Entrepreneurship)

The Placement Committee was formed to monitor the activities of the Training & Placement Cell. Their functions are:

A. Functions

- To enhance the employability of engineering students and to cater to the needs of the industry.
- To create a platform where the students can work towards accessing the skills required to get into industry.
- To bridge the gap between industry and educational institutions.
- To provide both technical and soft skill to people to facilitate their employability.
- To reinforce the students skills and acquire industry–specific knowledge from trained faculty and experts from industries
- Counseling for higher studies and preparing for GATE
- Motivation for Entrepreneurship and arrangement of workshop
- Encourage for PSU Jobs

B. Composition

There is a Placement Committee who guides the Training & Placement Cell to execute their decisions. The Director is the Chairman of the Placement Committee.

Placement Committee of 2015 PoB

MEMBERS OF PLACEMENT COMMITTEE FOR B.TECH STUDY - 2015 POB			
Representatives from Academics			
SR. No.	**NAME**	**DESIGNATION**	**DEPARTMENT**
1	Dr. Gautam Gangopadhyay	Associate Director	ECE
2	Dr. Rupendranath Chakraborty	Advisor	EE
3	Mr. Debajit Banerjee	Asst. Professor	ME
4	Mr. Aditya Shankar Ghosh	Asst. Professor	CE
5	Ms. Rupanjali Bhattacharya	Asst. Professor	EE
6	Ms. Nibedita Mukherjee	Asst. Professor	ECE
7	Mr. Jinnatul Islam	Asst. Professor	CSE
8	Dr. Bimal Dutta	H.O.D	CSE
9	Mr. Sumit Kanjilal	H.O.D	CE
Representatives from Training & Placement Cell			
SR. No.	**NAME**	**DESIGNATION**	
1	Mr. Sanjay Biswas	Training & Placement Officer	
2	Ms. Samapika Dutta Sinha	Training & Placement Officer	
3	Ms. Sarmistha Paul	Executive - T&P	
Student Co-ordinators from B.Tech study			
SR. No	**NAME**	**DEPARTMENT**	
1	SUVROJEET KUMAR GHOSH	CSE	
2	SUBHO MALLIK	CSE	
3	VINIT KUMAR	CSE	
4	SUKALYAN BISWAS	ECE	
5	SUMONA GHOSH	ECE	
6	PRITESH MUKHOPADHYAY	ECE	
7	SAGAR KANU	ME	
8	SUBHROJYOTI SAHA	ME	
9	BISWAJIT SHARMA	ME	
10	PRITAM CHOWDHURY	CE	
11	QAISHER AZAM	CE	
12	SOUMYAJIT GHOSH	EE	
13	ABHISHEK MAJUMDER	EE	
14	CHANDRAYEE MUKHERJEE	EE	

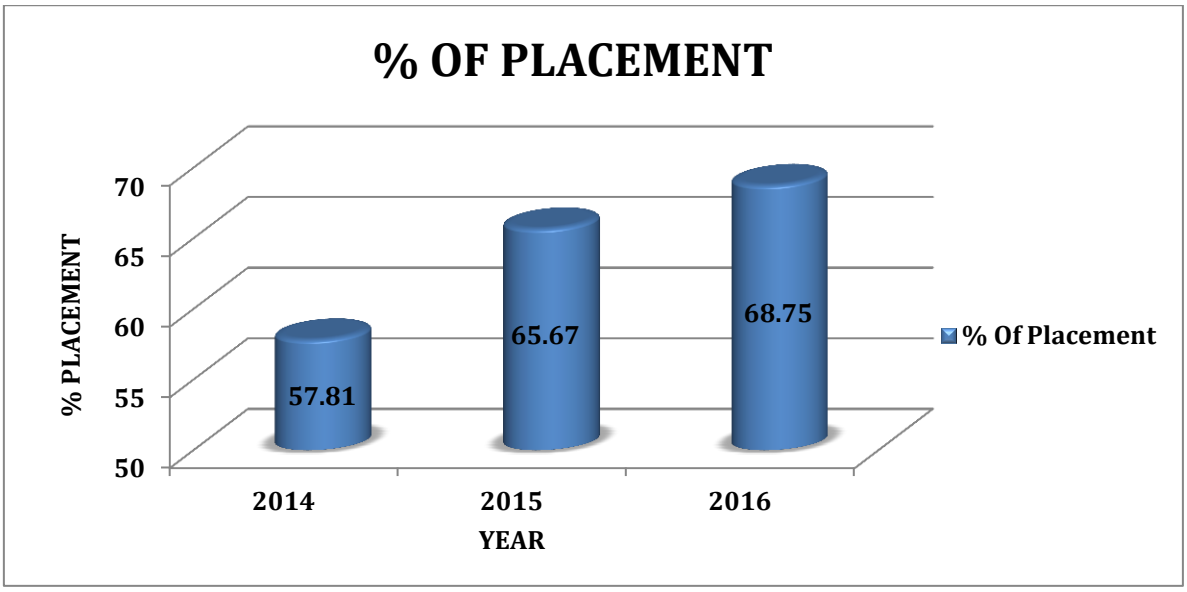
Placement Committee of 2016 PoB

MEMBERS OF PLACEMENT COMMITTEE FOR B.TECH STUDY - 2016 POB			
Representatives from Academics			
SR. No.	**NAME**	**DESIGNATION**	**DEPARTMENT**
1	Dr. Gautam Gangopadhyay	Associate Director	ECE
2	Dr. Rupendranath Chakraborty	Advisor	EE
3	Mr. Debajit Banerjee	Asst. Professor	ME
4	Mr. Aditya Shankar Ghosh	Asst. Professor	CE
5	Ms. Rupanjali Bhattacharya	Asst. Professor	EE
6	Ms. Nibedita Mukherjee	Asst. Professor	ECE
7	Mr. Jinnatul Islam	Asst. Professor	CSE
8	Dr. Bimal Dutta	H.O.D	CSE
9	Mr. Sumit Kanjilal	H.O.D	CE
Representatives from Training & Placement Cell			
SR. No.	**NAME**	**DESIGNATION**	
1	Mr. Dipak Das	General Manager	
2	Mr. Rajib Ghoshal	Asst. TPO	
3	Ms. Sarmistha Paul	Executive - T&P	
Student Co-ordinators from B.Tech study			
SR. No	**NAME**	**DEPARTMENT**	
1	RISHA HALDER	CSE	
2	SAIKAT MONDAL	CSE	
3	SAYANI ROY	CSE	
4	ANIRBAN BANERJEE	ECE	
5	VANDANA SHARMA	ECE	
6	DEEPAK VERMA	ECE	
7	ARCHISMAN GANTAIT	ME	
8	RAJARSHI DAS	ME	
9	VIDYAPATI KUMAR	ME	
10	RAINAK PODDAR	CE	
11	ROHIT CHANDRA SHOW	CE	
12	SOUMENDU SAHA	CE	
13	DIP KUMAR MALLICK	EE	
14	SUBHAJIT KARAR	EE	
15	SUZANE PATTANAYAK	EE	

8. **The summary of Placement, Higher Study and Entrepreneurship:**

Placement Record of Last 3 PoBs - B. Tech ME					
PoBs	***Total No. of Students***	***Higher Study***	***Entrepreneurship***	***No. of Students Placed***	***% of Placement***
2014	64	5	1	31	57.81
2015	67	9	1	34	65.67
2016	128	15	2	71	68.75

PoB: Passed Out Batch



9.6 Entrepreneurship Cell (5)

E-Cell was established in the year 2014 with the support of competent authority of the institute and here active and interested student and faculty members from each department were involved to run the E-Cell with strong spirit and innovative idea so that the institute creates entrepreneurs every year. Entrepreneurship is the buzz word in today's environment of startups. On an overall perspective, BBIT's E-cell has conceptualized entrepreneurship in a scientifically proven way to assist students in transforming their ideas into ventures at an early stage of their educational career.

A. Objectives

1. To inculcate the entrepreneurial culture into student minds.

2. To prepare the platform for the students to take up the entrepreneurship as a career
3. To create environment for innovation, self-employment, incubation and Entrepreneurship development through formal and non-formal programs
4. To establish a platform for effective interactions among existing and budding entrepreneurs.
5. To promote employment opportunities
6. To act as an institutional mechanism for providing various services including information on all aspects of enterprise building to science and technology entrepreneurs.

B. Facilities

1. Fully Wi-Fi Campus and separate A.C. Room
2. Mentors from different industries to support new business idea
3. Meeting with successful Entrepreneurs
4. AC Seminar Hall for conducting Workshop/Seminar
5. Industrial Visit
6. Access of Online Journal

C. Empanelment in PMYUVA scheme.

Pradhan Mantri YUVA Yojana (Yuva Udyamita Vikas Abhiyan) is a centrally sponsored Scheme on entrepreneurship education and training being implemented by the Ministry of Skill Development and Entrepreneurship, Government of India.

The Scheme aims at creating an enabling ecosystem for Entrepreneurship development through Entrepreneurship education and training Advocacy and easy access to entrepreneurship support network and Promoting social enterprises for inclusive growth.

At initial stage, the Govt. has considered 177 institutes under this scheme in which Budge Budge Institute of Technology (BBIT) is one of the members.

Advantages

- The Scheme encourages young entrepreneurs in India to actively participate in the economic growth of the country by starting new businesses.
- This scheme not only gives an opportunity for young entrepreneurs to start a new business but it also trains them and prepares them to face global competition.
- With their motivating reward system, they attract lot of youngsters who want to start business and thereby put them on the right track.
- If this plan is properly implemented and there are many successful entrepreneurs by the end of the scheme, businesses in India will flourish and increase the country's GDP.

- This scheme will help reduce the unemployment rate in India by employing many eligible people who are still unemployed for various reasons.

D. Members of E-Cell

i. Members of EDC – 2015 PoB

MEMBERS OF ENTREPRENEURSHIP DEVELOPMENT CELL (EDC) - 2015 PoB				
Representatives from Industries				
SR. No.	**NAME**	**DESIGNATION**	**COMPANY NAME**	
1.	Mr. Milton Samadder	Owner	M/s. UVA Technology	
2.	Mr. R. K. Bhandari	Managing Director	M/s. Sigma Search Lights Ltd.	
3.	Mr. A. Chuckerbutty	Director	M/s. R. M. Packaging Pvt. Ltd.	
4.	Mr. H. D. Nath	Managing Director	M/s. PEV Engineering Pvt. Ltd.	
5.	Mr. Avijit Chakraborty	Regional HR Manager -East	M/s. Videocon d2h	
SR. No.	**NAME**		**DESIGNATION**	**DEPARTMENT**
1	Dr. Gautam Gangopadhyay		Associate Director	ECE
2	Dr. Rupendranath Chakraborty		Advisor	EE
3	Mr. Debajit Banerjee		Asst. Professor	ME
4	Mr. Aditya Shankar Ghosh		Asst. Professor	CE
5	Ms. Rupanjali Bhattacharya		Asst. Professor	EE
6	Ms. Nibedita Mukherjee		Asst. Professor	ECE
7	Mr. Jinnatul Islam		Asst. Professor	CSE
8	Dr. Bimal Dutta		H.O.D	CSE
9	Mr. Sumit Kanjilal		H.O.D	CE
Representatives from Training & Placement Cell				
SR. No.	**NAME**		**DESIGNATION**	
1	Mr. Dipak Das		General Manager	
2	Mr. Rajib Ghoshal		Asst. TPO	
3	Ms. Sharmistha Paul		Executive – T&P	
Student Coordinators from B.Tech study				
SR. No	**NAME**		**DEPARTMENT**	
1	SUVROJEET KUMAR GHOSH		CSE	
2	SUKALYAN BISWAS		ECE	
3	SAGAR KANU		ME	
4	PRITAM CHOWDHURY		CE	
5	SOUMYAJIT GHOSH		EE	

ii. Members of EDC – 2016 PoB

MEMBERS OF ENTREPRENEURSHIP DEVELOPMENT CELL (EDC) - 2016 PoB			
Representatives from Industries			
SR.	**NAME**	**DESIGNATION**	**COMPANY NAME**

No.			
1.	Mr. Milton Samadder	Owner	M/s. UVA Technology
2.	Mr. R. K. Bhandari	Managing Director	M/s. Sigma Search Lights Ltd.
3.	Mr. A. Chuckerbutty	Director	M/s. R. M. Packaging Pvt. Ltd.
3.	Mr. H. D. Nath	Managing Director	M/s. PEV Engineering Pvt. Ltd.
4.	Mr. Avijit Chakraborty	Regional HR Manager -East	M/s. Videocon d2h

SR. No.	NAME	DESIGNATION	DEPARTMENT
1	Dr. C. V. Reddy	Director	ME
2	Dr. Gautam Gangopadhyay	Associate Director	ECE
3	Dr. Rupendranath Chakraborty	Advisor	EE
4	Mr. Debajit Banerjee	Asst. Professor	ME
5	Mr. Aditya Shankar Ghosh	Asst. Professor	CE
6	Ms. Rupanjali Bhattacharya	Asst. Professor	EE
7	Ms. Nibedita Mukherjee	Asst. Professor	ECE
8	Mr. Jinnatul Islam	Asst. Professor	CSE
9	Dr. Bimal Dutta	H.O.D	CSE
10	Mr. Sumit Kanjilal	H.O.D	CE

Representatives from Training & Placement Cell

SR. No.	NAME	DESIGNATION
1	Mr. Dipak Das	General Manager
2	Mr. Rajib Ghoshal	Asst. TPO
3	Ms. Sharmistha Paul	Executive - T&P

Student Coordinators from B.Tech study

SR. No	NAME	DEPARTMENT
1	RISHA HALDER	CSE
2	DEEPAK VERMA	ECE
3	ARCHISMAN GANTAIT	ME
4	RAINAK PODDAR	CE
5	DIP KUMAR MALLICK	EE

E. Meetings on Entrepreneurship

MEETING ON ENTREPRENEURSHIP	
DATE OF MEETING	**AGENDA**
17.07.14 (Thursday)	1. Introduction of Members 2. Formation of Entrepreneurship Development Cell (EDC) & 3. Basic Requirements to become Entrepreneur
08.09.14 (Monday)	1. Review of Previous Meeting 2. Pros & Cons of becoming an Entrepreneur
17.08.14 (Monday)	1. Review of Previous Meeting 2. Proposed Govt. Scheme on Entrepreneurship Development
20.02.14 (Saturday)	1. Review of Previous Meeting 2. Available Courses on Entrepreneurship 3. Risk Factor of Entrepreneurship

F. Workshop on Entrepreneurship

Sr. No.	Company Name	Date	Speakers	Topic
1.	M/s. Videocon d2h	20/08/14	Mr. Abhijit Chakraborty, Regional HR Manager – East	Required Skills to become an Entrepreneur
2.	M/s. R. M. Packaging Pvt. Ltd.	02/09/14	Mr. A. Chuckerbutty, Director	The Advantages and dark side of Entrepreneurship
3.	M/s. Sigma Search Lights Ltd.	13/02/15	Mr. R. K. Bhandari, Managing Director	Market Research for Startups : Get to know your customers, your target market and the competition
4.	M/s. Videocon d2h	07/8/15	Mr. Abhijit Chakraborty, Regional Manager-East	Reliable Ways to Fund a Startup
5.	M/s. UVA Technology	16/03/16	Mr. Milton Samadder, Owner	Basic Requirements to become an Entrepreneur and its advantages

9.7 Co-curricular and Extra-curricular Activities (10)

Co-curricular Activities	Extra-curricular Activities
NSS Annual	Sports
Industrial Training	Football Tournament
Spoken Tutorial	Cricket Tournament
Soft skill training & Grooming classes	Volley Ball Tournament
Departmental Seminars	Annual Fest

Budge Budge Institute of Technology encourages the faculty members and Students to take part in co-curricular activities along with their regular academic commitments to keep them exposed to recent developments in the area of their interest and to share their experiences among peer groups.

- The campus has large area for sports comprising of full size football & cricket ground, separate cricket practice pitches, area/courts for badminton, volleyball, lawn tennis (2), basketball, kabaddi etc. A modern swimming pool is also situated in the campus along with a fully equipped gymnasium. Moreover, facilities for indoor games like table tennis, carom, chess etc. are also provided.
- Budge Budge institute of technology organizes yearly intra and inter college tournaments of cricket, football and volley ball
- Students also organize "VERVE" the college fest every year which includes intra and inter college competitions on different technological, sporting as well as cultural events. The Verve series had

made its mark in the year of 2010 and with every passing year it is reaching new heights and VERVE 2K16 was no exception.

- Students of this institute also take part in various technical, games & sports and cultural competitions which are organized by other institutes.eg:

CRICKET:

1. Participated in Cricket Premier League, 2016 organized by Jalpaiguri Gov. Engineering College, March, 2016.
2. Participated in Inter-College Cricket Tournament organized by IIEST, Shibpur, and March, 2016 and emerged as the winners.
3. Organized and participated in BBIT CHAMPIONS TROPHY, Organized by BBIT, April, 2016 and emerged as the winner.
4. Participated in Stallions Cup, 2016 organized by Netaji Subhas Engineering College May, 2016.

FOOTBALL:

1. Organized and participated in Gulabi Devi Football Tournament, 2016, September, 2016 and Emerged as Champions.
2. Participated in Inter College football tournament organized by Future Institute of Engineering and Management.
3. Participated in Poto Cup,2016 organized by Pailan Engineering College , May 2016

MISCELLANEOUS EVENTS:

1. Organized a sports fest named IDROTT as a part of the yearly College Fest "VERVE" which had sports events like Gully Cricket, Football, Basketball, Volleyball, Kabaddi, carrom, etc. April, 2016
2. Future Institute of Engineering and Management, Feb 2016

   Event 1: Fashion show.

   Event 2: Street Dance.

3. Heritage Institute of Technology, March 2016

   Event 1: War of bands,

   Event 2: Fashion show

4. BBIT

   Event: Panel discussion on governance vigilance week

   Organizer: Employees provident fund organization

5. IIT KHARAGPUR, February, 2015.

   Event1: Model exhibition

   Event 2: Extempore, debate, quiz, catapult building.

6. Pailan college of Management and Technology. March 2015
   Event 1: Robot race.

   Event 2: counter strike, Position 1st

7. BIMS, Batanagar. December2014
   Event: counter strike, Position 1st

8. Modern Institute of Technology, April 2016,
   Event: Counter Strike, Position1st

- Cultural activities include debating, quizzing, music, photography etc., where students have excelled.
- NSS for all first year students is compulsory. Faculty members impart training to students and regular camps are conducted. First year Students undergo regular drills as per the NSS curriculum. Faculty members conduct classes and teach intra-moral awareness and enhance safety as well as medical knowledge of the students like first-aids, firefighting etc.
- Annual Days like Independence Day, Republic Day, as well as Teachers Day, Fresher's Welcome, Viswakarma Puja, Sara Swati Puja, Eid-ul-fitr etc. are observed.
- Classes on soft skills and grooming are regularly conducted by the in-house resources and also using external agencies.
- Departmental seminars are organized regularly by all core Departments for the students and the faculties as well.viz.
  - A seminar on "MEMS Based RFIC Design" (Key Speaker: Dr. Tarun Kanti Bhattacharyya) was held on 30th June 2015.
  - A seminar on "Electromagnetics and Advanced Nano Technology" (Key Speaker: (Dr.) Anirban Bhattacharya) was held on 24th September, 2015.
  - A seminar on "HCI and Intelligent Product Development" (Key Speaker: Subhasis Bhaumik) was held 11th April, 2016.
  - A seminar on "Communication: Past, Present & Future" Prof (Dr.) Bhaskar Gupta was held on 19th April, 2016.
  - "Automobile security using Biometrics" by Modassir Bashir and Sanjoy Kr. Mondal published in NCESSD- 2015, PP-13-16, and ISBN – 978-93-83010-24-0. Published by JBBL
  - Departmental FDP was held in 7th Jul 2015 on "Advanced Manufacturing Technology" conducted by Dr. Mukandar Sekh, Asst. Professor, and Aliah University.
  - Departmental FDP was held in 1st, 2nd & 8th Jul 15 on "Advanced Manufacturing Technology" conducted by Dr. Golam Kibria., Asst. Professor, and Aliah University.

- A workshop was conducted on "Press Tool Technology for Mass Production" on 12th Aug, 2015 organized by Dept. of Mech. Engg in association with Indo-Danish Tool Room, Jamshedpur.
- A seminar on "Application of Software Engineering in modern technology" (Key Speaker: Prof. D.M. Kar) was held on 27th April, 2016.
- A seminar on "Cloud Computing" (Key Speaker: Mr. Anirbam Mukherjee) was held on 26th Feb, 2016.
- A seminar on "Robotics" (Key Speaker: Dr. Dip Narayan Ray and Mr. Dilip Kumar Biswas) was held on 28th August,2015
- A seminar on "Signal Processing & System Security" (Key Speaker: Dr. Dipnarayan Roy) was held on 28th August, 2015.
- Departmental Seminar has been organized by Civil Engineering Department on 12th September 2015 at BBIT College Campus and Prof. (Dr.) Sudip Kumar Roy, Professor, Department of Civil Engineering, Indian Institute of Engineering Sciences and Technology (IIEST, Shibpur), delivered scholarly lecture on Transportation Engineering and Traffic Engineering to the teachers and students of BBIT.
- A Seminar on "Quantum Structures of Silicon: Potential Material for Photonics and Photovoltaic" (Speaker: Dr. Syed Minhaz Hossain, IIEST, Shibpur) was held on 12.08.2015.
- A Seminar on "Our Universe" (Speaker: Prof. Narayan Banerjee, IISER, Kolkata) was held on 13.04.2016.
- "Faculty Development Programme" conducted by Dr. Arna Seal held on 4th July, 2015 at BBIT.
- A seminar on "STAAD.PRO" for 3rd and 4th year Civil Engineering students was held on 26th Feb, 2015.
- A seminar on "Pile Foundation" presented by Mr. B. Mukherjee of KND Engineering & Technologies for 3rd and 4th year Civil Engineering students on March, 2015.
- On 28th Feb 2015 a Seminar on "Applications of Signal Processing and System security" was organized by CSE department. Speakers: Prof. (Dr.) Sitanshu Kumar Das (C.U) and Prof. (Dr.) Suvrojit Das (NIT Durgapur). More than 200 students and faculty had participated in the seminar.
- A seminar on "Detection of failure and fault diagnosis in rotating electrical machines" by Prof. (Dr.) Nirmal Kumar Deb and Prof. (Dr.) Debasish Chatterjee was held on 18th Oct 2014.
- A seminar on "Generation and utilization of electric power" by Er. Partha Sarathi Bhattacharyya and Prof. (Dr.) Debasish Chatterjee was held on 24th April 2015.
- A seminar on "Detection Control, Automation and Advanced Robotics - 2015" by Prof. Alok Kole, and Prof. Subhasis Bhaumik was held on 30th Jan 2015.

- Mr. Arindam Saha, Asst. Professor attended a seminar on "Teaching Signal Processing & Control Systems using MATLAB and Simulink" on 7th November 2014 at the Park Kolkata.
- A talk on "MEMS Based RFIC Design" was presented by Dr. Tarun Kanti Bhattacharyya (Professor, Department of Electrical and Electronics Communication Engineering, Advanced Technology Development Centre and Professor-in-charge, Advanced VLSI Laboratory, National MEMS Design Centre, IIT-Kharagpur) on 30th June, 2015 as part of Faculty Development Programme
- A Seminar was conducted on "Cutting Tool for Value Addition in Global Manufacturing Scenario" on 18th October 2014.
- Prof. Dr. Ambarish Ghosh& Prof. Dr. Sudip kr. Roy from IIEST, Shibpur on Recent trends in Geotechnical & Transportation Engineering.
- Seminar on "Modern Trends in Power System" was conducted at B.B.I.T seminar hall on 12.04.2014.
- Mr. Sabyasachi Bhattacharyya and Ms. Parna Kundu, Asst. Professor participated in a Two-week ISTE
- Workshop on Signals & Systems conducted by Indian Institute of Technology Kharagpur from 2nd to 12th January, 2014.
- Mr. Souvick mondal has attended a Short Term Course on "Faculty Development Programme for Effective Teaching", organized by Indian Institute of Technology (IIT), Kharagpur, and held on 10th July to 12th July, 2014.
- Prof (Dr.) P.K.Banerjee, Ex. Prof, ETCE, JU, delivered a lecture on Computer Security which covered all the processes and mechanisms by which computer-based equipment, information and services are protected from unintended or unauthorized access, change or destruction, and are of growing importance in line with the increasing reliance on computer systems of most societies worldwide.
- A students' seminar on EMERGING TRENDS IN ELECTRONICS AND COMPUTATION-2013 was held on 31st August, 2013 at BBIT.
- A students' seminar on EMERGING TRENDS IN ELECTRONICS AND COMPUTATION-2013 was held on 30th October, 2013 at BBIT.
- A students' seminar on Modern Communication System was held on 2nd April, 2014 at BBIT.

CRITERION 10:

Governance, Institutional Support and Financial Resources

CRITERION 10	Governance, Institutional Support and Financial Resources	120

10. GOVERNANCE, INSTITUTIONAL SUPPORT AND FINANCIAL RESOURCES (120)

10.1 Organization, Governance and Transparency (40)

10.1.1 State the Vision and Mission of the Institute (5)

Budge Budge Institute of Technology (BBIT), Kolkata is a premier Engineering & Technical Educational Institution, accredited by "NAAC" & "NBA", recognized by "UGC under Section 2(f)" and approved by AICTE. It is affiliated to MAKAUT and WBSCTVESD and was established in the year 2009 under the leadership of our Chairman, Sri Jagannath Gupta, for the qualitative progress and stride to reach the peak of excellence in Technical Educations.

HISTORY OF THE INSTITUTION

Budge Budge Institute of Technology (BBIT) is effectively run by reputable **Jagannath Gupta Family Trust (JGFT)**.

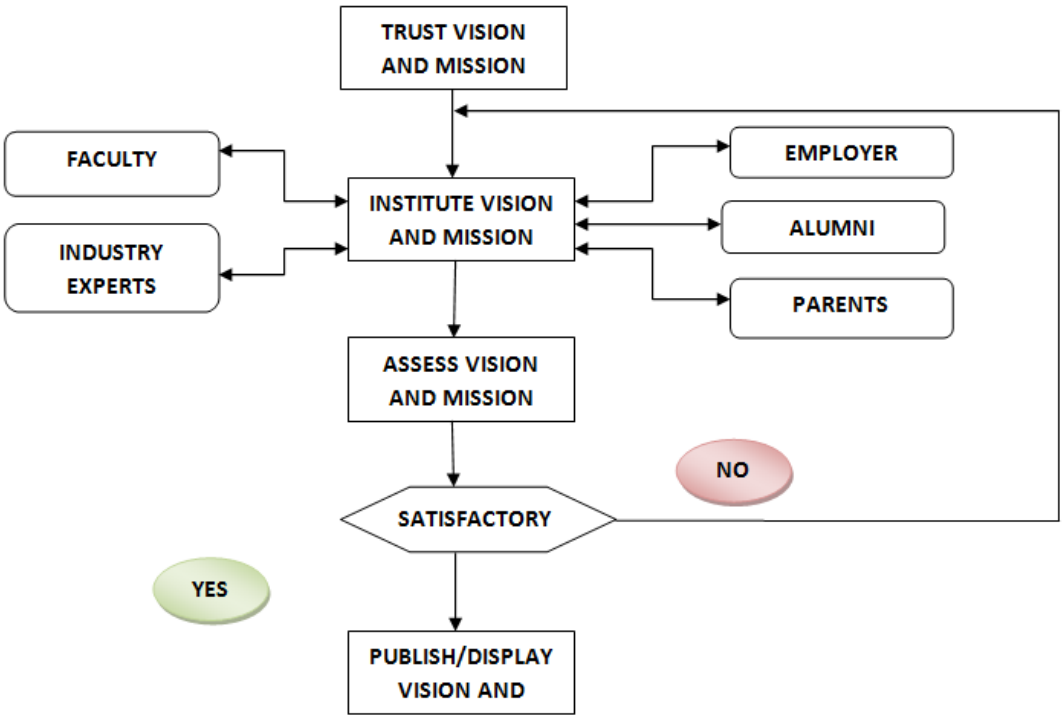
JGFT was founded in the year 2007 and adopted a dynamic, high quality, creative approach to education by recognizing and developing a premier institution **Budge Budge Institute of Technology (BBIT)**, for imparting quality education to students from primary to undergraduate level.

A centre for academic excellence and achievements, it is to-day, one of the finest institutions providing the students with modern educational facilities while retaining the traditional values.

Keeping abreast of modern developments, **BBIT** is constantly restructuring itself to meet the emerging challenges in education.

JGFT is a link in the long chain of accomplishments of the trust in the form of Primary and High School, Junior and Degree College and Hospital.

THE PROCESS OF ADOPTING VISION AND MISSION BY THE TRUST TO SET UP A PIONEER INSTITUTE OF ENGINEERING & TECHNOLOGY



JGFT VISION:

- **To be the best at serving society by creating engineering knowledge and educating engineers for dynamic and global careers.**

To fulfil this optimal desire, and to emerge as a 'Centre of Excellence' in Technical Education, **JGFT** successfully introduced, **Budge Budge Institute of Technology (BBIT)** in the year 2009 for Quality Education with Team spirit.

JGFT MISSION:

- **To consistently strive for Academic Excellence**
- **To create holistic teaching learning environment that build ethically sound manpower who contribute to the stake holders operating at Global environment.**

Our Dedication and commitment to achieve sustain and foster unmatched excellence in Technical Education. To this end, we are pursuing continuous development of infrastructure and enhance state-of-the art equipment to provide our students a technologically up-to-date and intellectually inspiring environment of learning, research, creativity, innovation and professional activity and inculcate in them ethical and moral values.

Considering the Trust Vision a Mission statements of the Institute were defined by involving the stakeholders.

- SWOT analysis was conducted by considering internal stakeholders including management and alumni.
- Analysis was conducted on basis of feedback forms by considering internal stakeholders including management and alumni.
- Armed with the information thus collected, the institutional faculty met number of times to develop and cultivate a strong and meaningful vision and mission. The mission was also finalised based on the following components.
  - Quality Education
  - Professional career
  - Higher Education
  - Innovation
  - Creativity
  - Lifelong learning

MISSION AND VISION OF BUDGE BUDGE INSTITUTE OF TECHNOLOGY (BBIT)

VISION

- **To realize the full potential of knowledge through universal education and research so as to foster a new era of development and growth through innovations**.

MISSION

- **To open new horizons of knowledge and to promote academic growth by offering state-of-the-art undergraduate, postgraduate and research programmes.**
- **To keep pace with regional, national and global needs.**
- **To play a pioneering role in shaping future generations through collaboration between academia and industry as well as between different national and international institutions.**

BBIT is well-known technical institute in Kolkata, whose main objective is to produce result oriented and skilled professionals to meet the ever-growing demands of industries...
With the best potential knowledge and development, BBIT offers intellectual courses to the students

- Bachelor Degree of Engineering & Technology (Full time), for 4 years

- Master of Business Administration (MBA), (Full time) for two years and
- Engineering and Technology - Polytechnic for 3 years (Full time).

BBIT endeavours quality education and training of ideal academic standards to the students to make qualitative progress and take strides to reach the peak of excellence in Technical Educations.
Since its inception, our Institution has grown into a vast conglomerate of magnificent buildings, state-of-the art and sophisticated laboratories, experienced faculties, lavish classrooms, internet centres, modern library, luxury Hostels for students and a superlative sports complex. Its quiet and idyllic surroundings, comprising of the architecturally and aesthetically designed buildings, the sports playgrounds and the lush greenery make it one of the most preferred destinations for the aspirants of Engineering studies.

Learning, teaching and assessment have been consistently good for years often providing an outstanding experience for our students.

Our Faculty has qualifications, training, subject knowledge and experience relevant to their roles and use these to plan and deliver lessons appropriate to students of all abilities, reflect good industry practice and meet employers' needs.

Teacher set high expectations and share their expertise and experience with students to motivate and inspire them.

The department of Training, Counselling and Placement is another sphere where we have made excellent strides.

Generation of Self-Learning Facilities, And Availability of Materials for Learning, encourage students to participate in departmental seminars & workshops, developing communication skills and personality development of the students, to learn how to intellect with the recruiters.

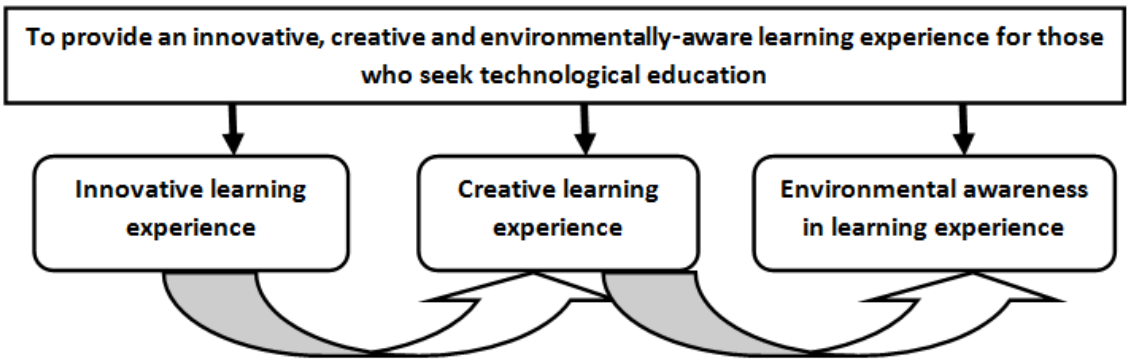
Laboratories and Library is made available beyond working hours to help the students in self-learning.

With all these practices, we strongly deem to acquire our vision in future.

To provide an innovative, creative and environmentally-aware learning experience for those who seek technological education, Institute follows moral principles as stated below.

Our Values	**Quality**	Striving towards excellence through teamwork and sustained effort.
	Integrity	Behaving with the highest integrity and transparency in all aspects of work.
	Leadership	Instilling, in students the leadership qualities to motivate and transform society.
	Innovation	Embracing and encouraging new knowledge, research and entrepreneurial approaches.
	Social Responsibility	Understanding the physical, cultural and social environment in which we operate, respecting the rights and needs of all.
	Ethics	Upholding the highest ethical standards in all activities and imparting those ideals to students and staff.

TRANSLATING THE MISSION STATEMENT KEY WORDS INTO A TABLE



- The mission and vision of the institute is published in the Institutional website (www.bbit.edu.in) and all the stakeholder's and future Students can have the access.
- The mission and vision displayed at prominent locations in the campus can be viewed by Students, parents, faculty members and others.
- For fresher's, institute organizes orientation program in which they are given the institutional profile along with some do's and don'ts.

THE VISION AND MISSION OF THE DEPARTMENT ARE DISSEMINATED THROUGH

Sl. No.	Place of Dissemination	Meant For
1	Display Board at the entrance of department	Internal Stakeholder
2	Departmental Notice Board	Internal Stakeholder
3	Departmental Laboratories	Internal Stakeholder
4	BBIT Website	Internal & External Stakeholder
5	Student – Teacher Committee Meeting	Internal Stakeholder
6	Faculty Development Programme	Internal & External Stakeholder
7	Seminar	Internal Stakeholder
8	Workshop	Internal & External Stakeholder
9	Orientation Programme	Internal & External Stakeholder

With the continuous efforts, we are developing

- To improve the quality of campus life
- Meeting the requirements of affiliation and standards
- Identifying and meeting student learning expectations
- Strengthening Teaching Learning process
- Conducting International Conferences
- Introduction of performance Management
- Aligning Every Stake Holders to vision and mission.
- Create conducive environment of continuous learning and research.

SWOT ANALYSIS

- **STRENGTHS**
  - Expert Board of Governors with total administrative autonomy
  - NAAC & NBA Accredited courses
  - Strong financial autonomy
  - Vigorous curriculum with periodic updating of the same
  - Qualified and experienced faculty members
  - Continuous Faculty Development Programmes
  - Excellent team work among faculty and students
  - Good performance of students in examination
  - Good placement records
  - Favourable ambience
  - Well-endowed computational and academic infrastructure facilities
  - Academic calendar is strictly adhered to the schedule
  - Scholarships
  - Frequently held workshops and trainings for the students
  - On-going projects since 2012
  - Alumni in prominent positions globally

- **WEAKNESS**
  - Lack of targeted advertisements to students out of the state or out of the region
  - Cannot operate independently
  - Inadequate publication of technical journals
  - Inadequate emphasis on laboratory experimental design and simulation
  - Monitoring and controlling behaviour of hostel apprentices
  - Inadequate emphasis on entrepreneur skill development in students
  - Lack of proactive approach to enhance consultancy activity
  - Inability to attract larger research projects for the want of trained / committed students
  - Distance From City
  - Road Conditions

- **OPPORTUNITIES**
  - Full academic autonomy and deemed university status
  - Increase in plan funds
  - Flexible curriculum

- International collaboration
- Improved campus placement
- Starting new courses
- Increased revenue generation
- Development of faculty and supporting staff
- Networking with IIT's and other national Research & Development laboratories
- Increased intake of students for UG courses
- To increase research activities: PhD and sponsored research
- Establishment of centres of excellence and advanced studies
- Training of technical supporting staff
- Scope for entrepreneurship and industrial employment
- Acquiring national and international collaborations and joint ventures

❖ **THREATS**

- Affordability of college for students
- Competition with other engineering colleges
- More attractive opportunities to attract not just students but also the faculty members but also technical staff
- Lack of incentives as compared to the other leading colleges of the country.
- Decreasing number of manufacturing units in Bengal.
- Decreasing numbers of student interested in Engineering Course.
- Growing interest in other courses of students like Mass-Communications, Journalism, Hospitality Management etc.

10.1.2 Governing body, administrative setup, functions of various bodies, service rules, procedures, recruitment and promotional policies (10)

10.1.2.1 GOVERNING BODY

BBIT has a strong Governing Body made up of different luminaries from various walks of life that supervises all policies and decisions related to both academics and administration.

A. List of Governing Council Members for the year 2013-2014

Sl. No.	Designation for representation in the Governing Body	Name of the person concerned	Address & Phone No.
1	Chairman as nominated by the Trust	**Prof.(Dr.) K.L. Chopra**	Former Director, IIT Kharagpur M-70, Kirti Nagar New Delhi – 110015. Ph. No. 09213433266, E-mail ID: choprakl@yahoo.com
2	Member nominated by the Trust	**Shri Jagannath Gupta**	Chairman, JGFT Industrialist, JKB GAS PVT. Ltd., Bharat Lubricant Pvt. Ltd. Ph. No. 9903893972 / 9331033158
3	Member nominated by the Trust	**Shri K.K. Gupta**	Vice Chairman, BBIT Director, JKB GAS PVT. Ltd. Bharat Lubricant Pvt. Ltd Mail ID: krishkgupta@gmail.com
4	Member nominated by the Trust	**Dr. Balram Gupta**	Cardiologist, Ph. No.: 08826066688 Mail ID: drbalramgupta@gmail.com
5	Member nominated by the Trust	**Shri D.P. Jana, I.A.S (R)**	Ex-vice Chairman West Bengal Housing Board 79/5, Palm Avenue, Kolkata – 700 019 , Ph. No.: 9830089970 Mail ID: deboprasad.jana@gmail.com
6	Member nominated by the Trust	**Prof.(Dr.) Siladitya Bandyopadhyay**	Principal & Member Secretary, 734A, Block-P, New Alipore, Kolkata – 700 053. Ph. No.- 9830028627, Mail ID: principal@bbit.edu.in
7	Member nominated by the Trust	**Shri Utpal Sinha**	Traffic Manager, Kolkata Port Trust "Subhas Bhawan", 40, C.G.R. Road, Kolkata-700043. Ph. No.- 24392926/ 23591504 Mail ID: utpal@kopt.in
8	Member nominated by the Trust	**Dr. Shubhangi Gupta**	Physiotherapist, Executive Director, BBIT Mail ID: executivedirector@bbit.edu.in
9	Industrialist from the Region	**Shri Yaswant Mishra**	Sr. Jt. President & Marketing Head M/s. Mangalam Cement Ltd., M/s. Kesoram Cement, M/s. Vasavadatta Cement (B.K. Birla Group of Industries), 9/1, R.N. Mukherjee Road, Kolkata- 700 001 , Ph. No.- 9830025589 Mail ID: yaswant@kesoram.net
10	Educationist from the Region	**Gp. Capt. Vijay Kumar Koushal**	Principal, Off. - Sainik School Purulia P.O-Sainik School, Dist. – Purulia ,(W.B), Pin–723104 . Resi: "RAM VILLA", B.D.-44(GF), Salt Lake City, Kolkata - 700 064. Ph.No.9233536795/9233536796/9233536798 Mail ID- sspurulia@rediffmail.com

Sl. No.	Designation for representation in the Governing Body	Name of the person concerned	Address & Phone No.
11	Nominee of the State Govt.- DTE	**Shri Sajal Dasgupta**	Director of Technical Education Bikash Bhawan, 10th Floor, Salt Lake Kolkata – 700 091, Ph. No.- 23347077/9830134836, Fax-23347077 Mail ID: dasguptasajal@yahoo.com
12	Nominee of the Affiliating University - WBUT	**Shri Debasis Bhattacharya**	Materials Science Centre Indian Institute of Technology Kharagpur- 721302. Ph. No.- 03222-283976/277975, Mail ID: dbmsc@matsc.iitkgp.ernet.in
13	Technologist from the Region	**Shri Sachchidanand Rai**	Managing Director Eden City Group, Maheshtala, Kolkata- 700141. Ph.No.-9903250841 Mail ID: sachchirai@gmail.com
14	Faculty members nominated from Regular Staff	**Prof. Kartik Sau**	Associate Professor, CSE Budge Budge Institute of Technology, Budge Budge, Kolkata – 700 137 Ph.No-9830265877/9830383510, Mail ID- hod.cse@bbit.edu.in
15	Nominee of the AICTE-Regional Officer (Ex-Officio)		**Regional Officer, Eastern Regional Office** All India Council for Technical Education College of Leather Technology Campus LB Block, Sector –III, Salt Lake City Kolkata – 700 098. , Ph. No.- 2335-7459/ 3089 Fax no.- 23357312
16	Member nominated by the Trust	**Dr. Moumita Poddar**	Principal, MBA, Budge Budge Institute of Technology, Budge Budge, Kolkata – 700 137 Mail ID: principalmba@bbit.edu.in
17	Principal, Budge Budge Institute of Technology, Polytechnic	**Prof. (Dr.) N.C. Dey Sarker**	Principal, Budge Budge Institute of Technology 201, S.N. Saha Sarani, Milan Nagar, P.O- Nimta, Kolkata – 700 049. Ph. No.- 8420196866 Mail ID: ncdeysarker@gmail.com
18	Member of the Governing Body	**Mr. Kaushik Ghoshal**	Member of BOG/ Manager, Talent Management ITC InfoTech India Limited, Virginia House, 37, J. L. Nehru Road Kolkata – 700 071. Ph.No-9874057722 Mail ID-kaushik.ghoshal@itcinfotech.com
19	Member of the Governing Body	**Mr. Debjit Chakraborty**	Asst. Vice President/ Member of BOG Enterprise Business Solutions Mahindra Satyam, DLF IT Park, Phase-II, 1st to 4th Floor, Tower 1B & 1C, Premises No.IIF/1, Rajarhat, Kolkata – 700156. Ph. No-9830049508, Mail ID- debjitc@techmahindra.com
20	Member of the Governing Body	**Ms. Atreyi Banerjee**	Sr. Manager-HR Tech Mahindra Ltd, DLF IT Park, Phase-II, 1st to 4th Floor, Tower 1B & 1C, Premises No.IIF/1, Rajarhat, Kolkata – 700156. Ph.No.9830012002 Mail ID- atreyib@techmahindra.com
21	Member of the Governing Body	**Mr. Chandan Chowdhury**	President, Supreme Infrastructure India Limited, Ecospace Business Park, Action Area II, Building No. 2A, 5th Floor, Unit No. 501B, New Town, Rajarhat, Kolkata – 700 156

Sl. No.	Designation for representation in the Governing Body	Name of the person concerned	Address & Phone No.
			Ph No. 9831257455, Mail ID- ckc@supremeinfra.com

B. List of Governing Council Members for the year 2014-2015

Sl. No.	Designation for representation in the Governing Body	Name of the person concerned	Address & Phone No.
1	Chairman as nominated by the Trust	**Prof.(Dr.) K.L. Chopra**	Former Director, IIT Kharagpur M-70, Kirti Nagar New Delhi – 110 015. Ph. No. 09213433266, E-mail ID: choprakl@yahoo.com
2	Member nominated by the Trust	**Shri Jagannath Gupta**	Chairman, JGFT Industrialist, JKB GAS PVT. Ltd., Bharat Lubricant Pvt. Ltd. Ph. No. 9903893972 / 9331033158
3	Member nominated by the Trust	**Shri K.K. Gupta**	Vice Chairman, BBIT Director, JKB GAS PVT. Ltd. Bharat Lubricant Pvt. Ltd Mail ID: krishkgupta@gmail.com
4	Member nominated by the Trust	**Dr. Balram Gupta**	Cardiologist, Ph. No.: 08826066688 Mail ID: drbalramgupta@gmail.com
5	Member nominated by the Trust	**Shri D.P. Jana, I.A.S (R)**	Ex-vice Chairman West Bengal Housing Board 79/5, Palm Avenue, Kolkata – 700 019 , Ph. No.: 9830089970 Mail ID: deboprasad.jana@gmail.com
6	Member nominated by the Trust	**Prof.(Dr.)Siladitya Bandyopadhyay**	Principal & Member Secretary, 734A, Block-P, New Alipore, Kolkata – 700 053. Ph. No.- 9830028627, Mail ID: principal@bbit.edu.in
7	Member nominated by the Trust	**Shri Utpal Sinha**	Traffic Manager, Kolkata Port Trust "Subhas Bhawan", 40, C.G.R. Road, Kolkata-700043. Ph. No.- 24392926/ 23591504 Mail ID: utpal@kopt.in
8	Member nominated by the Trust	**Dr. Shubhangi Gupta**	Physiotherapist, Executive Director, BBIT Mail ID: dyregistrar@bbit.edu.in
9	Industrialist from the Region	**Shri Yaswant Mishra**	Sr. Jt. President & Marketing Head M/s. Mangalam Cement Ltd., M/s. Kesoram Cement, M/s. Vasavadatta Cement (B.K. Birla Group of Industries), 9/1, R.N. Mukherjee Road, Kolkata- 700 001 , Ph. No.- 9830025589 Mail ID: yaswant@kesoram.net
10	Member nominated by the Trust	**Prof. (Dr.) Gautam Gangopadhyay**	Associate Director and HOD, ECE, Budge Budge Institute of Technology, Budge Budge, Kolkata-700137 Ph No.: 9007207291 Mail ID: hod.ece@bbit.edu.in
11	Nominee of the State Govt.- DTE	**Shri Sajal Dasgupta**	Director of Technical Education Bikash Bhawan, 10th Floor, Salt Lake Kolkata – 700 091, Ph. No.- 23347077/9830134836, Fax-23347077 Mail ID: dasguptasajal@yahoo.com

Sl. No.	Designation for representation in the Governing Body	Name of the person concerned	Address & Phone No.
12	Nominee of the Affiliating University - WBUT	**Shri Debasis Bhattacharya**	Materials Science Centre Indian Institute of Technology Kharagpur- 721302. Ph. No.- 03222-283976/277975, Mail ID: dbmsc@matsc.iitkgp.ernet.in
13	Technologist from the Region	**Shri Sachchidanand Rai**	Managing Director Eden City Group, Maheshtala, Kolkata- 700141. Ph.No.-9903250841 Mail ID: sachchirai@gmail.com
14	Faculty members nominated from Regular Staff	**Prof. Kartik Sau**	Associate Professor, CSE, Budge Budge Institute of Technology, Budge Budge, Kolkata – 700 137 Ph.No-9830265877/9830383510, Mail ID- hod.cse@bbit.edu.in
15	Member nominated by the Trust	**Dr. Moumita Poddar**	Principal, MBA, Budge Budge Institute of Technology, Budge Budge, Kolkata – 700 137 Mail ID: principalmba@bbit.edu.in
16	Principal, Budge Budge Institute of Technology, Polytechnic	**Prof. (Dr.) N.C. Dey Sarker**	Principal, Budge Budge Institute of Technology 201, S.N. Saha Sarani, Milan Nagar, P.O- Nimta, Kolkata – 700 049. Ph. No.- 8420196866 Mail ID: ncdeysarker@gmail.com
17	Member of the Governing Body	**Mr. Debjit Chakraborty**	Asst. Vice President/ Member of BOG Enterprise Business Solutions Mahindra Satyam, DLF IT Park, Phase-II, 1st to 4th Floor, Tower 1B & 1C, Premises No.IIF/1, Rajarhat, Kolkata – 700156. Ph. No-9830049508, Mail ID- debjitc@techmahindra.com
18	Member of the Governing Body	**Ms. Atreyi Banerjee**	Sr. Manager-HR Tech Mahindra Ltd, DLF IT Park, Phase-II, 1st to 4th Floor, Tower 1B & 1C, Premises No. IIF/1, Rajarhat, Kolkata – 700156. Ph.No.9830012002 Mail ID- atreyib@techmahindra.com

C. List of Governing Council Members for the year 2015-2016

Sl. No.	Designation for representation in the Governing Body	Name of the person concerned	Address & Phone No.
1	Chairman as nominated by the Trust	**Prof.(Dr.) K.L. Chopra**	Former Director, IIT Kharagpur M-70, Kirti Nagar New Delhi – 110 015. Ph. No. 09213433266, E-mail ID: chopraklkl@yahoo.com
2	Member nominated by the Trust	**Shri Jagannath Gupta**	Chairman, JGFT Industrialist, JKB GAS PVT. Ltd., Bharat Lubricant Pvt. Ltd. Ph. No. 9903893972 / 9331033158
3	Member nominated by the Trust	**Shri K.K. Gupta**	Vice Chairman, BBIT Director, JKB GAS PVT. Ltd. Bharat Lubricant Pvt. Ltd Mail ID: krishkgupta@gmail.com
4	Member nominated by the Trust	**Dr. Balram Gupta**	Cardiologist, Ph. No.: 08826066688 Mail ID: drbalramgupta@gmail.com
5	Member nominated by the Trust	**Dr. Shubhangi Gupta**	Physiotherapist, Executive Director, BBIT Mail ID: dyregistrar@bbit.edu.in
6	Member nominated by the Trust	**Prof. (Dr.) C.V. Reddy**	Director & Member Secretary, Budge Budge Institute of Technology, Budge Budge, Kolkata-700137 Ph. No.: 9490194995 Mail ID: director@bbit.edu.in
7	Member nominated by the Trust	**Shri D.P. Jana, I.A.S (R)**	Ex-vice Chairman West Bengal Housing Board 79/5, Palm Avenue, Kolkata – 700 019 , Ph. No.: 9830089970 Mail ID: deboprasad.jana@gmail.com
8	Member nominated by the Trust	**Prof. (Dr.) Gautam Gangopadhyay**	Associate Director, Budge Budge Institute of Technology, Budge Budge, Kolkata-700137 Ph. No.: 9007207291 Mail ID: hod.ece@bbit.edu.in
9	Member nominated by the Trust	**Prof.(Dr.)Siladitya Bandopadhyay**	Principal & Member Secretary, 734A, Block-P, New Alipore, Kolkata – 700 053. Ph. No.- 9830028627, Mail ID: principal@bbit.edu.in
10	Member nominated by the Trust	**Shri Tapas Satapathi**	Registrar, Budge Budge Institute of Technology, Budge Budge, Kolkata-700137 Ph. No.: 9836048800 Mail ID: registrar@bbit.edu.in

Sl. No.	Designation for representation in the Governing Body	Name of the person concerned	Address & Phone No.
11	Member nominated by the Trust	**Shri Utpal Sinha**	Traffic Manager, Kolkata Port Trust "Subhas Bhawan", 40, C.G.R. Road, Kolkata-700043. Ph. No.- 24392926/ 23591504 Mail ID: utpal@kopt.in
12	Industrialist from the Region	**Shri Yaswant Mishra**	Sr. Jt. President & Marketing Head M/s. Mangalam Cement Ltd., M/s. Kesoram Cement, M/s. Vasavadatta Cement (B.K. Birla Group of Industries), 9/1, R.N. Mukherjee Road, Kolkata- 700 001 , Ph. No.- 9830025589 Mail ID: yaswant@kesoram.net
11	Nominee of the State Govt.- DTE	**Shri Sajal Dasgupta**	Director of Technical Education Bikash Bhawan, 10th Floor, Salt Lake Kolkata – 700 091, Ph. No.- 23347077/9830134836, Fax-23347077 Mail ID: dasguptasajal@yahoo.com
12	Nominee of the Affiliating University - WBUT	**Shri Debasis Bhattacharya**	Materials Science Centre Indian Institute of Technology Kharagpur- 721302. Ph. No.- 03222-283976/277975, Mail ID: dbmsc@matsc.iitkgp.ernet.in
13	Technologist from the Region	**Shri Sachchidanand Rai**	Managing Director Eden City Group, Maheshtala, Kolkata- 700141. Ph.No.-9903250841 Mail ID: sachchirai@gmail.com
14	Member nominated by the Trust	**Shri. Kaushik Ghoshal**	Member of BOG/ Manager, Talent Management Ph. No.-, Mail ID:

D. List of Governing Council Members for the year 2016-2017

Sl. No.	Designation for representation in the Governing Body	Name of the person concerned	Address & Phone No.
1	Chairman as nominated by the Trust	**Prof.(Dr.) K.L. Chopra**	Former Director, IIT Kharagpur M-70, Kirti Nagar New Delhi – 110 015. Ph. No. 09213433266, E-mail ID: chopraklkl@yahoo.com
2	Member nominated by the Trust	**Shri Jagannath Gupta**	Chairman, JGFT Industrialist, JKB GAS PVT. Ltd., Bharat Lubricant Pvt. Ltd. Ph. No. 9903893972 / 9331033158
3	Member nominated by the Trust	**Shri K.K. Gupta**	Vice Chairman, BBIT Director, JKB GAS PVT. Ltd. Bharat Lubricant Pvt. Ltd Mail ID: krishkgupta@gmail.com
4	Member nominated by the Trust	**Dr. Balram Gupta**	Cardiologist, Ph. No.: 08826066688 Mail ID: drbalramgupta@gmail.com
5	Member nominated by the Trust	**Dr. Shubhangi Gupta**	Physiotherapist, Executive Director, BBIT Mail ID: dyregistrar@bbit.edu.in
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7	Member nominated by the Trust	**Shri D.P. Jana, I.A.S (R)**	Ex-vice Chairman West Bengal Housing Board 79/5, Palm Avenue, Kolkata – 700 019 , Ph. No.: 9830089970 Mail ID: deboprasad.jana@gmail.com
8	Member nominated by the Trust	**Prof. (Dr.) Gautam Gangopadhyay**	Associate Director, Budge Budge Institute of Technology, Budge Budge, Kolkata-700137 Ph. No.: 9007207291 Mail ID: hod.ece@bbit.edu.in
9	Member nominated by the Trust	**Prof.(Dr.)Siladitya Bandopadhyay**	Principal & Member Secretary, 734A, Block-P, New Alipore, Kolkata – 700 053. Ph. No.- 9830028627, Mail ID: principal@bbit.edu.in
10	Member nominated by the Trust	**Shri Tapas Satapathi**	Registrar, Budge Budge Institute of Technology, Budge Budge, Kolkata-700137 Ph. No.: 9836048800 Mail ID: registrar@bbit.edu.in

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12	Industrialist from the Region	**Shri Yaswant Mishra**	Sr. Jt. President & Marketing Head M/s. Mangalam Cement Ltd., M/s. Kesoram Cement, M/s. Vasavadatta Cement (B.K. Birla Group of Industries), 9/1, R.N. Mukherjee Road, Kolkata- 700 001 , Ph. No.- 9830025589 Mail ID: yaswant@kesoram.net
11	Nominee of the State Govt.- DTE	**Shri Sajal Dasgupta**	Director of Technical Education Bikash Bhawan, 10th Floor, Salt Lake Kolkata – 700 091, Ph. No.- 23347077/9830134836, Fax-23347077 Mail ID: dasguptasajal@yahoo.com
12	Nominee of the Affiliating University - WBUT	**Shri Debasis Bhattacharya**	Materials Science Centre Indian Institute of Technology Kharagpur- 721302. Ph. No.- 03222-283976/277975, Mail ID: dbmsc@matsc.iitkgp.ernet.in
13	Technologist from the Region	**Shri Sachchidanand Rai**	Managing Director Eden City Group, Maheshtala, Kolkata- 700141. Ph.No.-9903250841 Mail ID: sachchirai@gmail.com
14	Member nominated by the Trust	**Shri. Kaushik Ghoshal**	Member of BOG/ Manager, Talent Management Ph. No.-, Mail ID:

E. List of Governing Council Members for the year 2017-2018

Sl. No.	Designation for representation in the Governing Body	Name of the person concerned	Address & Phone No.
1	Chairman as nominated by the Trust	**Prof.(Dr.) K.L. Chopra**	Former Director, IIT Kharagpur M-70, Kirti Nagar New Delhi – 110 015. Ph. No. 09213433266, E-mail ID: choprakl@yahoo.com
2	Member nominated by the Trust	**Shri Jagannath Gupta**	Chairman, JGFT Industrialist, JKB GAS PVT. Ltd., Bharat Lubricant Pvt. Ltd. Ph. No. 9903893972 / 9331033158

Sl. No.	Designation for representation in the Governing Body	Name of the person concerned	Address & Phone No.
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4	Member nominated by the Trust	**Dr. Balram Gupta**	Cardiologist, Ph. No.: 08826066688 Mail ID: drbalramgupta@gmail.com
5	Member nominated by the Trust	**Dr. Shubhangi Gupta**	Physiotherapist, Executive Director, BBIT Mail ID: dyregistrar@bbit.edu.in
6	Member nominated by the Trust	**Prof. (Dr.) C.V. Reddy**	Director & Member Secretary, Budge Budge Institute of Technology, Budge Budge, Kolkata-700137 Ph. No.: 9490194995 Mail ID: director@bbit.edu.in
7	Member nominated by the Trust	**Shri D.P. Jana, I.A.S (R)**	Ex-vice Chairman West Bengal Housing Board 79/5, Palm Avenue, Kolkata – 700 019 , Ph. No.: 9830089970 Mail ID: deboprasad.jana@gmail.com
8	Member nominated by the Trust	**Prof. (Dr.) Gautam Gangopadhyay**	Associate Director, Budge Budge Institute of Technology, Budge Budge, Kolkata-700137 Ph. No.: 9007207291 Mail ID: hod.ece@bbit.edu.in
9	Member nominated by the Trust	**Prof.(Dr.)Siladitya Bandopadhyay**	Principal & Member Secretary, 734A, Block-P, New Alipore, Kolkata – 700 053. Ph. No.- 9830028627, Mail ID: principal@bbit.edu.in
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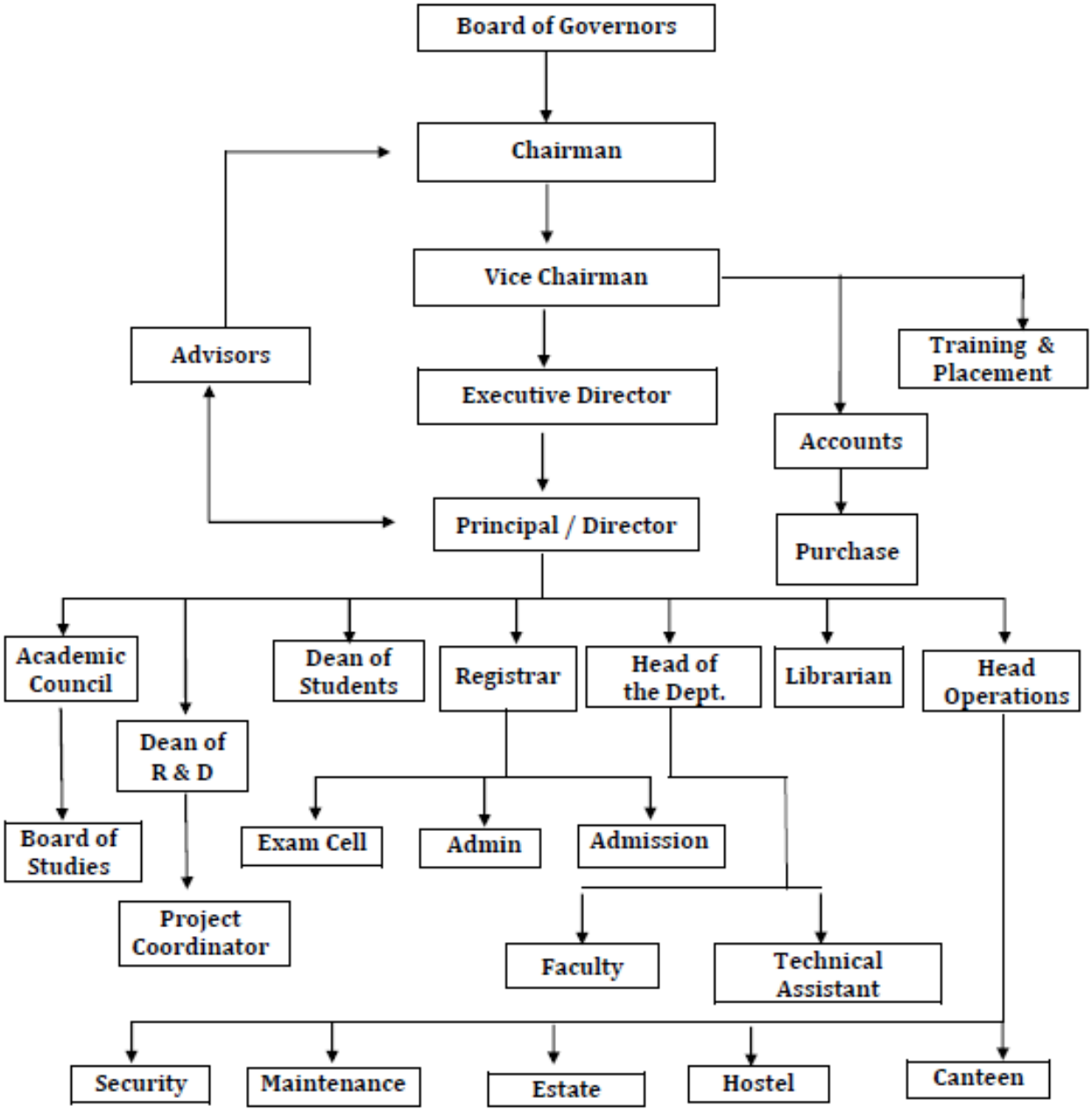
14	Member nominated by the Trust	**Shri. Kaushik Ghoshal**	Member of BOG/ Manager, Talent Management Ph. No.-, Mail ID:

Administrative structure of the Institute:

To foster a fruitful realization of the vision and mission of the college, it is highly desirable to have a well-knit organizational structure and we are proud to announce that BBIT has a strong one. The following tree represents the organizational structure of BBIT:

ORGANISATIONAL STRUCTURE



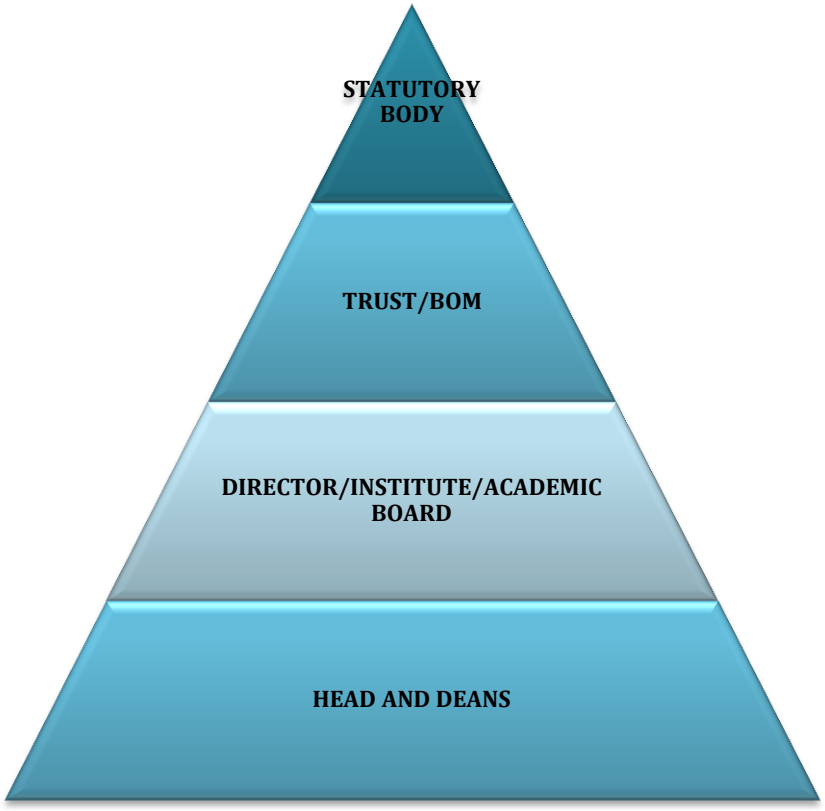
10.1.2.2 ADMINISTRATIVE SET-UP

We at BBIT believe in FAMILY KIND of work culture. Basically it aims at love and affection to each and every stake-holder of the institute. In particular, the concept of process owners, which facilitates a perfect decentralization of activities and delegation of authorities, has proven itself to be a key concept in the success achieved by the institute on different counts.

The working methodology basically is student centric, which is the dearest and highly responsible element of the system.

Involvement of each and everyone in the decision-making at their respective levels is ensured through decentralization and delegation of powers. Hence there are various institutional committees consisting of faculty and staff members. Transparency associated therein also forms an important feature of the work culture. This is done through an institutional rule book and code of conduct document which is easily accessible by any one as the copies are available in the library, with the HODs and the Principal.

The institute functions with perfect decentralized administration as depicted in the Figure below that has complete transparency in the decision making process.



DECENTRALIZATION IN ADMINISTRATION AT BBIT

10.1.2.3 FUNCTIONS OF VARIOUS BODIES

Statutory Body Functions:

- **AICTE:** Programme Approvals, Increase in Intakes, Faculty positions, Cadre Ratios and others
- **MAKAUT:** Affiliation, Course Content**,** Degree Conferment
- **GOVERNMENT:** Admission permission, Reservation norms, Pay scales
- **SOCIAL WELFARE:** Scholarship, Fee payments of Reservation category students
- **FEE FIXATION COMMITTEE:** Fixation of fees
- **TRUST:** Purchase/ Budget, Committee formation, Recruitment and approvals, Appraisals and awards, Financial Transactions, Promotions, Campus

Functions of Key Administrative Positions:

The functions of various key positions are depicted in the Table below:

Position	Functions
Governing Council	✓ Frame directive principles and policies ✓ Amend and approve policies from time to time ✓ Approve budgets
Chairman/ Chairman Rep i.e., Executive Director	✓ To look after the overall development of the institute ✓ Mobilize external resources to strengthen the institute ✓ Plan & provide for necessary facilities / equipment for development ✓ Instil confidence and devotion in every member of the institute
Director	✓ Design & define organization structure ✓ Define & delegate responsibilities of various positions in the organization ✓ Ensure periodic monitoring & evaluation, of various processes & sub- processes ✓ Ensure effective purchase procedure ✓ Define quality policy and objectives ✓ Prepare annual budget ✓ Conduct periodic meeting of various bodies such as Governing Council, LMC, Standing Committee and Grievances Redressal ✓ Manage accounts and finance ✓ Employee recruitment process ✓ Office Administration ✓ Compliance with AICTE & Maulana Abul Kalam Azad University ✓ Admission

	✓ Resource Generation ✓ Internal and External examinations ✓ Library Up gradation
Associate Director	✓ To discharge routine duty of Director during absence of Director ✓ Annual Magazine ✓ Resource Provision ✓ Transport ✓ Alumni interaction ✓ Housekeeping including hostels ✓ Prepare and execute academic calendar ✓ Oversee the teaching-learning process ✓ Carry out result analysis and submit corrective measures to Principal ✓ Initiate supplementary teaching measures ✓ Co-curricular activities ✓ Formation of student council ✓ Cultural activities ✓ Sports activities ✓ Student discipline ✓ Student health care
Head of Departments	✓ Plan and execute academic activities of the department ✓ Maintain discipline and culture in the department ✓ Maintain the department neat and clean ✓ Pick and promote strengths of students / faculty / staff ✓ Monitor academic activities of the department ✓ Propose Department Budget
Examination Cell	✓ Central time table ✓ Monitoring of lectures and practical examinations ✓ Conduction of internal examinations ✓ Students feedback ✓ Collective attendance of students
Administrative Officer	✓ Liaisoning with AICTE & Maulana Abul Kalam Azad University ✓ College roster ✓ Service Books ✓ Faculty personal files ✓ Recruitment process ✓ Maintain minutes of meeting (all) ✓ New proposals ✓ Co – ordinate day to day activities of office ✓ Purchase process ✓ AICTE, MAKAUT committee preparation ✓ Annual College budget

Training & Placement Officer	✓ Liaison with industry ✓ Student Training and Placement ✓ Identify and provide for training needs of students ✓ Arrange campus interviews ✓ Proposing annual T & P budget
Librarian	✓ Plan and execute modus operandi of routine activity of the library ✓ Plan and propose expansion / development ✓ Maintain library ✓ discipline and culture ✓ Prepare annual budget for the library
Counselling Cell	✓ Facilitate career guidance to students ✓ Assist students suffering from psychological disorders ✓ Arrange for professional counsellors ✓ Maintain record of counselling activities ✓ Student academic council ✓ Arrange remedial classes for weaker students
Alumni Association	✓ Arrange periodic meetings of student council ✓ Ensure alumni registration ✓ Prepare alumni news letter ✓ Proposing annual budget

10.1.2.4 DEFINE RULES, PROCEDURES, RECRUITMENT AND PROMOTIONAL POLICIES, AND OTHERS

RULES, POLICIES & PROCEDURES INCLUDING SERVICE RULES

A. RECRUITMENT:

Recruitment of Teaching Staff/Librarian:

Appointment

a. All appointment to any category of post in respect of teaching shall be made by Appointing Authority on the recommendation of the Selection Committee constituted by competent authority fulfilling the minimum AICTE norms wherever applicable.

b. The Appointing Authority may from time to time appoint Guest/Part time/Contract/Adhoc faculty fulfilling AICTE norms.

c. The BoG may appoint experienced and highly competent experts (Academician & Executive) as Advisor/Adjunct Professor/Emeritus Professor for growth and development of the Institute.

Procedure for recruitment

For initiating the process of recruitment, Institute will normally advertise the posts in leading newspaper, mentioning qualification, experience & age required for the posts. However, the requisite qualification & experience of the faculty shall be as per the guide line of AICTE, as detailed in Annexure-A, shall be followed.

Probation

Unless otherwise specified or decided by the Appointing Authority all Appointments against permanent posts will normally be on probation for a period of one year.

The period of probation may be extended in individual cases if considered necessary by the Appointing Authority. Each extension of probationary period, where considered desirable, shall be for six months and not more than two extensions shall be allowed where after probation and service of the employee would stand dispensed with.

Confirmation

i. On satisfactory completion of probation, an employee shall be considered for confirmation. He/she will not be confirmed unless a letter of confirmation, specifying the date of confirmation, has been issued to him/her by the Appointing Authority.

ii. For confirmation of service the Reporting Authority should give his/her performance report and recommend to the Appointing Authority with justification/appraisal for confirmation.

Appraisal

i. The Faculty up-gradation shall be considered strictly as per AICTE norms. Promotion in respect of member of faculty would be as per the guidelines of career advancement scheme (CAS) formulated by AICTE.

ii. Up-gradation of other categories of staff, will be decided on merit-cum-performance basis subject to requirement by the Appointing Authority based on recommendation forwarded by the Director/Director of the Institute concerned.

Superannuation/Retirement

i. All employees would superannuate as per AICTE/Institute norms and the retirement benefits on superannuation will be as per terms of the Institute.

ii. The date on which an employee attains the age of compulsory retirement shall mean the last date

of the month in which he/she attains the age.

Termination of Service

i. The Institute/Trust reserves the right to terminate the service of an employee by giving due notice in writing without assigning any reason whatsoever or by paying one month's salary for temporary or by paying three month's salary including all allowances for the equivalent period in lieu thereof as agreed upon on case to case basis.

ii. The Institute/Trust shall have the right to dismiss an employee summarily without any compensation whatsoever if the employee is found guilty of breach of trust, insobriety, addiction to drugs or alcoholism, dishonesty, neglect of duty, moral turpitude, erosion of conduct, plural marriage, loss of mental balance which are considered detrimental to the Institute/Office/Trust.

iii. An employee also reserves the right to resign from the services of the Institute/Office by giving the Institute one month's notice in case of probationers and temporary service holders and three months' notice in case of confirmed employees, as applicable in writing or by paying equivalent salary including allowances in lieu thereof. Faculty members and members of technical staff are normally not allowed to leave the services of the Institute during continuance of the semester. Legal steps may be taken in case an employee leaves without notice.

Recruitment of Non-Teaching Staff

The recruitment is made purely on the merit basis, through a Local Selection Committee of the Institute comprising of the Director, the head of the department and one or two experts in the subject concerned. The staff will be put on probation for two years, on satisfactory completion of temporary service period of one year.

B. SERVICE BOOK

A service book shall be maintained by the Registrar or any other officer duly authorized by the Director for the staff of the Institution and shall contain such information regarding date of birth, date of appointment, qualifications, scale of pay, increments, probation, particulars of leave and such other information as the Competent Authority may prescribe. The entries in the service book shall be brought to the notice of the teacher concerned after the end of the year and his/her signature obtained.

C. PAY SCALE

a. An Employee shall begin to draw the pay and allowance attached to a post to which he/she has been appointed with effect from the date he/she assumes the duties of that post and shall cease to draw the same when he/she ceases to discharge these duties.

b. Pay scale for the faculty will be as per AICTE norms.
c. For officers and others staff, the norms as approved by the Competent Authority will be followed.
d. Unless otherwise specified in the appointment letter, on first appointment to a post, the pay shall be fixed at the minimum of the scale attached to that post.
e. The increments are given annually after confirmation according to scale of pay in which he/she is confirmed subject to his/her satisfactory performance with the approval of Appointing Authority.

Incentives for higher qualification – AICTE norms will be followed.

Career Advancement – AICTE norms will be followed.

D. BENEFITS TO THE STAFF

i) Provident Fund

a) P.F. is applicable to all staff members @12% on wages as per wage limit para 2 (f) of EPF Scheme 1952 declared by EPFO on its web portal.
b) Newly recruited staff shall submit the Form No.11 duly filled in to administration office along with the required KYC documents mentioned in the form, immediately after joining the Institute.
c) Each Staff shall submit the nomination form for P.F. along with necessary documents mentioned in it
d) Each staff shall activate the allotted UAN number immediately using EPFO web portal

ii) Gratuity:

Gratuity shall be applicable to the staff who have completed minimum five years of continuous service

iii) Dearness Allowances, House Rent Allowances and Medical Allowances.

Employees shall be entitled to the Dearness Allowance, House Rent Allowance and Medical Allowance as per the policy of the Institute.

iv) Travelling allowances

This shall be decided from time to time by the Competent Authority.

v) Income Tax

Institute will deduct Income Tax from the salary at source of the employee as per the provision of the IT Act 1961. A salary certificate to this effect will be issued to the employee by end of April

each year.

vi) Professional Tax

Professional Tax at prevailing rate as applicable will be deducted from the monthly salary of each employee.

vii) Advance Against Salary

i. Advance against salary is sanctioned to confirmed employees for a) Self marriage ii) Medical Treatment of self/wife/husband, children, dependent parents.
ii. An undertaking of two confirmed employees as guarantors shall be submitted by the applicant staff along with the application.
iii. The amount of advance against salary shall be 2 times of current BP + DA.
iv. The amount of advance against salary shall be recovered in 6 equal monthly installments. The recovery shall be started after 1 month of advance against salary deposited.

E. LEAVE RULES

CATEGORIES OF LEAVE

i. Casual Leave,
ii. Compensatory Casual Leave
iii. Medical Leave
iv. Earned Leave
v. Maternity Leave
vi. Study Leave

GENERAL RULES

i. As leave cannot be claimed as a matter of right, the leave sanctioning authority reserves the right of not granting the leave applied for in the interest of the Institution or on any valid ground.
ii. The rules apply only to the full time and not to the part time employees. Teaching staff enjoying vocational holidays are not generally entitled for earned leave.
iii. An employee on leave shall not return to duty before the expiry of leave granted to him without permission of the authority sanctioning the leave.
iv. An employee who remains absent after the expiry of his/her leave granted is not entitled to leave salary for the period of such absence. The day/days of such unauthorized absence may only be regularized at the sole discretion of the approving authority on being satisfied of the justification submitted. Willful unauthorized absence from duty after the expiry of leave granted may be treated as misconduct calling for disciplinary action.

v. Any kind of leave if refused, partly or fully, should be communicated to the applicant either verbally or in writing, stating the reason(s) of such refusal.

vi. No employee/person who is under suspension shall be granted any leave.

vii. Privilege leave application should be submitted 7 (seven) days in advance.

viii. If under unavoidable circumstances previous sanction cannot be obtained, the employee shall write to the controlling authority on the day on which he/she absents himself/herself explaining the reasons which prevented him/her from attending the office. An employee is liable to have his pay forfeited for such period for which he/she is absent without leave.

ix. The office of the Registrar will maintain leave record of each employee in the Institute office.

x. The HoD, recommending authority of any leave must ensure alternative arrangement of carrying out the normal activities before recommending anybody to proceed on leave.

F. REQUIRED QUALIFICATION FOR FACULTY IN ENGINEERING

Workload of a teacher should not be less than 40 hours a week, of which teaching contact hours should be as follows:

Assistant Professor -16 hrs / week
Associate Professor -12 hrs /week
Professor – 8 hrs / week
Director - 4 hrs / week

G. MINIMUM QUALIFICATION REQUIRED FOR NON TEACHING STAFF

Lab. Assistant: B.E. or Diploma in relevant branch

Technical Assistant: B.E. or Diploma in relevant branch

Administrative Staff & Other Staff: Graduate + Skills / qualification required for concerned post.

H. RETIREMENT AGE

Director: 65 Years

Teaching Staff: 65 Years

Non-Teaching Staff: 60 Years

I. STAFF ATTENDANCE/OD/LEAVE DEDUCTION AGAINST LATE MARK/EARLY GOING

As per Circular No. Director/2010/073 Dt. 27-3-2010

J. DISCIPLINARY ACTION AND PROCESS FOR IMPOSING PENALTIES

As per Budge Budge Institute of Technology & MAKAUT Statute in accordance to the **AICTE / UGC Regulation**

10.1.3 Decentralization in working and grievance redressal mechanism (10)

GREVIANCE REDRESSAL PROCEDURE

A Grievance Redressal Committee has been constituted to redress the grievances and complaints of the faculty, students and staff. A women's forum is functioning separately for taking up issues related to the woman independently.

Objective

BBIT approach to grievance resolution emphasizes:

- Fairness and impartiality
- The handling of grievances informally where possible
- The principles of natural justice and procedural fairness
- Effective, reciprocal communication and feedback
- Resolution of grievances as early as possible and as close as possible to the source of dissatisfaction
- This Procedure shall not be used for the resolution of collective grievances related to salaries
- Employees may lodge grievances without fear of victimization
- Grievances should be resolved at the lowest possible level within BBIT
- Records will be kept of all statements and decisions

Duties & Responsibilities

1. To develop a responsive and accountable attitude among all the students in order to maintain a harmonious educational atmosphere in the Institute.
2. Grievances received in writing from the students about any of the following matters:-
   a. Academic Matters: Related to timely issue of duplicate Mark-sheets, Transfer Certificates, Conduct Certificates or other examination related matters.
   b. Financial Matters: Related to dues and payments for various items from library, hostels etc.
   c. Complaints, of alleged discrimination of students, from the Scheduled Castes, the Scheduled Tribes, Other Backward Classes, Women, Minority or Disabled categories;
3. Any other related work assigned by the Director / Associate Director

Facility

Complaint Boxes have been installed in the College campus in which the people, who want to remain anonymous, put in writing their grievances and their suggestions for improving the academics/administration in the College.

GRIEVANCE REDRESSAL COMMITTEE

The **Grievance Redressal Cell** headed by **Dr. S. Bandopadhyay, Dean of Students,** shall meet within a week from the date of receipt of any petition/complaint from anybody and take necessary action as deem fit and initiate necessary actions for solving various grievances and problems.

GRIEVANCE REDRESSAL COMMITTEE FOR THE ACADEMIC YEAR 2017-2018

Sr. No.	Name of the Faculty	Designation	Department
1.	Prof. (Dr.) S. Bandopadhyay	Convener	Dean-SW
2.	Ms. Priyanka Chatterjee	Member	HU
3.	Mr. Tapas Satapathi	Member	Registrar
4.	Prof. Tapesh Mukherjee	Member	ECE
5.	Prof. (Dr.) R.D. Shukla	Member	Dean- Diploma
6.	Ms. Trina Bhattacharjee	Member	PA to Executive Director

GRIEVANCE REDRESSAL AND MONITORING CELL 2017-2018

Designation	Name	Contact Number
Director	Prof. (Dr.) C. V. Reddy	9635862575
Warden of Hostels	Mrs. Sharbani Chakraborty	9051759288
	Ms. Anita Chakroborty	9836159909
	Mr. Uttam Bhaduri	9748249142
Guardian Representatives	Mr. Brajendra Gupta, Guardian of Garima Shaw	9433023972
	Mr. P.T. Bhutia, Gaurdian of Tenzing Bhutia	9434487510
Non Teaching Staff	Dr. Shubhangi Gupta	9748493158
	Mr. Tapas Satapathi	9433018800
	Mr. Samrat Ghosh	9002537488

	Mr. Sanjay Shaw	9331704251
	Mr. Golam Masum	9433462382
	Mr. Prasanta Das	9831680565
	Mr. Manas Barui	9831168582
	Mr. Amit Gupta	9831222519
Teaching Staff	Dr. Rishab Shukla	8585088710
	Prof. (Dr.) S. Bandopadhyay	9830028627
	Ms. Priyanka Chatterjee	9830428728
	Ms. Kakali Sengupta (Das)	9433101909
	Ms. Srimanti Roy Choudhury	9804401166
	Mr. Asit Paria	9474068604
	Mr. Sajal Mandal	9681154085
	Ms. Sumni Banerjee (Mukherjee)	9433746056
	Mr. Ranjit Kalindi	8013144538
	Mr. Santanu Chattopadhyay	9330010892
Coordinator	Prof. (Dr.)S. Bandopadhyay	9830028627
Ombudsman	Prof. (Dr.) Tamal Kanti Choudhury	9830176928

GRIEVANCE REDRESSAL COMMITTEE FOR THE ACADEMIC YEAR 2016-2017

Sr. No.	Name of the Faculty	Designation	Department
1.	Prof. (Dr.) S. Bandopadhyay	Convener	Dean-SW
2.	Ms. Priyanka Chatterjee	Member	HU
3.	Mr. Tapas Satapathi	Member	Registrar
4.	Prof. Tapesh Mukherjee	Member	ECE
5.	Prof. (Dr.) R.D. Shukla	Member	Dean- Diploma
6.	Ms. Shruti Ray	Member	HR Admin

GRIEVANCE REDRESSAL AND MONITORING CELL 2016-2017

Designation	Name	Contact Number
Director	Prof. (Dr.) C. V. Reddy	9635862575
Warden of Hostels	Mrs. Sharbani Chakraborty	9051759288
	Ms. Anita Chakroborty	9836159909
	Mr. Uttam Bhaduri	9748249142
Guardian Representatives	Mr. Brajendra Gupta, Guardian of Garima Shaw	9433023972
	Mr. P.T. Bhutia, Gaurdian of Tenzing Bhutia	9434487510
Non Teaching Staff	Dr. Shubhangi Gupta	9748493158
	Mr. Tapas Satapathi	9433018800
	Mr. Samrat Ghosh	9002537488
	Mr. Sanjay Shaw	9331704251
	Mr. Golam Masum	9433462382
	Mr. Prasanta Das	9831680565
	Mr. Manas Barui	9831168582
	Mr. Amit Gupta	9831222519
Teaching Staff	Dr. Rishab Shukla	8585088710
	Prof. (Dr.) S. Bandopadhyay	9830028627
	Ms. Priyanka Chatterjee	9830428728
	Ms. Kakali Sengupta (Das)	9433101909
	Ms. Srimanti Roy Choudhury	9804401166
	Mr. Asit Paria	9474068604
	Mr. Sajal Mandal	9681154085

	Mr. Shuvam Chatterjee	9836043097
	Ms. Sumni Banerjee (Mukherjee)	9433746056
	Mr. Krishnendu Rarhi	9830660810
	Mr. Ranjit Kalindi	8013144538
	Mr. Santanu Chattopadhyay	9330010892
Coordinator	Prof. (Dr.)S. Bandopadhyay	9830028627
Ombudsman	Prof. (Dr.) Tamal Kanti Choudhury	9830176928

GRIEVANCE REDRESSAL COMMITTEE FOR THE ACADEMIC YEAR 2015-2016

CORE COMMITTEE

Sr. No.	Name of the Faculty	Designation	Department
1.	Prof. (Dr.) S. Bandopadhyay	Convener	Dean-SW
2.	Ms. Priyanka Chatterjee	Member	HU
3.	Mr. Tapas Satapathi	Member	Registrar
4.	Prof. Tapesh Mukherjee	Member	ECE
5.	Prof. (Dr.) R.D. Shukla	Member	Dean- Diploma

GRIEVANCE REDRESSAL AND MONITORING CELL 2015-2016

Designation	Name	Contact Number
Director	Prof. (Dr.) C. V. Reddy	9635862575
Warden of Hostels	Mrs. Sharbani Chakraborty	9051759288
	Ms. Anita Chakroborty	9836159909
	Mr. Uttam Bhaduri	9748249142
Guardian Representatives	Mr. Brajendra Gupta, Guardian of Garima Shaw	9433023972
	Mr. P.T. Bhutia, Gaurdian of Tenzing Bhutia	9434487510

Non Teaching Staff	Dr. Shubhangi Gupta	9748493158
	Mr. Tapas Satapathi	9433018800
	Mr. Samrat Ghosh	9002537488
	Mr. Sanjay Shaw	9331704251
	Mr. Golam Masum	9433462382
	Mr. Prasanta Das	9831680565
	Mr. Manas Barui	9831168582
	Mr. Amit Gupta	9831222519
Teaching Staff	Dr. N.C. Dey Sarkar	8420196866
	Prof. (Dr.) S. Bandopadhyay	9830028627
	Ms. Priyanka Chatterjee	9830428728
	Ms. Kakali Sengupta (Das)	9433101909
	Ms. Srimanti Roy Choudhury	9804401166
	Mr. Asit Paria	9474068604
	Mr. Sajal Mandal	9681154085
	Mr. Shuvam Chatterjee	9836043097
	Ms. Sumni Banerjee (Mukherjee)	9433746056
	Mr. Bidrohi Bhattacharya	9433366587
	Mr. Ranjit Kalindi	8013144538
	Mr. Santanu Chattopadhyay	9330010892
Coordinator	Prof. (Dr.)S. Bandopadhyay	9830028627

GRIEVANCE REDRESSAL COMMITTEE FOR THE ACADEMIC YEAR 2014-2015

Sr. No.	Name of the Faculty	Designation	Department
1.	Prof. (Dr.) S. Bandopadhyay	Convenor	Dean-SW
2.	Ms. Priyanka Chatterjee	Member	HU
3.	Mr. Tapas Satapathi	Member	Registrar
4.	Prof. Tapesh Mukherjee	Member	ECE
5.	Prof. (Dr.) N.C. Dey Sarkar	Member	Principal- Diploma

GRIEVANCE REDRESSAL AND MONITORING CELL 2014-2015

Designation	Name	Contact Number
Principal	Prof. (Dr.) Dipankar Pal	9635862575
Warden of Hostels	Mr. Kamala Dubey	8334981067
	Ms. Anita Chakroborty	9836159909
	Mrs. Tanushree Jana	9231651331
Guardian Representatives	Mr. Brajendra Gupta, Guardian of Garima Shaw	9433023972
	Mr. Jyotirdipta Roy, Gaurdian of Neha Roy	9830412096
Non Teaching Staff	Dr. Shubhangi Gupta	9748493158
	Mr. Tapas Satapathi	9433018800
	Mr. Samrat Ghosh	9002537488
	Mr. Sanjay Shaw	9331704251
	Mr. Golam Masum	9433462382
	Mr. Prasanta Das	9831680565
	Mr. Manas Barui	9831168582
	Mr. Amit Gupta	9831222519
Teaching Staff	Dr. N.C. Dey Sarkar	8420196866
	Prof. (Dr.) S. Bandopadhyay	9830028627

	Ms. Priyanka Chatterjee	9830428728
	Ms. Kakali Sengupta (Das)	9433101909
	Ms. Srimanti Roy Choudhury	9804401166
	Mr. Asit Paria	9474068604
	Mr. Sajal Mandal	9681154085
	Mr. Shuvam Chatterjee	9836043097
	Ms. Sumni Banerjee (Mukherjee)	9433746056
	Mr. Bidrohi Bhattacharya	9433366587
	Mr. Ranjit Kalindi	8013144538
	Mr. Santanu Chattopadhyay	9330010892
Coordinator	Prof. (Dr.)S. Bandopadhyay	9830028627

GRIEVANCE REDRESSAL COMMITTEE FOR THE ACADEMIC YEAR 2013-2014

Sr. No.	Name of the Faculty	Designation	Department
1.	Dr S Bandyopadhyay	Convenor	Dean-SW
2.	Ms Priyanka Chatterjee	Member	HU
3.	Mr Tapas Satapathi	Member	Registrar
4.	Prof. Tapesh Mukherjee	Member	ECE
5.	Prof. (Dr.) N.C. Dey Sarkar	Member	Principal- Diploma

GRIEVANCE REDRESSAL AND MONITORING CELL 2013-2014

Designation	Name	Contact Number
Principal	Prof. (Dr.) S. Bandopadhyay	9830028627
Warden of Hostels	Mr. Kamala Dubey	8334981067
	Ms. Anita Chakroborty	9836159909
	Mrs. Tanushree Jana	9231651331

Guardian Representatives	Mr. Sunil Kr. Rai, Guardian of Srishti Rai	9903709380
	Mr. Barindra Krishna Awasthi, Gaurdian of Anand Awasthi	9433222033
Non Teaching Staff	Dr. Shubhangi Gupta	9748493158
	Mr. Tapas Satapathi	9433018800
	Mr. Samrat Ghosh	9002537488
	Mr. Sanjay Shaw	9331704251
	Mr. Golam Masum	9433462382
	Mr. Rudra Prasad Chowdhury	9051630835
	Mr. Prasanta Das	9831680565
	Mr. Manas Barui	9831168582
	Mr. Amit Gupta	9831222519
Teaching Staff	Dr. N.C. Dey Sarkar	8420196866
	Prof. (Dr.) S. Bandopadhyay	9830028627
	Ms. Priyanka Chatterjee	9830428728
	Ms. Kakali Sengupta (Das)	9433101909
	Ms. Srimanti Roy Choudhury	9804401166
	Mr. Asit Paria	9474068604
	Mr. Sajal Mandal	9681154085
	Mr. Shuvam Chatterjee	9836043097
	Ms. Sumni Banerjee (Mukherjee)	9433746056
	Mr. Bidrohi Bhattacharya	9433366587

	Mr. Ranjit Kalindi	8013144538
	Mr. Santanu Chattopadhyay	9330010892
Coordinator	Prof. (Dr.)S. Bandopadhyay	9830028627

N.B.: Grievance Redressal Committee for the academic year 2013-14 & 2014-2015 at BBIT is reconstituted as under consequent on relocation of some of the faculty members.

ANTI - RAGGING COMMITTEE MEMBERS FOR THE ACADEMIC YEAR 2017-2018

Sr. No.	Name of the Faculty	Designation	Department	Contact Nos.
1	Mr. Tapas Satapathi	Convener	Registrar	9433018800
2	Prof. (Dr.) C.V Reddy	Member	Director	9830130513
3	Prof. (Dr.) G. Gangopadhyay	Member	Associate Director	9007207291
4	Prof. (Dr.) S. Bandopadhyay	Member	Dean, SW	9007718127
5	Prof. (Dr.) R.D. Shukla	Member	Dean, Polytechnic	9335827300
6	Prof. Priyanka Chatterjee	Member	HU	9830428728
7	Ms. Anita Chakroborty	Member	Warden-Girls Hostel	9836159909
8	Mr. Uttam Bhaduri	Member	Warden-Boy's Hostel	9748249142

ANTI - RAGGING COMMITTEE MEMBERS FOR THE ACADEMIC YEAR 2016-2017

Sl. No.	Name of the Faculty	Designation	Department	Contact Nos.
1	Mr. Tapas Satapathi	Convener	Registrar	9433018800
2	Prof. (Dr.) C.V Reddy	Member	Director	9830130513
3	Prof. (Dr.) G. Gangopadhyay	Member	Associate Director	9007207291
4	Prof. (Dr.) S. Bandopadhyay	Member	Dean, SW	9007718127
5	Prof. (Dr.) R.D. Shukla	Member	Dean, Polytechnic	9335827300
6	Prof. Priyanka Chatterjee	Member	HU	9830428728
7	Ms. Anita Chakroborty	Member	Warden-Girls Hostel	9836159909
8	Mr. Uttam Bhaduri	Member	Warden-Boy's Hostel	9748249142

ANTI - RAGGING COMMITTEE MEMBERS FOR THE ACADEMIC YEAR 2015-2016

Sl. No.	Name of the Faculty	Designation	Department	Contact Nos.
1	Prof. (Dr.) C.V Reddy	Convener	Director	9830130513
2	Prof. (Dr.) Rajdeep Bakshi	Member	Dean, MBA	9433101364
3	Prof. (Dr.) S. Bandopadhyay	Member	Dean, SW	9007718127
4	Prof. (Dr.) N.C. Dey Sarkar	Member	Principal, Polytechnic	943325620
5	Prof. Priyanka Chatterjee	Member	HU	9830428728
6	Mr. Tapas Satapathi	Member	Registrar	9433018800
7	Ms. Anita Chakroborty	Member	Warden-Girls Hostel	9836159909

ANTI - RAGGING COMMITTEE MEMBERS FOR THE ACADEMIC YEAR 2014-2015

Sl. No.	Name of the Faculty	Designation	Department	Contact Nos.
1	Prof. (Dr.) Dipankar Pal	Convener	Principal, B.Tech.	9635862575
2	Prof. (Dr.) N.C. Dey Sarkar	Member	Principal, Polytechnic	943325620
3	Prof. Moumita Poddar	Member	Principal, MBA	9830162781
4	Prof. Priyanka Chatterjee	Member	HU	9830428728
5	Mr. Tapas Satapathi	Convener	Registrar	9433018800
6	Ms. Tanushree Jana	Member	Warden, Girls' Hostel	9830676940
7	Ms. Anita Chakroborty	Member	Warden-Girls' Hostel	9836159909
8	Mr. Anand Kumar Jha	Member	Warden-Boys' Hostel	9051759288
9	Mr. Avishek Ghosh	Member	Warden-Boys' Hostel	9434487510

ANTI - RAGGING COMMITTEE MEMBERS FOR THE ACADEMIC YEAR 2013-2014

Sl. No.	Name of the Faculty	Designation	Department	Contact Nos.
1	Prof. (Dr.) S. Bandopadhyay	Convener	Principal, B.Tech.	9007718127
2	Prof. (Dr.) N.C. Dey Sarkar	Member	Principal, Polytechnic	9433256201
3	Prof. (Dr.) R. Patra	Member	Principal, MBA	8420558194
4	Prof. Priyanka Chatterjee	Member	HU	9830428728
5	Mr. Tapas Satapathi	Member	Registrar	9433018800
6	Ms. Tanushree Jana	Member	Warden, Girls' Hostel	9830676940
7	Ms. Anita Chakroborty	Member	Warden-Girls' Hostel	9836159909
8	Mr. Akhilesh Singh	Member	Warden-Boy's Hostel	9843062719
9	Mr. Sukreet Majhi	Member	Warden-Boy's Hostel	9831048751

NB: There are and have been extended members as well in this committee in each academic year.

In addition to the committees or bodies presented above, there are the following Non-Statutory Committees at Budge Budge Institute of Technology:

Sl. No.	Name of the Committee	Members	Functions & Responsibilities	Frequency of Meetings	Headed By
1	**Governing Body**	16	➢ To discuss various issues and aspects related to the development of the college and its academic standards. ➢ It includes considering and approving the institution's strategic plan which sets the academic aim and objectives of the institution and identifies the financial, physical and staffing strategies and so on. ➢ It chalks out a roadmap in order to achieve the goals of the institute.	Twice in an academic year	**Dr. K.L Chopra**
2	**Anti-Ragging Committee**	60	➢ To comply with the directives of the Supreme Court. ➢ Studying various aspects of ragging, means and methods to prevent it, possible action that can be taken against those who indulge in it and action taken against the offender in the event of ragging.	Twice a year and as and when required	**Mr. Tapas Satapathi**
3	**Alumni Committee**	7	➢ To promote and foster mutually beneficial interaction between alumni and present students and the alumni themselves	Once in each semester	**Dr. Siladitya Bandopadhyay**
4	**Academic Council**	11	➢ Concerned with all the academic affairs of the college encompassing academic staff, academic planning, instructional issues, students' co-curricular activities, discipline and others	Once in each semester	**Dr. Gautam Gangopadhyay**
5	**Disciplinary Committee**	9	➢ To ensure discipline in the campus and suggest measures for any kind of violation of discipline	Once in each semester and as and when required	**Dr. Gautam Gangopadhyay**

6	**Examination Committee**	12	➢ To arrange and conduct different internal and university examinations as per norms. ➢ To maintain liaison with the Controller of the Examination of the University as and when required	Three per semester	**Dr. Labakanta Mandal**
7	**Mentoring Committee**	6	➢ To provide guidance and monitor the mentoring activities of the mentors	Thrice a semester	**Prof. Priyanka Chatterjee**
8	**Cultural Committee**	7	➢ Shall be responsible for intra and inter collegiate cultural events in the college	Twice in an academic year and as and when required	**Prof. Priyanka Chatterjee**
9	**Grievance & Redressal Committee**	6	➢ To redress the grievances and complaints of the staff and students	Once in each semester and as and when required	**Dr. Siladitya. Bandyopadhyay**
10	**Purchase Committee**	7	➢ To recommend purchase of items, services, equipment and others	Once in each semester and as and when required	**Mr. Tapas Satapathi**
11	**Newsletter & Magazine Committee**	7	➢ To determine the content & quality of the Newsletter & Magazine of the Institute	Once in each semester	**Mrs. Tithi Chakraborty**
12	**Placement Committee**		➢ To coordinate with Training & Placement Cell concerning campus , training, industry academia interaction, and others	Twice in an academic year and as and when required	**Dr. Dipak Das**
13	**Women's Grievance Redressal & Sexual Harassment Cell**	8	➢ To provide healthy and safe environment in the institute for female students and employees	Once in each semester and as and when required	**Mrs. Rajasahi Sengupta Mothey**
14	**Sports Committee**	11	➢ For the holistic development of students apart from academia, students are encouraged to participate in different sports events which include Cricket, Football and others.	Twice in an academic year and as and when required	**Dr. Siladitya. Bandyopadhyay**

15	**Techfest Committee**	5	➢ To organize Techfest which provides a platform for students to showcase their Technical expertise	Twice in an academic year and as and when required	**Prof. Debajit Banerjee**
16	**Timetable Committee**	11	➢ Smooth and efficient management of Academic Programme throughout the semester	At least twice per academic year	**Prof. Subodh Bhunia**
17	**Attendance Committee**	9	➢ To keep track of students' attendance and ascertain if there is any correlation between their attendance and performance by maintaining proper record of attendance	At least twice per academic year	**Prof. Debajit Banerjee**

DELEGATION OF FINANCIAL POWER

SL. NO.	DESIGNATION	LIMIT TO SANCTION	PURPOSE
1	Director	Rs. 27 lakhs per month	Institutional development
2	Head of Departments	Rs. 5,000 per month	Departmental expenditure

LIST OF FACULTY MEMBERS WHO ARE ADMINISTRATORS/ DECISION MAKERS FOR VARIOUS ASSIGNED JOBS:

SL. NO.	NAME	DESIGNATION
1	Prof. (Dr.) C.V Reddy	✓ Director
2	Prof. (Dr.) Gautam Gangopadhyay	✓ Associate Director ✓ Head of the Department, Electronics and Communication Engineering ✓ In-charge, Academic Council ✓ In-charge, Disciplinary Committee
3	Prof. (Dr.) Rupendranath Chakraborty	✓ Advisor
4	Prof. (Dr.) Siladitya Bandopadhyay	✓ Dean, Students' Welfare ✓ In-charge, Alumni Committee ✓ In-charge, Grievance Redressal Committee ✓ In-charge, Sports Committee
5	Prof. (Dr.) Bimal Kumar Dutta	✓ Head of the Department, Computer Science Engineering

6	Prof. (Dr.) Anish Deb	✓ Head of the Department, Electrical Engineering
7	Prof. Biswajit Bal Majumder	✓ Head of the Department, Civil Engineering
8	Prof. (Dr.) Subrata Bhowmik	✓ Head of the Department, Mechanical Engineering
9	Prof. (Dr.) Mrinal Kanti Mukherjee	✓ Head of the Department, Basic Science and Humanities
10	Prof. Priyanka Chatterjee	✓ In-charge, Mentoring Committee ✓ In-charge, Cultural Committee
11	Prof. Labakanta Mandal	✓ In-charge, Examination Committee
12	Prof. Debajit Banerjee	✓ In-charge, Attendance Committee ✓ In-charge, Techfest Committee
13	Prof. Tithi Chakraborty	✓ In-charge, Magazine and Newsletter Committee
14	Prof. Rajashi Sengupta Mothey	✓ In-charge, Women's Grievance and Sexual Harassment Committee
15	Prof. Subodh Bhunia	✓ In-charge, Timetable Committee

PROFESSIONAL COUNSELLING FOR STUDENTS:

At Budge Budge Institute of Technology, the holistic development and the well-being of the students are of utmost importance and keeping this in view we have a full time Clinical Psychologist, Ms. Priyanka Das who provides with both professional and psychological counselling to students. Apart from this we also have at our disposal, Dr. Ambarish Ghosh, Assistant Professor, Department of Psychiatry, Jagannath Gupta Institute of Medical Sciences who provides with expert counselling to not only students but to the staff members as well. There is also a well-equipped and fully functional psychiatry ward at Jagannath Gupta Institute of Medical Sciences.

SL. NO.	NAME OF THE MEMBER	DESIGNATION	JOB PROFILE
1	Ms. Priyanka Das	Clinical Psychologist	Professional and psychological counselling to students
2	Dr. Ambarish Ghosh	Doctor	Counselling and Consultation

10.1.4 Delegation of financial powers (10)

All departmental funding proposals and approvals are coordinated by the central accounts department of the Institute.
Any requirement of any department is addressed by its HoD in consultation with the Director. Each departmental head has been allocated with an amount of Rs. 5000/- for running the expenses of the department.

10.1.5 Transparency and availability of correct/unambiguous information in public domain (5)

The institution maintains transparency in all its operation and working. Information such as Internal marks scored by students, Shortage of attendance, if any, Availability of scholarships, Opportunities for students, etc, are promptly displayed on Notice Boards.

All the information essential for the stakeholders is made available in the institution's website: www.bbit.edu.in.

10.2 Budget Allocation, Utilization, and Public Accounting at Institute level (30)

Summary of current financial year's budget and actual expenditure incurred (for the institution exclusively) in the three previous financial years.

Total Income at Institute level: For CFY, CFYm1, CFYm2 & CFYm3

CFY: Current Financial Year, CFY*m*1 (Current Financial Year minus 1), CFY*m*2 (Current Financial Year minus 2) and CFY*m*3 (Current Financial Year minus 3)

CFY

(Rs. In lacs)							
Total Income:				Actual expenditure (till ...):			Total No. of students: 3094
Fee	Govt.	Grant (s)	Other Sources (specify)	Recurring including Salaries	Non-recurring	Special Projects/ Any other, specify	Expenditure per student
1426.13	0	0	246.81	839.61	92.53	1084.04	0.65

CFYm1

(Rs. In lacs)							
Total Income:				Actual expenditure (till ...):			Total No. of students: 3094
Fee	Govt.	Grant (s)	Other Sources (specify)	Recurring including Salaries	Non-recurring	Special Projects/ Any other, specify	Expenditure per student
2286.97	0	0	449.57	1131.91	253.22	1110.00	0.84

CFYm2

(Rs. In lacs)

Total Income:				Actual expenditure (till ...):			Total No. of students: 3094
Fee	Govt.	Grant (s)	Other Sources (specify)	Recurring including Salaries	Non-recurring	Special Projects/ Any other, specify	Expenditure per student
1999.02	0	0	217.62	727.11	1287.78	0	0.77

CFYm3

(Rs. In lacs)							
Total Income:				Actual expenditure (till ...):			Total No. of students: 3094
Fee	Govt.	Grant (s)	Other Sources (specify)	Recurring including Salaries	Non-recurring	Special Projects/ Any other, specify	Expenditure per student
1567.49	0	0	375.44	600.19	1276.88	0	0.95

Items	(Rs. in lacs)							
	Budgeted in CFY	Actual expenses in CFY (till ...)	Budgeted in CFYm1	Actual Expenses in CFYm1	Budgeted in CFYm2	Actual Expenses in CFYm2	Budgeted in CFYm3	Actual Expenses in CFYm3
Infrastructure Built-Up	150.00	55.12	200.00	165.33	470.00	443.28	500.00	483.70
Library	15.00	3.66	15.00	12.06	15.00	10.24	22.00	19.61
Laboratory equipment	20.00	8.11	25.00	23.59	60.00	49.85	100.00	84.73
Laboratory consumables	2.00	1.74	2.00	1.62	2.00	1.85	4.00	3.94
Teaching and non-teaching staff salary	650.00	485.19	625.00	594.60	575.00	559.31	475.00	455.67
Maintenance and spares	20.00	10.77	17.50	15.59	16.00	9.70	6.25	5.99
R&D	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
Training and Travel	9.00	6.19	3.00	2.51	2.00	0.55	4.00	3.85
Miscellaneous expenses *	35.00	23.20	35.00	31.01	22.00	21.47	8.00	7.91
Others,specify	400.00	357.21	373.00	358.54	350.00	320.47	300.00	287.05
Total	1301.00	951.19	1297.50	1204.85	1512.00	1416.72	1419.25	1352.45

* Items to be mentioned.

10.2.1 Adequacy of budget allocation (10)

(The institution needs to justify that the budget allocated during assessment years was adequate)

Budget requirements under 'recurring' and 'non-recurring' heads are collected from all the departments and units before the commencement of the financial year. Allocations are made as per the availability of funds. Spending is monitored by the accounts section. Supplementary allocations are made in special cases, if needed. The institution carefully monitors the expenses such that the necessities are met without affecting the smooth working of the institution. The management has been very efficiently and effectively doing this over the past several years that the institution never had any serious budget crunch that affected the normal functioning of the institution.

10.2.2 Utilization of allocated funds (15)

(The institution needs to state how the budget was utilized during assessment years)

All the Heads of the departments are intimated of the extent of funds allocated against their budget proposals. Major works like construction, up gradation of existing infrastructure, procurement and maintenance of common utilities, house-keeping, procurement of furniture, etc., are controlled directly by Vice-Chairman and Executive Director in consultation with the Director.

10.2.3 Availability of the audited statements on the institute's website (5)

(The institution needs to make audited statements available on its website)

As of now, the audited statements of accounts of the institution are not made available on the institution's website. However, this can be done with the permission of the Governing Body.

10.3 Program Specific Budget Allocation, Utilization (30)

Total Budget at program level: For CFY, CFY*m*1, CFY*m*2 & CFY*m*3
CFY: Current Financial Year, CFY*m*1 (Current Financial Year minus 1), CFY*m*2 (Current Financial Year minus 2) and CFY*m*3 (Current Financial Year minus 3).

For CFY

(Rs. In lacs)				
Total Budget:		**Actual expenditure**		**Total No. of students: 488**
Non recurring	**Recurring**	**Non recurring**	**Recurring**	**Expenditure per student**
70	190	46.57	128.41	0.36

For CFYm1

(Rs. In lacs)				
Total Budget:		**Actual expenditure**		**Total No. of students: 458**
Non recurring	**Recurring**	**Non recurring**	**Recurring**	**Expenditure per student**
60	180	67.54	176.27	0.53

For CFYm2

(Rs. In lacs)				
Total Budget:		**Actual expenditure**		**Total No. of students: 419**
Non recurring	**Recurring**	**Non recurring**	**Recurring**	**Expenditure per student**
40	170	39.69	173.62	0.51

For CFYm3

(Rs. In lacs)				
Total Budget:		Actual expenditure		Total No. of students: 271
Non recurring	Recurring	Non recurring	Recurring	Expenditure per student
30	150	34.22	149.41	0.67

Item	Budgeted in CFY	Actual expenses in CFY	Budgeted in CFYm1	Actual expenses in CFYm1	Budgeted in CFYm2	Actual expenses in CFYm2	Budgeted in CFYm3	Actual expenses in CFYm3
Laboratory equipment	1.00	0.33	16.00	15.39	20.00	15.84	35.00	40.40
Software	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Laboratory consumables	1.00	0.83	0.90	0.70	1.00	0.57	1.00	0.96
Maintenance and spares	0.10	0.05	0.10	0.06	0.10	0.07	0.50	0.10
Training and Travel	2.00	2.10	1.50	2.14	1.50	1.40	1.50	1.25
Miscellaneous expenses for academic activities	1.90	1.77	1.50	1.63	1.40	1.33	1	1.12
Total	6.00	5.08	20.00	19.92	24.00	19.21	39.00	43.83

10.3.1 Adequacy of budget allocation (10)

(Program needs to justify that the budget allocated over the assessment years was adequate for the program)

Budget requirements under 'recurring' and 'non-recurring' heads are collected from all the departments and units before the commencement of the financial year. Allocations are made as per the availability of funds. Spending is monitored by the accounts section. Supplementary allocations are made in special cases, if needed. The institution carefully monitors the expenses such that the necessities are met without affecting the smooth working of the institution. The management has been very efficiently and effectively doing this over the past several years that the institution never had any serious budget crunch that affected the normal functioning of the institution.

10.3.2 Utilization of allocated funds (20)

(Program needs to state how the budget was utilized during the last three assessment years)

All the Heads of the departments are intimated of the extent of funds allocated against their budget proposals. Major works like construction, up gradation of existing infrastructure, procurement and maintenance of common utilities, house-keeping, procurement of furniture, etc., are controlled directly by Vice-Chairman and Executive Director in consultation with the Director. Hence the utilization is always more than 85%.

10.4 Library and Internet (20)

10.4.1 Quality of learning resources (hard/soft) (10)

The Central Library of Budge Budge Institute of Technology plays a pivotal role in the academic life of the institute. The fully computerized library is located on the 3rd floor of the Administrative Block and Journal Section is on the 2nd floor.

Physical Area of Library

- Total Area of Library – 605 sq. m.
- Book and Reading Area – 465 sq. m
- Journal Section - 140 sq. m
- No. of seats in reading space – 180
- No. of seats in E-Library – 10
- Provision of separate space for Faculty members with 18 seats.

Library Timings

- From Monday to Saturday : From 9 A.M. to 8 P.M.
- During Holidays – Monday through Saturday from 9 A.M. to 5 P.M.

Library Facilities

- Book issue/return
- Book Bank facility
- Reference Service
- E-library facility
- Reprographic facility
- Scanning facility
- Project binding facility
- Inter Library Loan facility (through DELNET)
- Accessing resources of Institution of Engineers (India)
- Accessing resources through institutional membership of AL & BCL.

Library Holdings

- News Papers – 5 Daily Newspapers
- Total No. of Title of Books – 3912
- Total No. of volumes of Books – 40744
- CDs – 250 educational CDs
- Journals & Magazines
- E-Books
- Lectures from Moocs/NPTEL
- Project Reports

Membership of Professional Society

Our Institute is a member of The Institution of Engineers (India) and Computer Society of India (CSI) through which we can access to the resources of these societies.

Library Membership

- American Centre Library
- British Council Library
- Developing Library Network

Library Automation

- Library is fully automated.
- Name of the Library software – Lsease (LIBSYS) with Barcode facility.
- Library Network facility is available in E-library.
- Users can access to e-resources through a static IP address.

10.4.2 Internet (10)

- Wi-Fi availability
- Name of the Internet provider: BSNL & PSPL
- Available bandwidth:10 & 05 mbps
- Access speed: 10 & 05 mbps
- Availability of Internet in an exclusive lab: yes (as required)
- Availability in most computing labs: yes
- Availability in departments and other units: yes
- Availability in faculty rooms: yes
- Institute's own e-mail facility to faculty/students: yes
- Security/privacy to e-mail/Internet users: yes
- (Instruction: The institute may report the availability of Internet in the campus and its quality of service.)