

### YEARLY STATUS REPORT - 2020-2021

Part A		
Data of the Institution		
1.Name of the Institution	DON BOSCO INSTITUTE OF TECHNOLOGY	
Name of the Head of the institution	Prasanna Nambiar	
Designation	Principal	
• Does the institution function from its own campus?	Yes	
Phone no./Alternate phone no.	02268878700	
Mobile No:	9820080079	
Registered e-mail	dbit@dbit.in	
Alternate e-mail	dbit@dbit.in	
• Address	Premier Automobiles Road Opp. HDIL Premier Exotica	
• City/Town	Mumbai	
• State/UT	Maharashtra	
• Pin Code	400070	
2.Institutional status		
Type of Institution	Co-education	
• Location	Urban	
Financial Status	Self-financing	

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Name of the Affiliating University			University of Mumbai					
Name of the IQAC Coordinator			Dr. S. S. Mande					
Phone No.			9867285270					
Alternate	phone No.			9867285270				
• Mobile				986728	5270			
• IQAC e-r	nail address			iqac.dbit@dbclmu mbai.org				
• Alternate	e-mail address			sudhakar.dbit@dbclmumbai.org				
3.Website address (Web link of the AQAR (Previous Academic Year)		https://www.dbit.in/agar.html						
4. Whether Academic Calendar prepared during the year?		Yes						
• if yes, whether it is uploaded in the Institutional website Web link:		https://www.dbit.in/academic- calendar.html						
5.Accreditation	Details							
Cycle	Grade	CGPA		Year of Accredita	ntion	Validity	from	Validity to
Cycle 1	B++	2.87		2019	9	28/03/	2019	27/03/2024
6.Date of Establishment of IQAC		17/07/2017						
7.Provide the lis					C etc.,			
Institutional/Depa Scheme Funding rtment /Faculty			Agency		of award luration	A	mount	
Nil	Nil		Ni	il Nil			Nil	
8.Whether composition of IQAC as per latest NAAC guidelines		Yes			1			
Upload latest notification of formation of IQAC			View File	<u>2</u>				
9.No. of IQAC n	neetings held du	ring th	e year	2				
Were the minutes of IQAC meeting(s) and compliance to the decisions have been		Yes						

uploaded on the institutional website?	
If No, please upload the minutes of the meeting(s) and Action Taken Report	View File
10. Whether IQAC received funding from any of the funding agency to support its activities during the year?	No
• If yes, mention the amount	

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

1. Quality Initiatives taken to improve NAAC score (Improving the Quality of Technical Papers written by students) 2. Initiative to improve NAAC score (Mapping of objectives of institute level committees on NAAC criteria) 3. Course on Research and Review

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

Plan of Action	Achievements/Outcomes
Introduction of	Increase in number of technical articles / papers published by students and teachers
Faculty Development Program conducted for improving quality of writing technical paper based on final year projects	Increase in number of technical articles in magazines/ technical newsletter/ papers published by students and teachers
13.Whether the AQAR was placed before statutory body?	Yes

### statutory body?

• Name of the statutory body

Name	Date of meeting(s)
College Development Committe	20/09/2020

#### 14. Whether institutional data submitted to AISHE

Year	Date of Submission	
2020	18/01/2020	
15.Multidisciplinary / interdisciplinary		
16.Academic bank of credits (ABC):		
17.Skill development:		
18.Appropriate integration of Indian Knowledge using online course)	e system (teaching in Indian Language, culture,	
19.Focus on Outcome based education (OBE):Fo	ocus on Outcome based education (OBE):	
20.Distance education/online education:		
Extended	d Profile	
1.Programme		
1.1	4	
Number of courses offered by the institution across all programs during the year		
File Description	Documents	
Data Template	View File	
2.Student		
2.1	990	
Number of students during the year		
File Description	Documents	
Data Template	<u>View File</u>	

2.2		0
Number of seats earmarked for reserved category as per GOI/ State Govt. rule during the year		
File Description	Documents	
Data Template		<u>View File</u>
2.3		396
Number of outgoing/ final year students during the	year	
File Description	Documents	
Data Template		<u>View File</u>
3.Academic		
3.1		73
Number of full time teachers during the year		
File Description	Documents	
Data Template		View File
3.2		60
Number of Sanctioned posts during the year		
File Description	Documents	
Data Template		View File
4.Institution		
4.1		17
Total number of Classrooms and Seminar halls		
4.2		277.63
Total expenditure excluding salary during the year (INR in lakhs)		
4.3		1092
Total number of computers on campus for academi	c purposes	

#### Part B

#### **CURRICULAR ASPECTS**

### 1.1 - Curricular Planning and Implementation

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

The Institute ensures effective curriculum delivery by following the academic calendar provided by University of Mumbai. Institute prepares its academic calendar according to the notices and circulars received from the university. The students are notified about the probable teaching days and dates of internal examinations, extension related activities and co-curricular activities. The faculty reviews the syllabus and mapping of the Course Outcomes with the Programme Outcomes and subsequently plans the curriculum in such a way that GAPS in the curriculum are identified and activities are planned at First to Final Year Programme level to bridge the gaps related to the syllabus. The process followed after this is as follows:

- Every department submits a workload statement at the beginning of each semester, upon which the time-table is prepared.
- Accordingly, each faculty member from every department prepares Teaching, Lesson, course and Practical plan with various curricular and co-curricular activities to address the gaps by allotting topics to be taught within the stipulated time at the beginning of the semester.
- Faculty uploads their course material like Teaching Plan, Lecture Notes, etc. on the Learning Management System MOODLE site for students e-learning and self-study.

The process for curriculum delivery is as follows:

- The Principal addresses the newly admitted students in "Induction Program". This program orients the students about the facilities, code of conduct and discipline, add-on courses and extra-curricular activities.
- In the start of semester each faculty member conducts prerequisite test for their respective subject to assess student's preparedness for the new course followed by taking lectures on the introduction of the syllabus.
- The periodic tutorial / class test / MCQ examinations are conducted in order to assess the regular progress of the students.

- To make the classroom sessions interesting and interactive different pedagogies and activities like group discussions, power point presentations, quiz, debates, tests, etc. are used by faculties.
- Internal Assessment tests are conducted periodically and its results is displayed and discussed with the students in the class room.
- Bright and weak students are identified on the basis of students' performance in class test and internal assessment.
- Individual and group assignments are given to the students.

  Bright students, are given challenging assignments, assessed regularly and feedback is given to the students.
- Guest lectures of eminent faculty, alumni or industry experts are arranged to give exposure of the current trends and the latest subject knowledge.
- Remedial classes are conducted for students performing poorly in the tests are counselled and mentored and extra sessions are conducted for them
- Student attendance is continuously monitored and uploaded on MIS. Students with poor attendance are counselled. Parents are also informed about their ward's attendance. Disciplinary action is taken in cases of chronic absenteeism
- Course exit survey is carried out to gather student's feedback about the course content, delivery, use of different pedagogies, types of assignments, etc. and is crucial in improving the course delivery in subsequent sessions
- Every department maintains the record of the lectures conducted, student attendance, assessments, co-curricular activity, departmental activity, audit reports etc.
- Faculty feedback is gathered through an online feedback document. Faculty classroom engagement is also gathered through PEER REVIEW and suggestions are given for improving classroom teaching.
- Academic Monitoring Committee meets frequently to monitor the academics and deliberate on better methods to improve student engagement. The committee also keeps a vigilant eye on the results, departmental proceedings and student needs and also keeps record of the different activities regarding teachinglearning, development and improvements of different methods of effective curriculum delivery.

File Description	Documents
Upload relevant supporting document	<u>View File</u>
Link for Additional information	Nil

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

The institute is affiliated to University of Mumbai and implements the curriculum prepared by the Board of Studies of University of Mumbai. The University declares the dates for the commencement and completion of the academic term as well as the schedule for the external exams. The University also shares the list of public holidays. Affiliated institutes have the flexibility to decide the dates for the Continuous Internal Evaluation. Other inputs required for preparing the academic calendar are gathered from the Management, departments, faculty committees and the Student Clubs.

The academic calendar notifies all stakeholders about the various activities and events that are planned for the academic term. Individual departments prepare their own academic calendar on the basis of the institute academic calendar.

All events at the institute level are conducted as per the schedule mentioned in the calendar.

All departments, too, adhere to their academic calendar as far as possible and submit an annual report in the form of a departmental newsletter.

The institute has developed a structured process for implementing the effective curriculum delivery by following the academic calendar provided by University of Mumbai. It is as follows:

- 1. Institute's prepares its academic calendar according to the notices and circulars received from the university and the students are notified about the probable teaching days and dates of internal examinations, extension related activities and co-curricular activities.
- 2. Every department submits a workload statement at the beginning of each semester, upon which the time-table is prepared.
- 3. Accordingly, each faculty member from every department prepares Teaching, Lesson, course and Practical plan with various curricular and co-curricular activities to address the

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- gaps by allotting topics to be taught within the stipulated time at the beginning of the semester.
- 4. Faculties upload their course material like Teaching Plan, Lecture Notes, etc. on the Learning Management System MOODLE site for students e-learning and self-study.
- 5. Concern faculty collects feedback about the subject from the students after the last University examination, reviews the semester completed, and discusses with them about the next semester. They incorporate the suggestions and prepare the course plan and distribute them to the students.
- 6. Faculty members also prepare assignments and case studies in advance. Resources like relevant websites and e-resources are made available for advanced learners.

File Description	Documents
Upload relevant supporting documents	No File Uploaded
Link for Additional information	https://www.dbit.in/timetable.html

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

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

#### 1.2 - Academic Flexibility

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

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

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

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

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

1

File Description	Documents
Any additional information	<u>View File</u>
Brochure or any other document relating to Add on /Certificate programs	<u>View File</u>
List of Add on /Certificate programs (Data Template )	<u>View File</u>

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

120

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

120

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

### 1.3 - Curriculum Enrichment

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

DBIT integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability into the Cocurricular and Extracurricular Activities All the engineering programs in DBIT offer at least one course that integrates issues relevant to Professional Ethics or Gender or Human values or Environment and Sustainability. These include Institute Level Elective( ILO)courses under Choice Based Credit System like Environment Management and Development Engineering. Environment Management covers topic like Global Warming, Environmental Policy, Environmental Protection, Bio-diversity, Disaster Management, Quality of Environment Management. In Development Engineering students learn about sustainable technologiesValues and Ethics in general and as applied to the engineering profession.

All UG students undergo a compulsory course in Professional Ethics in semester-5 and undertake projects related to the topic. Atleast 10-15% of all the BE projects in each programme are on topics related to sustainability and Environment. Students learn to build innovative products and technologies which are eco-friendly and sustainable. These are displayed to the public during the annual project competition 'INNOVEX'. Students also participate in project competitions related to sustainability like Smart India Hackathon, Tata Crucible Hackathon, etc.

The SIE club (Sustainable Innovations for the Environment) conducts sessions, training programmes and competitions on issues related to global warming, sustainable waste management, carbon credits, etc. as part of co-curricular and extra-curricular activities.

DBIT itself is involved in rain water harvesting, making the campus green by continuous tree plantation, waste management, using solar energy and so on. DBIT integrates courses that teach human values in its curricular by developing right attitude in life and in one's profession. Almost all engineering programs integrate and teach professional ethics through the courses - Professional Communications & Ethics 1 & 2 common to all branches. The institute keeps a separate lecture on Gender sensitization. N.S.S. & SIE club promotes environmental protection through tree plantation and other sustainable development programs. Every year N.S.S. units undertake a host of activities in the nearby vicinity and in the adopted villages. Various activities like quiz and invited talks are organized to create awareness about nature, biodiversity, environment and sustainability. The institute takes efforts for integration of ethical and human values through extra-curricular activities also. Major gender issues are focused and addressed

### through different activities in the institute.

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

### ${\bf 1.3.2 \cdot Number\ of\ courses\ that\ include\ experiential\ learning\ through\ project\ work/field\ work/internship\ during\ the\ year}$

15

File Description	Documents
Any additional information	<u>View File</u>
Programme / Curriculum/ Syllabus of the courses	<u>View File</u>
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	<u>View File</u>
MoU's with relevant organizations for these courses, if any	No File Uploaded
Number of courses that include experiential learning through project work/field work/internship (Data Template)	<u>View File</u>

### ${\bf 1.3.3 - Number\ of\ students\ undertaking\ project\ work/field\ work/\ internships}$

304

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

### 1.4 - Feedback System

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# 1.4.1 - Institution obtains feedback on the syllabus and its transaction at the institution from the following stakeholders Students Teachers Employers Alumni

### A. All of the above

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

### 1.4.2 - Feedback process of the Institution may be classified as follows

B. Feedback collected, analyzed and action has been taken

File Description	Documents
Upload any additional information	<u>View File</u>
URL for feedback report	https://dbit.in/feedback.html

#### TEACHING-LEARNING AND EVALUATION

### 2.1 - Student Enrollment and Profile

### 2.1.1 - Enrolment Number Number of students admitted during the year

### 2.1.1.1 - Number of sanctioned seats during the year

300

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

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

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

107

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

### 2.2 - Catering to Student Diversity

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

During the orientation the First year students and their parents are introduced to the ethics and value based education of DBIT, the organizational structure and its requirements. A formal -3 days orientation programme is arranged during the commencement of F.E. The parents and their wards are briefed on training and placement activities, mentoring and counselling, university credit and grading system, student council activities, various chapters and different clubs in DBIT, importance of attendance, disciplinary measures of college. Students are introduced to yoga education and practices.

Since the students admitted in FE have varying intellectual capacities, academic, socio-economical and cultural backgrounds the institute designed the Three Track programme to provide professional guidance and promote holistic development of students, to enhance academic, aspirational and wellness quotients of the students. Various activities are conducted in each semester to provide the requisite inputs to the students.

The departments assess the learning levels of the students to identify the slow and advanced learners. Pre-requite test scores, class tests scores, final exam score, student attendance are all used as performance indicators. At the entry level point the student's CET / HSC score is used as one of the performance indicators. Student competency in effective communications is also assessed at entry. After the first Internal Assessment (IA-1) test the weak ( slow learners) and bright ( advanced learners) students are identified. The weak students are mentored and counselled to understand their difficulties. The parents are also invited to participate in such sessions. The students are assigned peer mentors to help them with the course work. Remedial classes, additional coaching, extra practicals are organized for the students. Their academic performance is monitored regularly. On the other hand the

advanced learners are encouraged to participate in competitions like Hackathons, Robocon, Off-terrain vehicle building and so on. They are motivated to work on minor research projects, do advanced certifications through online educational platforms like COURSERA, SWAYAM, and do internships and present papers at national and international competitions. The students are also motivated to engage in product development and begin their own start-ups.

To make learning more student-centric ,result oriented and effective, students are provided on MOODLE the (i) course resource material module wise, (ii) lab manuals (iii) set of unsolved short and short questions / problems, design based questions & analytic based questions and (iv) Solution sets of all class tests conducted. Material is prepared by faculty with the support of NPTEL database, MIT -OCW and is updated regularly. At F.E level Maths, Physics, Literary club activities like quiz and debate competitions are organized to motivate the students towards deeper understanding of subjects.

For Academic Year FE- 2020-2021

At the entry level, when the students secured admission in DBIT in the First Year of Engineering, they were made to appear for Competency tests in various subjects of Engineering during the start of FE. The tool for testing was devised based on their entry level knowledge and some application based question so as to check their aptitude and inclination towards the subject.

Based on the scores of Competency Test and First Class test the weak students in all subjects were identified. For them special remedial classes were conducted in all subjects of First Year, SEM-I. The improvement in performance after attending the remedial classes was observed in majority of the subjects in IA exams.

Project based learning in Engineering Physics were assigned to the FE students where homogenization of weak and bright students happened and they worked together. The weak students have been motivated and their problem - solving ability will improve by interacting with the bright students. Mentoring sessions on regular basis have been conducted for the students along with faculty mentors and peer mentors. Regular meet up of the HoD and subject teachers with the parents of the underperforming and attendance defaulters happened and root cause of the problems was identified. All students including weak and bright were introduced to three track program to get self-motivated and develop interest and learn a new skill needed for technological advancement.

File Description	Documents
Link for additional Information	https://dbit.in/events reports.html
Upload any additional information	<u>View File</u>

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

Number of Students	Number of Teachers
990	73

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

#### 2.3 - Teaching- Learning Process

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

The COVID-19 pandemic has led the faculties of the institute to reinvent teaching strategies and pedagogies by using innovative methods. Various pedagogical methods appropriate for an online course were adapted in the department. The faculty used Zoom and Google Meet platform to conduct the classes and laboratory sessions online.

The students were provided a supportive learning environment in the online mode by using virtual whiteboard. The course content was made interactive and visual by using animations, videos, quizzes, Power Point Presentation, Microsoft Office tools, Google Meet, Moodle LMS, Google Colab, Open board, Pentad, Digital Pad and Pen, Open-source software's like Audacity, OBS & Shortcut. The faculty used a mix of learning tools for better engagement of students like flipped classroom, inclusion of interactive animation and simulations.

The teachers encouraged active learning strategies by engaging the students and promote their active participation by putting them at the center of the learning process in the form of group discussion. Short Animated Videos based on the concepts, Topic wise Quizzes, presentations made by students on various case studies were regularly used to engage the passive students and hold yourself accountable and practice time management for an upcoming MCQ exam.

To encourage collaborative learning use of online resources from

NPTEL, Coursera, YouTube links, etc. were used. Professional quality videos were made using open-source software to promote self-learning among the students. Blended learning like Cloud Computing, Collaborative Coding, use of quizzes, cryptex and crosswords, miniprojects case-study and project-based learning were practiced.

In order to make eLearning content mobile, the screens were recorded and videos made by using different tools during online lectures. Making the recorded video available offline in Moodle or YouTube. This benefited the students who missed online class due to connectivity failure.

Module wise teaching notes and mcq questions were made available to the students before the Internal Assessment and End Semester Exams.

For conduction of experiments during lab session, use of a mix of learning tools for better engagement was practiced throughout the department. Some faculties recorded the performance of the experiment on the kit or test set up and demonstrated the same and testing methods and how to record the readings. Use of FEKO Student Version simulation software was done where permissions were procured specifically for conduction of online experiments. Use of SONNET LITE (registered with the company a student version), APPCAD, use of virtual labs, radio mobile software, Open Signal App. Use of Scilab coding for majority of the subjects, Cloud computing, Collaborative coding, case study, miniprojects and project-based learning, AWS, coding assignments were given.

Real time case studies, Research and Review papers which involves reading, generating and redesigning ideas for Final year Projects were practiced for the TE students. Assigned Group based/ Individual unique experiment to bring out the student-centred and self-directed learning environment. Hands-on practical using virtual labs (compatible for mobile as well as laptop/desktop) were followed considering that all students don't have access to devices.

To facilitate online teaching-learning success, Head of the Department, class teachers, subject teachers, mentors interacted and engaged the students regularly while promoting regular communication along with their teaching learning process.

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

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

DBIT follows ICT enabled teaching wherein all the classrooms and labs are ICT enabled with projectors installed ,high speed wifi connection. Due to lockdown, teaching was fully conducted in an online mode. The faculty used various ICT enabled tools to enhance the quality of teaching-learning like:

- Faculties used Google meet or Zoom to conduct tests and for lecture delivery along with interactive methods for effective teaching such as PPT with animations, Video clippings, Use of online resources from NPTEL, Coursera, youtube links, Simulation tools, Virtual labs, online assessment tools like mentimeter - Quizz.com, various Cloud portals etc.
- WhatsApp group used as platforms to communicate, make annoucements, share information.
- For problem solving subjects, faculty have used various online tools like- whiteboard in Microsoft teams, Jamboard in Google meet, Pentab etc.
- All teaching/instructional material for conducting Experiments, online tests and e-assignments are given through Moodle.
- Activities such as Project presentation, Debates, Group discussions, Mentoring, PTA meet, AAC meet were also conducted online.
- The research journals and ebooks are available on online library to faculty and students.
- Departments conducted webinars, workshops and guest lectures on the new developments in the core subjects by Industry experts and Alumni which were broadcasted on Youtube.

File Description	Documents
Upload any additional information	<u>View File</u>
Provide link for webpage describing the ICT enabled tools for effective teaching-learning process	https://www.dbit.in/images/pdf/naac/ICT_Tools.pdf

### ${\bf 2.3.3}$ - Ratio of mentor to students for academic and other related issues (Data for the latest completed academic year )

#### 2.3.3.1 - Number of mentors

73

File Description	Documents
Upload, number of students enrolled and full time teachers on roll.	<u>View File</u>
Circulars pertaining to assigning mentors to mentees	<u>View File</u>
mentor/mentee ratio	<u>View File</u>

### 2.4 - Teacher Profile and Quality

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

73

File Description	Documents
Full time teachers and sanctioned posts for year (Data Template)	<u>View File</u>
Any additional information	<u>View File</u>
List of the faculty members authenticated by the Head of HEI	<u>View File</u>

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

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

13

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

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

#### 2.4.3.1 - Total experience of full-time teachers

#### 664.3

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

#### 2.5 - Evaluation Process and Reforms

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

The Internal Assessment (IA) examinations are conducted by the college on behalf of the University. The procedures prescribed by the University are strictly adhered to while handling the examinations. The internal examinations are held on the open source moodle platform enabling the students to continue to access the DBIT moodle and communicate with the subject teacher for doubt solving.

An Exam coordinator is appointed by each department. The department exam coordinator schedules the exam according to the dates mentioned in the Department Academic Calendar. The role of the exam coordinator is to schedule the exam, prepare the timetable, coordinate with the senior supervisor, prepare a supervision duty chart, create the required links, create breakout rooms according to the batches prepared and finally collect the marks after the papers are assessed. The coordinator also prepares a semester wise whatsapp group of the students to communicate with them and solve their queries if any.

The Institute appoints a senior supervisor who is responsible for the activities related to the platform on which the exam shall be conducted. The senior supervisor takes care of preparing a document related to the use of the platform, enrolling the teachers and the students onto the platform, creating courses, allotting the teachers to their respective course, create the required links to upload the documents like the junior supervisor report, briefing the teachers and the students, conducting a mock test for the students and scaling of the server.

During the exam the supervisor also confirms the number of students present for the exam and also coordinates with the subject teacher. Further the supervisor verifies whether the required documents are uploaded by the respective department like the junior supervisor report, the attendance sheet etc.

The subject teacher is required to coordinate with the senior supervisor and self enroll on the open source platform. The teacher creates a question paper link in the course created by the senior supervisor and checks for the number of questions, timing of the paper with reference to the guidelines provided by the University. The teacher finally collects the papers from the senior supervisor after the examination is over.

Students will require a Gmail account of their own to appear for the examination. Students are required to appear for all IA examinations through this same Google account. Students are required to keep the college ID card and roll number handy during the examination. In case of any further support, the students can approach their respective department Heads or exam (IA) coordinator.

File Description	Documents
Any additional information	<u>View File</u>
Link for additional information	https://dbit.in/timetable.html

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

DBIT has a very effective and transparent mechanism to deal with the grievances related to assessment, communication of various rules and notices and timely declaration of results. A student can approach the subject teacher / the department exam coordinator / the HoD / the examination cell / approach the Principal directly to redress the examination related grievance as per the requirement of the

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grievance. The Institution executes the guidelines provided by the University. Grievances related to orals and practical exams are forwarded to the University through proper channels as prescribed by the University. The norms regarding grievances are displayed on the University website.

The institute also follows up with the university on behalf of the students to ensure timely redressal of the grievance.

Grievances related to all forms of internal examinations conducted on behalf of the University like Internal Assessment (IA) test and term work are handled by the respective HoD and the department Exam Committee member and is communicated to the Controller of Examination (CoE) and the Principal.

The grievances during the conduct of the theory examinations are redressed in consultation with the Principal and if necessary, forwarded to the University by examination section. For any post examination queries, the student has to apply to the University, following the above mentioned procedure, within fifteen days after declaration of the result.

File Description	Documents
Any additional information	<u>View File</u>
Link for additional information	
	<pre>https://dbit.in/images/pdf/LetteforIAredress</pre>
	<u>albystudent.pdf</u>

#### 2.6 - Student Performance and Learning Outcomes

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

- Our institute uses the Programme Outcomes ( Graduate Attributes) framed by the National Board of Accreditation (NBA) and our Vision-Mission statement as the framework to define our Programme Educational Outcomes (PEO) , the Programme Specific Outcomes (PSO) and the Course Outcomes (CO).
- Each faculty prepares a teaching -learning plan and lesson plan for higher course at the beginning of the semester.
- Learning Outcomes (LO) are framed for each lecture.
- The COs are framed from the Lecture Outcomes .
- Each CO maps to a particular level of Bloom's Taxonomy in the cognitive domain

- The COs are mapped to the Programme Outcomes (PO) and gap areas are identified
- Value added courses, certificate courses, mini projects, seminars, expert talks, etc are planned to address the gaps
- The faculty share the COs with the student right at the beginning of the course.
- The COs are uploaded on MOODLE and are viewed by the students when they access the course files. They are also displayed on the website.
- COs are displayed in the laboratories for the students' reference.

File Description	Documents		
Upload any additional information	<u>View File</u>		
Paste link for Additional information	https://drive.google.com/file/d/1P- xEGO7EiMDXPsvFkj-1hbFOdfOOyH P/view		
Upload COs for all courses (exemplars from Glossary)	<u>View File</u>		

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

Attainment of Programme outcomes and course outcomes are evaluated by the institution: Considering the concept of the Outcome Based Education, assessment is done through one or more processes, carried out by the department. The process involves identifying, collecting, and tabulating data to evaluate the achievement of COs and POs using various tools/methods and the attainment is calculated. Rubrics are used for both formative and summative assessment of students. Same rubric is used for assessing any outcome, so that the faculty is able to assess student progress and maintain the record of the same for each student. The rubrics are shared with students before being evaluated so that they are aware of the performance criteria and their weightage. The methods of attainment displays the student's knowledge and skills from their performance in the class tests, internal assessment tests, assignments, end semester examinations, seminars, laboratory assignments, practical performance, mini projects, group discussions etc. These methods provide a sampling of what students know and/or can do and provide strong evidence of student learning.

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

### 2.6.3 - Pass percentage of Students during the year

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

392

File Description	Documents
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	<u>View File</u>
Upload any additional information	<u>View File</u>
Paste link for the annual report	https://dbit.in/images/pdf/naac/AnnualReport 2021-22.pdf

#### 2.7 - Student Satisfaction Survey

2.7.1 - Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design its own questionnaire) (results and details need to be provided as a weblink)

https://docs.google.com/document/d/14WD20CcNch6uFZkS3Xr3eDMi7SwmbMggn9wWAaONkis/edit

### RESEARCH, INNOVATIONS AND EXTENSION

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

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_	•		$\mathbf{\circ}$	$\mathbf{\circ}$	-	v

File Description	Documents
Any additional information	<u>View File</u>
e-copies of the grant award letters for sponsored research projects /endowments	<u>View File</u>
List of endowments / projects with details of grants(Data Template)	<u>View File</u>

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

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

1

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

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

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

126

File Description	Documents
Report of the event	<u>View File</u>
Any additional information	<u>View File</u>
List of workshops/seminars during last 5 years (Data Template)	<u>View File</u>

### 3.2 - Research Publications and Awards

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

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### the year

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

12

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

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

28

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

#### 3.3 - Extension Activities

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

The Vision statement of the institute emphasises on holistic development as well as creating socially conscious citizens who will contribute towards creating sustainable technologies.

The institute contributes to the welfare of the local communities not only through a strong NSS cadre but also through other socially relevant activities. The institute is located in an area that houses many slum dwellers and people from the under-privileged communities, which provides several avenues to serve the community. The important activities undertaken can be classified as follows:

- 1.Health and education
- 2.Skill development and training

#### 3.Entrepreneurship

#### 4. Technical projects to solve community problems

Health and Education : During this corona pandemic and lockdown, almost everyone got affected by one or another way. But it came as a mental as well as financial strike for the poor, financially unstable and daily workers who lost their job in this lockdown. Considering this circumstances, NSS DBIT conducted a survey for HIV positive children under the MUSKAN group activity. The MUSKAN group survey consisted of calling up the HIV positive families and taking their feedback on various issues faced by them. The Young at Risk (YaR) Ministry and outreach cell of Don Bosco Centre for learning had organised Raion distribution program on the 29th and 30th of August and 2nd September at DBCL Kurla campus, Malvani area and in Vasai areas. The event was in association with Sanmitra Trust. The 300 Ration packets was sponserd by Mr. Nikunj from Rotary club of Marine lines, Mumbai. Entrepreneurship and Skill development and training: The DBIT NSS unit along with the DBC NSS Unit conducted 5-day 'Entrepreneurship Development Programme' for the College students, unemployed and jobless youth from slums of Mumbai.

Technical projects to solve community problems: few technical projects are listed bellow

- A Novel Approach for Sustainable Handling and Disposal of Sanitary Pads.
- An Approach to Aid Mobility in Parkinson's Disease patients
- Design of Natural Cooling System for Urban Requirements
- LoRaWAN Enabled Remote Solar Photo Voltaic Energy Monitoring System
- Breast Cancer Detection and Segmentation using Deep Learning
- Block chain in Healthcare
- NSS Mumbai University Website and E DIARY Development and Maintenance Agreement

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File Description	Documents
Paste link for additional information	https://www.dbit.in/nss.html
Upload any additional information	<u>View File</u>

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

2

File Description	Documents
Any additional information	No File Uploaded
Number of awards for extension activities in last 5 year(Data Template)	<u>View File</u>
e-copy of the award letters	<u>View File</u>

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

29

File Description	Documents
Reports of the event organized	<u>View File</u>
Any additional information	<u>View File</u>
Number of extension and outreach Programmes conducted with industry, community etc for the last year (Data Template)	<u>View File</u>

- 3.3.4 Number of students participating in extension activities at 3.3.3. above during the year
- 3.3.4.1 Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations through NSS/

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### NCC/ Red Cross/ YRC etc., during the year

#### 121

File Description	Documents
Report of the event	<u>View File</u>
Any additional information	<u>View File</u>
Number of students participating in extension activities with Govt. or NGO etc (Data Template)	<u>View File</u>

#### 3.4 - Collaboration

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

98

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

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

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

11

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

#### INFRASTRUCTURE AND LEARNING RESOURCES

#### 4.1 - Physical Facilities

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

DBIT has full-fledged facilities related to infrastructure and equipment. The campus is lush green with an additional playground. The major facilities include 15 classrooms, 36 laboratories, 2 Seminar halls, an auditorium, cafeteria, office rooms, examination centre, medical rooms, boys & girls common rooms, prayer hall, students' activities centre, library, drawing halls and playground.

All the classrooms are maintained with comfortable ventilation and lighting level and are well furnished, connected with LCD projector, public address system and have an internet connection.

All the laboratories have a sufficient number of modern equipment. Apart from this it also has additional equipment facilities such as 3D printers, milling machines, vector network analyser, 32-bit logic analyser, flue gas analyser, antenna test measurement system to expose the students to the latest technologies. The institute has a well equipped and well-ventilated workshop with modern lathes, highend milling machines and shaping machines. Students are also trained on CNC lathe and Vertical Milling Centre

In today's digital time, the institute offered high-end software like Matlab, ANSYS Workbench including FLUENT, GENESYS and Solid Works. The institute not only provides high-speed internet through LAN and Wi-Fi but also blesses with a large number of computers facilities. The present computer to student ratio is 1.0 as against 4.0. The institute offers Moodle facilities, NPTEL courses, e-journals and webinars. The entire campus is under CCTV surveillance including lifts to maintain discipline all across.

The central library has a rich collection of books, e-journals, e-books and plagiarism software. It has a reading section, reference section and digital section. The digital section has dedicated 30 computers. This enables students and staff to get access to e-contents such as e-books, journals and NPTEL videos.

Low-cost reprography and printing facility is provided on campus for all students and faculty.

A hygienic, cleaned and affordable rate canteen facility adds additional feather to campus. Along with good food, it offers proper

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seating and a good ambience.

The campus has outdoor and indoor sports facilities such as football ground, basketball court volleyball court, carom, table tennis, gym and chess.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://www.dbit.in/Infrastructure.html

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

The Don Bosco culture of learning is based on the holistic development of a student. To stay true to this culture, priority is given to the participation of students in extracurricular and co-curricular activities. To provide a platform for the same, the college provides substantive facilities as given below for the students to venture out and be a part of the amazing array of sports and cultural events. The college is blessed with a lush green field to play sports like Football, athletics, volleyball, and throw ball. Adjacent to the football field concrete court is provided to play box cricket, badminton, and basketball.

Indoor game facilities like Table Tennis, carom boards, and Chess boards are available in girls' and boys' common rooms. Hysteria is the annual Cultural Festival and Colosseum is the annual technical festival of the college. Hysteria, an Inter department-College Event, encompasses cultural and sporting events held for all the different departments/colleges in Don Bosco Centre for Learning. A fully-fledged 506 sq.m auditorium holds innovative and sparking cultural events. These include domains of fine arts, literary arts, performing arts and photography, blood donation camp, Women self-defense training, gatherings, exhibitions, conferences and workshops, and Yoga classes. Yoga classes are conducted by an expert trainer, so as to inculcate it as an integral part of student life. Institute promotes students to play at inter-college and higher-level tournaments.

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

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

17

### 4.1.3.1 - Number of classrooms and seminar halls with ICT facilities

17

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

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

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

8.33

File Description	Documents
Upload any additional information	<u>View File</u>
Upload audited utilization statements	<u>View File</u>
Upload Details of budget allocation, excluding salary during the year (Data Template)	<u>View File</u>

### 4.2 - Library as a Learning Resource

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

The library facility at the institute has reference, circulation, periodical, multimedia, issue-return & reading sections. The reading room is well furnished to accommodate students at a time and provides a conducive environment for study. They have all types of required textbooks, reference books, periodicals, and journals. The libraries are automated using Open Source Koha Library Management System, which enables the students and faculty to check books availability anywhere on the campus. It also helps to maintain a record of books issue and return. Both students and staff can also access the library services from outside the campus, through web Access OPAC, http://opac.dbit.in. Institute also cultivates a research culture amongst students and faculty. To avoid plagiarism, the institute has plagiarism software. Institute also annually takes subscriptions of international e-journals and made them available on all computers in the institute. The library has dedicated 31 computer terminals connected with 150 Mbps internet so that students can access e-journals, NPTEL video, and notes. The library has taken steps to tie up with other technical libraries like IIT Bombay, NDL and others, to augment its services. The Peer library committee which also includes students' participation reviews the progress of the library.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for Additional Information	http://opac.dbit.in.

## 4.2.2 - The institution has subscription for the following e-resources e-journals e-ShodhSindhu Shodhganga Membership e-books Databases Remote access toe-resources

A. Any 4 or more of the above

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

### 4.2.3 - Expenditure for purchase of books/e-books and subscription to journals/e-journals

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#### during the year (INR in Lakhs)

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

#### 0.13246

File Description	Documents
Any additional information	<u>View File</u>
Audited statements of accounts	<u>View File</u>
Details of annual expenditure for purchase of books/e-books and journals/e- journals during the year (Data Template)	<u>View File</u>

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

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

4

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

#### 4.3 - IT Infrastructure

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

DBIT provides its students with well-equipped IT facilities with a total of 1092 computers, 150 Mbps internet. The internet is extended to all rooms and offices through LAN connections and routers. All classrooms are provided with anLCD projector, audio system and high-speed Internet connection. Servers have 12 to 32 GB RAM with Xeon and IBM processor. Institute has hosted all web services internally using Apache server along with two public Domain Name Servers locally. IPCop Firewall is used for protecting all servers and computers from outside attacks.

DBIT has a Central login authentication system (LDAP) facility. Internal Zimbra mail server is used for official communication. The institute makes use of One or Zero Helpdesk & Task Management System for raising technical support requests within the campus. Library

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uses updated Koha software while Moodle is used as a learning management system for academic activities and examinations. A biometriclogin system is used for staff attendance management. All students and faculty are provided with storage space in DBCL Drive, cloud-based self-hosted file sync and share solution.

MIS and NEST (New Exam System Terminal) software used for staff record with Biometric login system, students attendance, and academic activities. NEST is the in-house examination software. It is used to generate seat numbers, hall tickets, results, and analysis. Institute also has a dedicated high-quality audio recording studio.

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

#### 4.3.2 - Number of Computers

1092

File Description	Documents
Upload any additional information	<u>View File</u>
Student – computer ratio	<u>View File</u>

### **4.3.3 - Bandwidth of internet connection in the** A. ? 50MBPS Institution

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

### 4.4 - Maintenance of Campus Infrastructure

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

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

#### 269.29

File Description	Documents
Upload any additional information	<u>View File</u>
Audited statements of accounts.	<u>View File</u>
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	<u>View File</u>

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

Systems and procedures have been established to ensure that all facilities on campus are well maintained and appropriately utilized by students and staff.

- 1. Laboratories: Each laboratory has a faculty in charge and a lab assistant. The laboratory in charge needs to take care of the up-gradation of equipment and software as per the change in syllabus. The laboratory assistant along with the laboratory in charge handles the laboratory equipment and maintains the Dead Stock Register (DSR) and the routine maintenance of the equipment.
- 2. Library: Librarycommitteeaddressesspecificneedsofthestudentsan dstaffrelatedtoavailabilityofbooks, accessing of journal articles, utilization of plagiarism software, etc. Librarian with supporting staff maintains a central library. At the end of the Academic year, stock verification is done.
- 3. Sports ground: Sports faculty in charge looks after the sports facilities and activities. The sports committee along with the Sports -in-Charge ensures the availability of sports equipment and monitors the usage of the ground, courts, and indoor games facilities.
- 4. Class Rooms: Classroomsareallocated to all departments along with withnecessaryICT tools. The classrooms are utilized as per the timetable of the department. They are cleaned on daily basis.
- 5. IT facilities: All departments in the college are allotted Computers with essential software and necessary applications. The network administrator along with the assistants

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- maintainstheITfacilities in the institute.
- 6. Electrical, Drinking watercoolers, Lift, etc.: housekeeping committee inspects the facilities like toilets, water coolers, class rooms, corridors and conveys any specific requirement to Dean Adm inistrator. The canteen committee oversees the clean liness and hygiene in the canteen and monitors the food quality.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://dbit.in/images/pdf/naac/Procedure In frastructurefacilities DBIT.pdf

#### STUDENT SUPPORT AND PROGRESSION

#### 5.1 - Student Support

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

291

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

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

21

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

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

A. All of the above

File Description	Documents
Link to institutional website	https://dbit.in/images/pdf/event_reports2021 /studentProgression2021.pdf
Any additional information	<u>View File</u>
Details of capability building and skills enhancement initiatives (Data Template)	<u>View File</u>

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

297

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

297

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

#### **5.1.5** - The Institution has a transparent

A. All of the above

mechanism for timely redressal of student grievances including sexual harassment and ragging cases Implementation of guidelines of statutory/regulatory bodies Organization wide awareness and undertakings on policies with zero tolerance Mechanisms for submission of online/offline students' grievances Timely redressal of the grievances through appropriate committees

File Description	Documents
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	<u>View File</u>
Upload any additional information	<u>View File</u>
Details of student grievances including sexual harassment and ragging cases	<u>View File</u>

#### **5.2 - Student Progression**

#### 5.2.1 - Number of placement of outgoing students during the year

#### 5.2.1.1 - Number of outgoing students placed during the year

272

File Description	Documents
Self-attested list of students placed	<u>View File</u>
Upload any additional information	<u>View File</u>

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

#### 5.2.2.1 - Number of outgoing student progression to higher education

12

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

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

36

File Description	Documents
Upload supporting data for the same	<u>View File</u>
Any additional information	<u>View File</u>

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

3

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

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

Despite online mode of operation of Academics DBIT Student Council actively participated and contributed in various activities. The objective of the council is to make the students to participate in the development activities of the institute as well as to develop their personality, organizational skills and career through organizing interactive programs with the faculty, alumni, and industry. In nutshell, they ensure holistic development of the students from the beginning. The student council provides a common platform to students for co-curricular and extra-curricular activities. It is responsible for all the major technical, cultural, literary and sports activities organized in the college premises. The management of the institute endorses activities of the council.

Each year the student class representatives elect the following members (one boy and one girl student) to the student council: 1. General Secretary 2. Technical secretary 3. Treasurer 4. Cultural Secretary 5. Sports Secretary 6. Public Relation 7. Alumni Secretary

COMPOSITION, DUTIES AND RESPONSIBILITIES OF THE COUNCIL:

Sr No Name of the Post Responsibilities 1 General Secretary Spearheading the council activities, planning, executing and monitoring the calendar of activities across the academic year. 2 Treasurer To plan the budget for the various events handled by the student council, manage the disbursement of funds allocated to the council and prompt preparation of statement of accounts. 3 Technical Committee To organize intra and inter collegiate Technical Festival, skill development programmes, training programmes. The Math Club and Physics Club hold activites like Math-Physics Quiz, Poster presentation, etc 4 Cultural Committee To organize intra and inter collegiate Cultural Festival, 'Hysteria' formerly known as 'Crextal'. To organize events of the Marathi Club, Literary Club, Drama Club, Dance Club, Music Club. 'Samvaad', an inter-collegiate Parliamentary Debating competition is the flagship event of the Literary club. 5 Sports Committee To spread awareness of sports in the DBIT campus through intra and inter collegiate as well as organization of university level sports 6 Public Relations Committee To reach out to the students in the most effective manner by developing the college's communication strategy on campus through posters, blog posts, Facebook events, e-mails, videos and any other innovativeways. To collect sponsorship for various institute events 7 Alumni Committee To organize student interactions with alumni

through seminars, panel discussions, guest lectures; to assist in organizing annual Alumni Meet. 8 Sustainability Committee To generate interest and actions towards sustainability on campus through awareness creation, regular interaction with campus staff and administrators to identify opportunities for a green environment through composting, waste reduction, energy conservation, using alternate forms of energy etc.

Student representatives are an integral part of the following institute level committees. The student council members are groomed various leadership and outreach program. They prepare the annual activity calendar and propose the annual student activity budget. After approval of these by the management, they go for circulation of the activities to the entire students' community of DBIT to ensure maximum participation in the activities.

File Description	Documents
Paste link for additional information	https://drive.google.com/file/d/1k9PLMCslTsQ kDmQId6FLTyUX2ar4-2Fo/view?usp=sharing
Upload any additional information	No File Uploaded

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

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

28

File Description	Documents
Report of the event	<u>View File</u>
Upload any additional information	<u>View File</u>
Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions (Data Template)	<u>View File</u>

#### 5.4 - Alumni Engagement

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

The Salesians of Don Bosco is an international organisation headquartered in Rome. The Indian National Federation of the Past Pupils of Don Bosco was founded in 1968 in Mumbai. The Alumni Association of DBIT is affiliated to the Mumbai Provincial Federation of the Past Pupils of Don Bosco which in turn is affiliated to Indian National Federation of the Past Pupils of Don Bosco. DBIT is part of the Kurla unit of the Mumbai Provincial Federation. Despite the affiliation, individual Don Bosco Institutes are permitted to have their own Alumni association without a formal letter of affiliation. In the alumni meet of March 2018, the DBIT Alumni Association was formalised and elections were held for the various posts after receiving nominations. Distinguished alumni were felicitated for their contribution to various fields. Alumni of DBIT have been contributing to the development of the institute in over the past several years.

Some of the activities in which alumni have contributed are listed below:

- Visiting faculty for lectures in various subjects
- Expert lectures on upcoming technologies
- Full time teaching faculty(Several alumni are full time teaching faculty in this institute)
- Design and maintenance of institute website
- Conducting training programmes and workshops for students
- Mentoring students on employment, entrepreneurship and career planning: "Alumni Konnect" is an event organised for the first year engineering students to interact with alumni and learn from their experiences
- Presence on the Academic Advisory Committee of the departments
- Financial contribution for conferences
- •Coaching the presents students for football
- Helping forge MoU between their organisation and DBIT Functions of Alumni Association are as follows.

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- Since the formation of the Alumni Executive Committee, several meetings have been held to formalise the objectives of the association and plan the activities
- The Memorandum of the Association is framed
- The alumni web portal has been set up
- Activities to be carried out during the academic year have been identified.
- The Mumbai Provincial Federation is to be registered soon. By virtue of the affiliation, DBIT Alumni Association will not need to be registered separately
- Presently the accounts of the association are managed by the institute.

A total of INR 385308 was contibuted by Alumni for promoting and sponsoring various activities.

File Description	Documents	
Paste link for additional information	https://drive.google.com/file/d/1c722WwlqKlw 3UIoKhlxRaUZj-8JeQNIS/view?usp=sharing	
Upload any additional information	<u>View File</u>	

## **5.4.2 - Alumni contribution during the year** (INR in Lakhs)

C. 3 Lakhs - 4Lakhs

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

#### GOVERNANCE, LEADERSHIP AND MANAGEMENT

#### 6.1 - Institutional Vision and Leadership

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

The institute's Vision is to create enjoyable and holistic learning environment for the students to transforms themselves into socially conscious citizens. The pedagogy is advocated by the "Don Bosco Way" of social inclusiveness and active learning. We see our future

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engineers as able to conduct research to solve societal and industrial issues and become entrepreneurs in the area of sustainable technologies.

The Institute's mission is to nurture and foster the values like honesty, integrity, sensitivity toward the underprivileged and use innovative problem skills acquired during the program to develop sustainable solutions.

To realise its Vision and Mission the institute has appointed Dean of Research and Dean of Innovation and Entrepreneurship to drive the agenda of research and entrepreneurship. The DBIT journal of Science and Technology is published each year to showcase the research work done by students and faculty. To promote entrepreneurship and create a start-up eco-system an E-Cell and Institute Innovation Cell ( IIC) have been established. The E-cell organises Make-a-Thon to promote ideation and product development. The institute has also been able to participate in the ARIIA 2020 - 2021.

A Three-Track programme has been initiated to enable students from first year to final year to develop their skills and abilities in technical, social, cultural and sports fields and provide them with holistic development.

File Description	Documents
Paste link for additional information	https://www.dbit.in/images/pdf/ARIIA/ARI- C-34171.pdf
Upload any additional information	<u>View File</u>

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

The process of decentralization and the participative management is practised in all the aspects of operations. Following are few case studies:

CASE STUDY 1 Decentralization and participative management is the culture of our institute since past few years. • Prior to the end of the financial year each HOD submits the department budget to the Principal for the following academic year. • The HOD gathers the necessary requirements from their departmental colleagues. • The Principal consolidates all the requirements under various budget heads and presents the consolidated budget before the CDC for their

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approval, post which it is presented before the Board of Governors for approval.

CASE STUDY 2: The subject teacher is authorized to decide the organizing of guest lectures for the students, budgetary provision for the guest lectures and workshops, etc is part of department budget. The department plans and executes the curricular, extracurricular and co-curricular activities • For example of a co-ciricular activity:- Workshops conducted by Computer department as part of Teknack Gaming Week - Valorant.

File Description	Documents	
Paste link for additional information	https://www.dbit.in/dbit-faculty- committee.html	
Upload any additional information	<u>View File</u>	

#### 6.2 - Strategy Development and Deployment

#### 6.2.1 - The institutional Strategic/perspective plan is effectively deployed

DBIT takes immense pride in promoting research at the undergraduate level. Research initiatives have been a significant part of the institute's growth and development.

Sr. No. Strategy Outcome 1

To promote undergraduate research through final year project.

Steps to implement the strategy:

- a) Survey of faculty perception on the quality of final year project.
- b) Survey of student's expectation from the final year project.
- c) Based on the survey findings, designed tool to aid the literature review, literature summarization tool. Increase in number of publication. 2

To inculcate research culture among final year students.

- a) Steps to implement the strategy:
- a) Survey of faculty perception on quality research with respect to

final year project.

- b) Survey of student's perception about the research orientation in the projects
- c) Based on the survey findings, designed course to training the students in research methodology. Course has been completed 90% of final year students

File Description	Documents
Strategic Plan and deployment documents on the website	<u>View File</u>
Paste link for additional information	Nil
Upload any additional information	<u>View File</u>

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

Service rules:- The institution has framed the Service Rules according to the AICTE, UGC and UoM norms. The official working hours of the institute are from 9:00 AM to 5:00 PM. The teaching and non-teaching faculty have the benefits of EPF/ Group Insurance Scheme / Gratuity and Casual / Earned / Medical /Maternity / Compensatory Leaves.

Recruitment Policies: The HoDs reviews faculty requirements as per teaching load and submits the consolidated staff requirement to Principal. Recruitment takes place according to the norms of the University of Mumbai, AICTE and rules applicable for institute with minority status. The selection committee decides the worthiness of the faculty member by his/her performance in the interview according to the parameters. In case of the Ad-hoc requirement the recruitment happens through written test, demonstration lecture and interview with Principal & Director.

Promotional Policies: Promotions are based on merit and qualifications required for the higher position. The policy is outlined in the service rule book. Grievance redressal and Internal Complaints: The institute has formed Grievance Redressal Committee to handle student grievances regarding teaching and assessment. The committee has framed guidelines as well as processes for timely

review and redressal.

An Internal Complaints committee has also been formed to handle cases of gender discrimination, harassment or any other matter related to the day- to -day activities on campus. Committees are also in palce to handle the issues of minorities and those belonging to socially backward communities.

File Description	Documents
Paste link for additional information	Nil
Link to Organogram of the Institution webpage	Nil
Upload any additional information	<u>View File</u>

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

A. All of the above

File Description	Documents
ERP (Enterprise Resource Planning)Document	<u>View File</u>
Screen shots of user interfaces	<u>View File</u>
Any additional information	<u>View File</u>
Details of implementation of e- governance in areas of operation, Administration etc (Data Template)	<u>View File</u>

#### **6.3 - Faculty Empowerment Strategies**

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

The institute demonstrates its concern for staff well being by creating a congenial and caring environment on campus.

#### Staff self-development:

• Teaching and non-teaching faculty are provided sponsorship to upgrade their qualifications by sponsoring their Phd studies, sponsorship for skill enhancement like certification and

- training, granting leave for preparing for exams, book writing
- Sponsorship and grant of leave to attend various programmes like National / International conferences, workshops, STTPS and Seminars.
- Conducting Faculty Development Programmes on topics related to academics and self development
- Rotation of key leadership positions like HOD and Dean amongst the staff to provide an opportunity to develop leadership skills
- Individual computer for all teaching faculty with internet connection and access to high quality scholarly material

#### Health and welfare

- Ensure immediate medical attention for any health emergency by admitting to near by hospital (Kohinoor).
- Accidental death policy with Oriental insurance company for all staff
- Campus Minister and counsellors available on campus to resolve any conflicts or personal grievances of staff
- Prayer room and infirmary available for staff and students
- Class 4 employees given uniform every 2 years. Snacks and tea provided to Class-4 employees each day
- Ward of staff given preference under management quota for admission to the program

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

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

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

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

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

12

File Description	Documents
Reports of the Human Resource Development Centres (UGCASC or other relevant centres).	No File Uploaded
Reports of Academic Staff College or similar centers	No File Uploaded
Upload any additional information	<u>View File</u>
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff (Data Template)	<u>View File</u>

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

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

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

#### Teaching faculty appraisal:

The appraisal system is merit based and is used as a tool to offer or deny increments and promotions. The appraisal process not only evaluates the faculty performance against stated parameters but also provides guidelines for upgrading oneself.

The appraisal process comprises of the following elements:

- Faculty self-appraisal and Management review is conducted once a year by Management.
- Peer review of classroom teaching is carried out every semester by the senior faculty and Dean - Academics once every semester.
- Review of Course file is carried out by peers once every semester.
- Review of learning material uploaded on MOODLE is carried out by MOODLE review team once every semester.
- Student feedback on the teacher is conducted twice every semester.

#### Non-teaching staff:

The performance appraisal of non-teaching staff is carried out by their respective HODs. Different self-appraisal formats are used to capture data and information regarding the staff's attitude towards work, efficiency and commitment. The HOD reviews these formats and counsels and motivates the staff to improve performance

The performance of the class-4 employees is reviewed by the Dean of

#### Administration/ Administrator.

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

#### 6.4 - Financial Management and Resource Mobilization

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

The college has the mechanism of both internal and external audits for the financial activities carried out. Accounts department is headed by Accounts Manager who maintains financial accounts and prepares all financial statements and submits them to all statutory bodies like AICTE, Shikshan Shulka Samiti (SSS), etc when required. The institute is a self-financed private institute thus the main source of income is the tuition fee collected from the students. SSS decides the fee on the basis of the expenditure incurred by the institute. The institute submits audited statements of accounts as evidence annually or when required. The final statement of accounts is audited by an external chartered accountant every year.

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

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

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

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File Description	Documents
Annual statements of accounts	<u>View File</u>
Any additional information	<u>View File</u>
Details of Funds / Grants received from of the non- government bodies, individuals, Philanthropers during the year (Data Template)	<u>View File</u>

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

STRATEGIES FOR RESOURCE MOBILISATION 1. Motivating faculty to apply for research grants of UGC, AICTE, DSTE, BARC, IEEE for funding research activities and purchase of high end equipment for laboratories 2. Conduct of workshops, training programmes, certification courses, value added courses for students other than those mandated by the curriculum 3. Carrying out consultancy work for industry 4. Use of laboratory equipment for testing 5. Encouraging faculty to engage in product/process design and patent the same 6. Sponsorship of laboratories and equipment by industry through MoUs 7. Applying to various bodies for grant for conducting Short Term Training Programmes on new technologies 8. Sponsorship from corporates of students activities like competitions, technical festival, cultural and sports festivals., participation in national competitions like SAE -BAJA, GKDC, etc. 9.Approaching alumni, parents and well wishers for donations and sponsorship of the following activities: Fees, books, laptops for economically backward students Sponsorship of activities for community development Funding of conferences and workshops Purchase of laboratory equipment

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

#### **6.5 - Internal Quality Assurance System**

- 6.5.1 Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes
  - 1. How to improve quality of technical paper writing based on final year project work?

IQAC has conducted faculty and students survey to capture students aspiration about the research and writing a technical research paper. Based on the survey results IQAC has developed literature survey summeriaztion tool. The puropose of this tool was to help students to understand literature survey, identify the reserach gaps and prepare problem defination. This initiative has resulted in significant improvement the qualitative and quantitative improvement in quality of technical research paper based on final year project work. Each department has published technical maganize as result of this initative.

#### 2. How to improve NAAC/NIRF/AIIRA score

Institute level committees were asked to prepare objectives and outcome for AY 2021-22 for their respective committees. Each committee has planned activities and events in line with the objectives and prepared event planner for entire year. In order to improve score each committee was asked to map their activities and events on NAAC/NIRF and AIIRA criteria. This mapping has helped all committees to improve effectiveness of the events and activities.

3. Design and development of the course on Introduction to Research

To imrove undergraduate research IQAC in collobration with R&D cell of DBIT has developed course on Introduction to Research. This course is offered at SEM VI to the students of DBIT. This initative has resulted the paper publications in reputed conferences and journals by undergraduate students.

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

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

IQAC conducts periodic review of teachning learning processess for its effective implementation. The review process is as follows

- 1. Audit of LMS (Moodle) system to check the avaliblity of teaching and learning plan, lecture notes, lab manuals, sample question papers, module wise MCQ, previous year questions papers is perfromed three times in a semester.
- 2. Peer review of content delivery of faculty is perform to ensure the quality of teaching as per the peer review tool.
- 3. Faculty feedback is taken from students to understand the effectiveness of the content delivery.
- 4. Course file audit is conducted after end of every semester.

Based on findings of above processes corrective measures are taken to improve quality of tecahning learning processes.

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

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

B. Any 3 of the above

File Description	Documents
Paste web link of Annual reports of Institution	https://www.dbit.in/nirf.html#:~:text=NIRF%2 ODBIT%20NIRF%20The%20National%20Institutiona 1%20Ranking%20Framework,of%20Human%20Resourc e%20Development%20on%2029th%20September%2020 15.
Upload e-copies of the accreditations and certifications	<u>View File</u>
Upload any additional information	No File Uploaded
Upload details of Quality assurance initiatives of the institution (Data Template)	<u>View File</u>

#### INSTITUTIONAL VALUES AND BEST PRACTICES

#### 7.1 - Institutional Values and Social Responsibilities

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

DBIT ensures gender equality by providing equal opportunities to girl students and lady staff as to their male counterparts. Some of the actions taken by the Management are as follows:

- 1. Women are appointed to key positions like Principal, Deans and HODs and are important decision makers on campus
- 2. Girl students are given equal representation on the Students Council and are equally responsible for organizing institute level events
- 3. Lady staff lead many of the institutional committees and contribute immensely to the growth and development of the institute
- 4. All lady staff are eligible for 6 month fully paid maternity leave
- 5. Lady faculty are encouraged to pursue their PhD and are also sponsored for the same.
- 6. FDP, seminars, training programmes on gender sensitization are conducted each year for staff and students
- 7. The Women's Development Cell organizes several events for students and staff

#### (a) Safety and Security

CC TV cameras are placed all over the campus including in the

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- elevators and playgrounds.
- A discipline committee is formed to monitor campus discipline and address issues of harassment and ragging.
- A Internal Complaints Committee is put in place

#### (b) Counselling

- Counsellors are appointed to address any counselling needs of faculty and students , both female and male
- One of the campus Priests' functions as the Campus Minister and conducts counselling and mentoring events for staff and students.

#### (c) Common Rooms:

- Common rooms for women, which facilitate meetings and indoor games.
- Infirmary for girls students and lady staff members
- (d) Other Measures: Co-curricular activities 2020- 2021
- i. The WDC organized a guest talk on "Professional and Personal Life Balance during Lockdown", to increase the morale and confidence of students and faculty.
- ii. DBIT in association with IEEE WIE Affinity group SSGMCE Shegaon, organized a panel discussion on "Women empowerment- work health and society".
- iii. National Conference on Gender Bias in Technology 2021, in collaboration with AURO University, was organized.

File Description	Documents
Annual gender sensitization action plan	Nil
Specific facilities provided for women in terms of: a. Safety and security b. Counseling c. Common Rooms d. Day care center for young children e. Any other relevant information	https://www.dbit.in/images/pdf/naac/7.1.1_Sp ecific Facilties provided for women.pdf

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

A. 4 or All of the above

#### Biogas plant Wheeling to the Grid Sensorbased energy conservation Use of LED bulbs/ power efficient equipment

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

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

The institute strives to minimise the waste generation on campus by recycling and reusing wherever possible.

#### SOLID WASTE MANAGEMENT:

Canteen food waste is fed into the Biogas plant installed in the institute. The excess amount is put into the compost pit to convert the waste into organic fertilizer. This is then used as manure for gardening.

Paper waste from students' journals is sent for recycling and conversion into writing pads

#### E-WASTE AND METAL WASTE:

Metal waste from the workshops and project lab are salvaged or sold to the scrap dealer.

The institute has an E-waste management policy which is followed. Electronic and computer accessories which are declared as obsolete are sold at salvage value for recycling to vendors who provide the e-waste management certificate with MPCB (Maharashtra Pollution Control Board).

#### LIQUID WASTE MANAGEMENT:

The coolant and oil waste from the machines in the workshop and other laboratories is filtered and reused

File Description	Documents
Relevant documents like agreements/MoUs with Government and other approved agencies	No File Uploaded
Geo tagged photographs of the facilities	https://www.dbit.in/images/pdf/naac/Waste Management.pdf
Any other relevant information	<u>View File</u>

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

E. None of the above

File Description	Documents
Geo tagged photographs / videos of the facilities	No File Uploaded
Any other relevant information	No File Uploaded

#### 7.1.5 - Green campus initiatives include

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

- B. Any 3 of the above
- 1. Restricted entry of automobiles
- 2. Use of Bicycles/ Battery powered vehicles
- 3. Pedestrian Friendly pathways
- 4. Ban on use of Plastic
- **5. landscaping with trees and plants**

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

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

## 7.1.6.1 - The institutional environment and energy initiatives are confirmed through the

C. Any 2 of the above

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

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

7.1.7 - The Institution has disabled-friendly, barrier free environment Built environment with ramps/lifts for easy access to classrooms. Disabled-friendly washrooms Signage including tactile path, lights, display boards and signposts Assistive technology and facilities for persons with disabilities (Divyangjan) accessible website, screen-reading software, mechanized equipment 5. Provision for enquiry and information:

Human assistance, reader, scribe, soft copies of reading material, screen reading

A. Any 4 or all of the above

File Description	Documents
Geo tagged photographs / videos of the facilities	<u>View File</u>
Policy documents and information brochures on the support to be provided	<u>View File</u>
Details of the Software procured for providing the assistance	<u>View File</u>
Any other relevant information	<u>View File</u>

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

The Vision statement of the institute is about developing a socially

responsible citizen.

College has always endeavoured to instil the right attitude and moral responsibility among the students and faculty by organizing various events to promote social harmony. Many events related to ethical, cultural and spiritual values were conducted like session on "Yoga for well-being".

The institute celebrates several cultural events like Onam, Shivaji Jayanti, Christmas by organizing competitions and cultural events.

Clubs like Music club, Marathi Club, Literary Club, Dance club are part of the institute cultural scene.

The Sustainable Innovations for Environment( SIE) club organizes activities to promote social and environmental sustainability.

The outreach committee along with the NSS engages with underserved communities around the campus and provides an opportunity to sensitize the students about the needs and challenges of the weaker sections of society and trains them to innovatively address their needs through mini and major projects

Panel discussion on "Sustainability in Engineering"where academicians and researchers from different backgrounds discussed about different ways of incorporating engineering practices for providing a sustainable solutions, Entrepreneurship Development Programmefor students, unemployed and jobless youth from slums of Mumbai, webinar on COVID-19-Relief and Rehabilitation was conducted to understand challenges faced by people and how to solve their problems.

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

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

A talk by Ms.Rwitwika Bhattacharya was organized in the Institute to address Governance issues using "Swaniti" way. A way of working with elected representatives to provide critical support for constituency

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development. The roles of individuals to help the representatives be better and requisite support system to be able to make a difference. Through Swaniti, the younger generation are welcome to work with elected representatives for constituency development programmes, like local healthcare chain, solving clean water problem etc.

A 2 hour session on Status of Urban Governance in India was conducted by PRAJA on September 23 , 2020. Nearly 72 students of Final Year Engineering attended the session. Students were informed of their Rights and Duties as citizens and of the role played by PRAJA in ensuring good governance.

The Student council also arranged for a session on Consumer Protection Act, the students and staff were made aware of the existing rules in order to safeguard consumer rights and create exhaustive consumer protection law. Every year during Independence day staff commemorate our National Leaders and pay homage to our freedom fighters by means of a programme that includes hoisting of the national flag, singing of the national anthem and a speech by the Rector reminding us of our duty towards our nation.

File Description	Documents
Details of activities that inculcate values; necessary to render students in to responsible citizens	<u>View File</u>
Any other relevant information	No File Uploaded

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

4. Annual awareness programmes on Code of Conduct are organized

B. Any 3 of the above

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

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

During the lockdown and in the WFH mode the institute continued to celebrate all festivals on the virtual platform which were also livestreamed on YouTube. All events were collaborated by the faculty committee and students' council members. Online celebrations of the event are listed below.

Onam: All the participants shared photos of their family celebration including rangoli, pookalam, and wearing the traditional dress. The photos were arranged as a collage and displayed on the DBIT Instagram account.

Teachers Day: - The Students Council organised an online event to express their gratitude towards their teachers for their efforts and also had fun events and cultural performances in which all the faculty members participated.

Engineers Day: A panel discussion on "Sustainable Engineering '', was organized, where eminent speakers from the various industries of mechanical, electronic and computer domain were invited to deliver an interactive discussion with regards to sustainability.

Environment Day: Literature Society club responded by organizing "Tug of Words" in collaboration with the Social Innovation for Environment club, to create awareness on environmental issues on sustainable consumption and deforestation through debate.

Yoga Day: Celebration began by practising various yoga asanas for 1:30 minutes duration under a renowned certified trainer with 116 people on board.

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

#### 7.2 - Best Practices

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

#### BEST PRACTICE-1

Title of the practice: Strategizing Technology deployment for community needs through student training and engagement in community projects.

#### Objectives of the Practice:

Don Bosco organizations across the globe have been training young students for life and livelihood. Therefore the VISION statement of DBIT mentions about transformation of students into SOCIALLY CONSCIOUS CITIZENS who promote sustainable technologies. To realize this vision the institute has devised a strategy to formally engage students in activities that contribute to this vision.

- 1. To sensitize the students to the needs of the community.
- 2. To engage deeply with the community to understand their culture and practices and help identify their needs and their challenges.
- 3. To learn the principles of innovative problem solving.
- 4. To deploy latest technology for benefit of the community.

#### The Context:

With the advent of Artificial intelligence (AI), Machine learning(ML), Internet of Things (IoT), there is a clamour amongst engineering students to learn these new age technologies and achieve a fair degree of proficiency in deploying them. It is observed that though these technologies have the ability to be inclusive and serve all sections of society there is an overwhelming tendency to use it

for enhancing the comforts of the urban population. The institute took the initiative to offer a course in Development Engineering for the final year UG students of all branches to formally train them in addressing community needs through the use of technology.

During COVID the digital divide was exemplified with many children from underprivileged sections of society missing out of learning due to the absence of devices for online learning. Having access to new age technology and thereby building aspirations to compete in an increasingly digital world is a pipe dream for many such children. DBIT planned a programme to train the students in technology through the CrEAST programme. The curriculum was designed and the pedagogies identified and the proposal was forwarded to corporates for funding under CSR. Larsen and Toubro have agreed to support this endeavour through their CSR funding

#### The Practice:

• In order to sensitize the students to the needs of the community, DBIT envisages to establish an inclusive center for Creative Exploration and Advanced Skilling in Technology (CrEAST) within the premises of Don Bosco Center of Learning to induct girl students from underprivileged backgrounds and students with learning disabilities (LD) in Science, Technology, Engineering & Mathematics (STEM) through experiential learning. The center envisions to impart this training through a structured curriculum and appropriate pedagogies to provide hands-on training and practical skills. The purpose of the program is to make the participants future ready & motivate them to take up a career in STEM. The curriculum has been prepared by the faculty of DBIT and all sessions will be delivered by the faculty along with student interns.

DBITSevatech is an organization founded by the students and faculty of DBIT, which is created with a vision to "Improve Lives Through Technology". It aims to give technical support to NGOs who intend to upgrade themselves to a digital platform.

Students are also motivated and trained to participate in competitions like Avishkaar,, Tata Crucible, Smart India Hackathon which all have community problem solving at their core. Students are also encouraged to select community problems as part of their final year project

In the final year atleast 72 students opt for the elective subject of Development Engineering which focuses on understanding

developmental issues and technology deployment to address the issues. Students read about organizations working in the development space and participate in presentations and in-house competitions.

• Experts are engaged to deliver talks to students, field visits are also organised but due to the COVID-19 pandemic this year it could not be done.

Projects are carried out by final year students on solving community problems. These projects are exhibited during INNOVEX, the annual project competition, and the students are encouraged to convert their ideas into business proposals and start-ups.

#### Evidence of success:

•The initiative of DBIT to bring about awareness and interest among school students about STEM courses in the form of CrEAST was appreciated by the school managements and they were open to discuss the training programmes that would be beneficial for the students with Learning disability.

Three students of computer department along with their faculty mentor worked on a project to develop the website for an NGO called the Shantighar. Shantighar is a Shelter home for battered women and children who are in crisis and helps the women and children with providing them services and guidance.

Another initiative was development of official app of Young Women's Christian Association (YWCA) of Bombay. This enabled them to spread awareness about the workdone by them and also obtain registrations for events held by them.

At least 20%- 25% of the final year projects are related to solving community problems by deploying the latest technology

#### Problems encountered

Due the COVID-19 restrictions there were repercussions on all academic activities, including field trips and fieldwork. Engaging with the community and winning over their trust is vital to working with them

Community projects have a long gestation period and cannot be

completed as part of a year-long academic project

Students need to have a lot of commitment and passion since there are no quick fixes for community problems

Projects need to be carried forward for a couple of years before the solutions are implemented

#### Resources required

· Adequate manpower is required for surveys, sensitizing the community, monitoring the deployment and capturing the impact.

Resources are required for travel and stay with the communities

Students may need to spend some time away from their academic classes

Remuneration to experts to judge competitions, deliver expert talks

#### Cost of field visits:

Most of the communities considered for the above activities are in the vicinity of the institute therefore the costs incurred were nominal.

#### BEST PRACTICE-2

Title of the practice: Awareness of Innovation and Entrepreneurship amongst students and Faculty members of DBIT

Objectives of the practice:

To realize this vision the institute has devised a strategy to formally engage students in activities of innovation and entrepreneurship.

- 1. To create an entrepreneurial eco-system in the Institute.
- 2. To inculcate spirit of entrepreneurship amongst students and faculty
- 3. To provide necessary training and awareness to take up entrepreneurial activities.
- 4. To interact with successful entrepreneurs to motivate students and faculty
- 5. To mentor students and faculty to convert ideas into marketable products

#### The Context:

This is the initiative to promote the zeal to take up entrepreneurship as a career among the students and faculty at DBIT. Startup is a buzz word in Indiatodayand many hackathons are being conducted across the country. Due to the current pandemic, Hon. PM Shri Narendra Modi has given a call for Atma-Nirbhar Bharat, hence we, as a nation, are on verge of resuming our original entrepreneurial mindset. Also, entrepreneurship and startup are at the core of New Education Policy 2020. At DBIT, we have adopted the National Innovation Startup Policy (NISP) by the Ministry of Education as it is andhave been conducting pre-incubation activities for quite a time now and our flagship programme inthis genre isMake-A-Thon. We have successfully conducted the two editions ofMake-A-Thonwith great pomp and grandeur.

#### The Practice:

- 1. Students are engaged in mini-projects which may end up in starting up.
- 2. In the second year of engineering students are formally taught innovation techniques through InnovatioNext software and trained to identify problems and to devise innovative and creative solutions. This course is not a part of the formal curriculum laid down by the university
- 3. In the third year of engineering students are motivated and trained to participate in competitions like Chhatra Vishwakarma, Tata Crucible, Smart India Hackathon.
- 4. Experts are engaged to deliver talks to students on innovation, startup and entrepreneurship.
- 5. Field visits are organized to nearby incubation centres.
- 6. We have launched successfully conducted our flagship programme in startup and entrepreneurship, Make-A-Thon.
- 7. We have conducted Any-Body-Can-Do-Entrepreneurship (ABCDE) training programme for students and faculty
- 8. Our institute is on mission of training all our faculty members in Startup and Entrepreneurship and have stated faculty entrepreneurship training programme.
- 9. Regular participation in Atal Ranking of Institutions on Innovation Achievements (ARIIA) since its inception.
- 10. The final year projects are exhibited during INNOVEX, the annual project competition, and the students are encouraged to convert their ideas into business proposals and start-ups.
- 11. An in house MIS is being developed as a product which is used to capture staff and student attendance and many other

- features required in support of Academic
- 12. An in-house innovation competition," Solutions for Smart City" was conducted for the final year students

#### Evidence of success:

- 1. Students winning competitions like Smart India Hackathon which demonstrates their ability to ideate, think out of the box.
- 2. Our students have been consistently winning prizes in SIH since 2017.
- 3. Successfully conducted two editions of Make-A-Thon.
- 4. Presence of very active E- Cell with plethora of innovation, startup and entrepreneurship programmes round the academic year.
- 5. Student internship in Startups.
- 6. E-cell newsletter, "Teaching Marco".
- 7. Creation of position of Dean for Innovation and Entrepreneurship
- 8. Adoption of DBIT Innovation and Startup policy drafted on the basis of NISP
- 9. Constitution of NISP Implementation Team
- 10. Constitution of Institution's Innovation Council (IIC) on the guidelines of MIC (Ministry of Educations' Innovation Cell)
- 11. The daily login and logout details captured by the MIS is one of the evidence.

#### Problems encountered

- 1. Absence of budgetary provisions for Innovation and Entrepreneurship (I&E) activities.
- Students consider hackathons as competitions only and participate with a goal of winning a prize or certificate and not to startup.
- 3. Students tend to lose interest in (I&E) once out of campus.
- 4. Difficulties in seeking Government Grants.
- 5. Absence of I&E infrastructure on campus
- 6. Providing Industry Mentors during SIH and taking care of the expenses of Industry experts during the SIH.
- 7. Customization required when the system of the college changes and new additions are made to syllabus structure: MIS changes due to Mumbai university criteria

#### Resources required

- 1. Budgetary provisions for Innovation and Entrepreneurship
- 2. On campus Incubation Centre
- 3. Availability of mentors to groom the students and take forward their start-up ideas

File Description	Documents
Best practices in the Institutional web site	<u>View File</u>
Any other relevant information	No File Uploaded

#### 7.3 - Institutional Distinctiveness

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

#### HOLISTIC DEVELOPMENT OF THE STUDENT:

The Salesians of Don Bosco promote an education system that is STUDENT CENTRIC and which focuses on HOLISTIC development of the students. The term HOLISTIC encompasses physical, intellectual, emotional, social and spiritual development.

To realise these aspects in every student who takes admission in DBIT, we have proposed a 3-TRACK PROGRAMME along which the students progress right from the first year to the final year. The objective of this programme is to provide each student with opportunities for self discovery, realisation of one's potential, creating aspirations, developing an all-rounded personality, learning varied skills and being future ready as an engineer as well as a citizen.

#### The 3 TRACKS envisaged are as follows:

TRACK 1 is the ACADEMIC track which comprises of all academic activities like lectures and practicals. This track is driven by the teaching faculty and is curriculum centric

TRACK 2 is the ASPIRATION track which comprises of all co-curricular activities. This track is driven by the student clubs and chapters and is expected to make every student aspirational in terms of knowledge and skill gathering

TRACK-3 is the WELLNESS track which is about the emotional, social and spiritual growth of the student. This track focusses on building skills that will complement the students educational journey.

The students spend an assigned amount of time on each track from first year to final year. The departments plan the activities for each track and monitors students progress. Parents are also make a part of the students journey.

File Description	Documents
Appropriate web in the Institutional website	<u>View File</u>
Any other relevant information	<u>View File</u>

#### 7.3.2 - Plan of action for the next academic year

The plan for the next academic year (2021-22) will largely depend on the COVID restrictions prevailing at that time since the restrictions would decide if the classes will be conducted online or off-line.

In the online mode the plan of action would be as follows:

- 1. Conduct all lectures in the online mode using google meet as the platform
- 2. Conduct practicals online for Computer Engineering and IT students. For Mechanical Engineering and EXTC students the practicals would be demonstrated by the concerned staff
- 3. All internal assessment tests to be conducted online. Question paper to contain both Multiple Choice Questions as well as descriptive questions.
- 4. Virtual industry visits, expert lectures and webinars to be conducted for courses to augment classroom teaching
- 5. Mini projects, major projects and seminars to be conducted in online mode
- 6. Students and staff to be encouraged to register for online certification courses of NPTEL, COURSERA, SWAYAM, UDEMY, etc.
- 7. Students and faculty to be encouraged to do internships during semester breaks
- 8. To relieve student boredom, extra-curricular cultural and sports activities to be organized in the online mode
- 9. All student festivals, student chapter events, club events to be conducted in online mode
- 10. ISO surveillance audit to be carried out in November 2021.
- 11. All NAAC, NBA, IQAC, CDC and other meetings to be scheduled in online mode