

FOR 2nd CYCLE OF ACCREDITATION

INTERNATIONAL INSTITUTE OF INFORMATION TECHNOLOGY

INTERNATIONAL INSTITUTE OF INFORMATION TECHNOLOGY BANGALORE 26/C ELECTRONICS CITY PHASE 1 HOSUR ROAD BANGALORE 560100

www.iiitb.ac.in

SSR SUBMITTED DATE: 04-08-2021

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

August 2021

1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

The International Institute of Information Technology Bangalore (IIITB) was established in 1999 jointly by the Government of Karnataka and the IT Industry with the mission "to build on the track record set by India in general and Bangalore in particular, to enable India to play a key role in the global IT scenario through a world class institute with a focus on education and research, entrepreneurship and innovation."

In 2005, the Institute was recognized under Section 3 of the University Grants Commission Act as a "Deemed to be University" in the de-novo category. Subsequently, the Tandon Committee constituted by the Ministry of Human Resources Development in 2009, to review the functioning of Deemed Universities, included IIITB among the category of institutions that, on the basis of "their achievements and performance as well as potential, justify their continuation as 'deemed universities".

The academic programme commenced in 1999 with a two-year post graduate diploma programme as the Institute did not have a "Deemed University" status at inception. In 2005, the institute was recognized as a "Deemed University" by the UGC. It started offering M.Tech, MS and Ph D programmes. On the advice of the Government of India the name of the Institute was changed from "Indian Institute of Information Technology" to "International Institute of Information Technology".

In 2012, a five-year integrated M. Tech programme admitting students who have completed their higher secondary school educations was started. Recognizing the potential of digital technologies to improve the lives of people and the increasing need to train professionals in harnessing this potential, IIIT-B is launched an innovative two-year inter disciplinary Masters Programme for the Digital Society from August 2015. IIIT-B continues to be a post graduate school with about 320 M.Tech students, 550 integrated M Tech students and about 110 MS / PhD students.

More than 3,600 students have graduated from the Institute since its inception many of whom currently hold leadership positions in over 100 blue-chip MNCs and large companies in the areas of IT products and services, in India and abroad. The institute alumni have also founded nearly 60 enterprises

Vision

International Institute of Information Technology, Bangalore was set up consequent to the Karnataka Industrial Promotion Policy for the Information Technology sector of 1997. Founded as an institution to emphasize 'knowledge is supreme (Gyanam Uttamam) IIITB is envisioned to strive for excellence in IT higher education at global level.

The Vision of IIITB is to contribute significantly to Information Technology for transforming the lives of individuals & society and efficient conduct of sustainable businesses, social

enterprises, and governments through continuous innovation in Information Technology education, research, and entrepreneurship.

The objectives set to realize the vision are appended below: -

- · Become a globally recognized institution of higher learning in the field of Information Technology, particularly at the Masters and Doctoral levels.
- · Engage in research work and create new knowledge in Information Technology
- Provide knowledge based technological services and consultancy to satisfy the needs of the industry, governments and society as a whole.
- · Contribute to advancing the state of the art of Information Technology by authoring papers and books.
- · Create value by nurturing and encouraging entrepreneurship.
- · Help in building capabilities in emerging Information Technologies and opening up new vistas in IT education and research.
- · Nurture students as global citizens and impart value based education.
- · To do all acts, matters and things as are incidental and conducive to the attainment of the above objectives.

Mission

The Mission of International Institute of Information Technology Bangalore (IIITB) is "to build on the track record set by India in general and Bangalore in particular, to enable India to play a key role in the global IT scenario through a world class institute with a focus on education and research, entrepreneurship and innovation."

Towards achieving this mission, IIITB is committed to excellence through the delivery of outstanding integrated, post graduate and research programmes that remains current and responsive to the diverse needs of those it serves. The Institute's faculty and staff promote intellectual, professional, social and personal development of its students through innovations in learning, scholarship, and other creative endeavors. In carrying out this mission:

- \cdot We believe in lifelong intellectual development of students, faculty, and staff. We are committed to the pursuit of knowledge and continuous growth in learning and teaching.
- · We believe that students should experience cultural activities as they grow in their appreciation for the diversity of ideas and peoples, both inside and outside the classroom.
- · We believe that an outstanding physical infrastructure, along with a culture of excellence in all of our endeavors, provides an environment in which our students and faculty can thrive personally and intellectually.
- · We are dedicated to promoting outreach activities, community education and partnerships with surrounding entities.
- · We promote a safe, healthy and sustainable environment where our community members can flourish

personally and socially as whole beings with obligations to improve their environment.

- · We maintain the highest academic quality and ensure that our programs remain innovative and responsive to the ever-changing and diverse needs of those we serve.
- · We are dedicated to attracting and supporting a diverse student, faculty and staff population and enhanced multicultural learning opportunities.
- · We support a community and climate of respect and thoughtfulness among students, faculty, staff, and the people of our community, state, nation and world.
- · We commit to being responsible and accountable in our operations at all levels of the institution, including continuous assessment of our academic programs and transparency in fiscal and operational proceedings.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

A very prominent institutional strength of IIITB has been its world class faculty. The institute has an outstanding faculty drawn from the some of the best institutions across the world such as MIT, Cornell University, Pennsylvania State University, University of California Berkeley, IISc, and University of Toronto. The institute's pool of distinguished professors has the right mix of academic expertise, research experience, global industry exposure and insights. To enhance social impact, the Institute and its faculty members offer consulting services, often pro-bono, to government agencies, industry and other universities. Areas of expertise shared by faculty include technology assessment, project management, product and process design, modelling and simulation, software development and testing.

An important hallmark of IIITB has been its robust industry connect. Through its Industry Advisory Board, the institute ensures that its curriculum and syllabus are current and meets the ever changing requirements of the industry. This has fortified IIITB's unique strength of ensuring a near 100% placement with major companies in the areas of product, hardware, research and development consistently visiting the campus. Students have also bagged international offers with record salaries. Some of the consistent recruiters include Cisco, Morgan Stanley, TCS, Accenture, Telstra, MediaTek and MathsWorks.

Another strength of the institute has been its Open environment that fosters creativity, critical thinking and knowledge sharing, genuine commitment to make a lasting

contribution to the society. At IIITB, these serve as guideposts in our pursuit of excellence in teaching, research and student development.

Campus location and the state of the art infrastructure has always been a big strength for IIITB. The nine-acre campus strategically located in Electronic City, the heart of the IT Industry in Bengaluru, has five main buildings with facilities like Innovation Centre, academic blocks, research labs, state-of-the-art classrooms, playground, library, food court, four student residence halls, medical room and multipurpose hall.

Institutional Weakness

Page 4/106

The Institute Regulations and Policy guidelines for admissions of students and recruitment of staff and faculty is without any differentiation to gender, caste, creed or religion. The Institute follows a non-discriminating policy and all admissions and recruitment.

However, lack of a robust Male – Female ratio amongst students has been a concern and weakness that the institute has been working on relentless to overcome this concern. Following are a few steps that the institute is considering to overcome this: -

- (a) Relook at the admission strategy to find ways to accommodate more girl students. Provide merit scholarships, prizes and other incentives in order to make admission more lucrative for female students.
- (b) Concession in the tuition fees or reduced hostel fee can make parents feel that getting admissions into IIITB is easier for women.

Institutional Opportunity

IIITB sees the new National Education Policy (NEP) as an excellent opportunity for its growth towards being a multi-disciplinary research institution with IT playing a major role in virtually all fields. The flood of information technology (IT) products and services entering the market place often obscures the need to nurture the research enterprise. But as I.T. becomes integrated into all aspects of society, the need for research is even greater. And the range of issues that need to be addressed is broader than ever. IIITB is viewing this as a great opportunity with its already strong research base and its already early foray into Digital Society curriculum.

The institute also sees the NEP as an opportunity for collaborating with adjoining institutions like IISc, IBAB, National Law school etc to further our intent of expanding towards multidisciplinary education and research.

Globalization is the emergence of a global free market in higher education, resulting in the blurring of cultural, intellectual, spatial, temporal boundaries. This provides further incentives and opportunities for IIITB to develop closer cross-border, cross-national and cross-institutional collaborations to expand its academic programs, research, and

technology transfer, to prepare its graduates into well-informed citizens and leading professionals, ready to engage with the global community.

IIITB's reputation and the interest and involvement of its alumni have increased drastically in the last few years. Yet, there is far more potential. Alumni is still a partly untapped opportunity for the institution as there is a possibility of initiating multiple engagement to gauge alumni support.

Institutional Challenge

One of the challenges the institute is facing is finding more space for its expansion. With the multi-disciplinary focus of the NEP coming into play, the institute has already envisaged a threefold increase in its strength. In order to expand and enhance its infrastructure facilities, the institute has already started looking for available land in and around the existing campus.

04-08-2021 04:47:00

Over the years, data pertaining to academics and research in the institute has grown multifold. The more data an institution has, the stronger its data governance policies must be. The institute is hoping to overcome these challenges on Data storage, Data security, Data management and Data Policy Implementation processes.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

IIITB was established as an educational institution focusing on Information Technology. IIITB's vision of continuous innovation in IT education, research and entrepreneurship are aimed towards significantly transforming the lives of individuals and society, including their deployment in sustainable businesses, social enterprises, and the government. These aspects are reflected in the various academic courses, the Integrated MTech, MTech, and MSc (Digital Society) programmes offered by the Institute and incorporated in the curricula.

Curricular Design and Development Highlights

- The curriculum of M.Tech.programmes in Information Technology were revamped into CSE and ECE, in tune with the contemporary demands
- A unique programme of its kind called MSc Digital Society was designed from scratch and was implemented from 2015 onwards. It is a unique programme that intersects information technology and social sciences.
- An **inter-disciplinary** Post-graduate Diploma Programme in Big Data Biology sanctioned by the Department of BioTechnology(DBT) was started in collaboration with IBAB. This programme fills the gap of professionals equipped with both data science and biological training.

Curricular Planning and Implementation Highlights

- A lot of care and attention was given to the sequencing of the courses in the curriculum. Innovative implementation of CBCS provides an opportunity to the students to even obtain **double specialization** with-in the same branch.
- Faculty members of IIITB have come up with a variety of innovative pedagogical techniques to improve and enhance students' learning. **The mandate-oriented learning** involves modeling a course into several "learning mandates."
- Faculty members use using innovative pedagogy to make learning efficitive. For example, faculty members have leveraged **gamified learning** which helps students understand the nuances of auction systems.

Curriculum Enrichment

• The curriculum review committee includes external experts from industry and academia. For example, the curriculum review inputs enriched CSE and ECE programmes with new specializations in AI and ML

Feedback System Highlights

A robust feedback system is in place to incorporate inputs from students, parents teachers, alumni, and industry.

Based on student feedback, they were given the choice to split one whole semester worth of credits(20 credits) between projects and courses instead forcing them to do only project or only course work.

Teaching-learning and Evaluation

Student Enrolment and Profile Highlights

- The admissions to the Integrated M.Tech. and M.Tech. are offered for students above the **99th percentile** in GATE and JEE Main, respectively
- Meritorious Students get opportunity to visit world-class universities like MIT, EPFL, etc. through the university exchange program or through scholarships, such as MITACS,DAAD etc.

Catering to Student Diversity

- Advanced learners at the institute encouraged through the Deans' List programme. Top performing students on the Deans' List are given merit scholarships,
- Many women-centric initiatives are taken to make women students safe and empowered.
- Campus is designed to be accessible to physically challenged students. Two visually impaired students, one of whom went to secure Institute Gold Medal.

Teaching-Learning Process Highlights

- All classrooms are "smart" with projectors, digital writing pads / smart boards, audio systems
- All courses hosted on Learning Management System.
- Lecture capture solutions are implemented to provide an opportunity to the students tow review the lecture through a video recording of the class
- IIITB has a dedicated Academic Performance Management Committee (APMC) that creates guidelines and monitors the evaluation of students whose work needs improvement.

Teacher Profile and Quality Highlights

- IIITB employs faculty members of the highest quality with the selection criteria and selection process comparable to world-class institutions like IITs.
- PhD is the minimum qualification for appointment as a regular faculty member at IIITB
- In order to maintain industry-relevance of the programmes, IIITB employs "Adjunct Faculty" and "Visiting Faculty" for teaching courses in cutting-edge

Evaluation Process and Reforms Highlights

- Digital Exampad device is used for conducting examinations. It cuts down the usage of paper, reduces malpractice with randomization of questions, and eliminates the possibility of tampering of answer books after the examination
- All publications go through checks using institutional accounts with Urkund, and Turnitin for plagiarism checks for fulfilling degree requirements, to fulfill regulatory requirements of UGC and AICTE.

Student Performance and Learning Outcomes Highlights

- All courses following the norms of Outcome-Based Education.
- All instructional material, assessments are traceable to CO, PO and PSO.
- Faculty Development Programme by leading authority on OBE Prof. N J Rao.

Research, Innovations and Extension

HITB has laid out several institutional mechanisms to foster a culture of research and aid researchers in reaching out to stakeholders in the industry and society at large.

- The research promotion policy has been discussed as a part of several Governing Body meetings.
- Domain-specific research centres encourage faculty members to align their research activities with the broad objectives to actively collaborate with other researchers.
- Ethics Committee to offer advice and guidance on research ethics.
- Research Council to oversee sponsored research collaborations, IP policies, research funding assistance, etc.
- Samvaad, a weekly research gathering of the institute, where faculty members present their research to the rest of the institute.
- Travel Fellowships to facilitate research scholars and faculty members to present their research at major international conferences across the world.
- Research, Innovation, Society and Entrepreneurship (RISE) is an annual 3-day event.

The Innovation Centre was incorporated in 2009. Since 2014, the Innovation Center runs an initiative called IMACX (IOT to Mobility Apps for Community Excellence). IMACX has been a response to the Vision 2020 Initiative by the Government of Karnataka.

Collaboration Highlights

 Academic collaborations with leading universities both within India and abroad including Asia, USA, and Europe

Faculty members are expected to pursue an active research agenda in addition to their teaching, administration, and outreach responsibilities.

- As a part of IIITB Faculty Consultancy Guidelines, All Individual consulting assignments need to be recommended Dean-R&D and approved by the Director.
- IIITB faculty follow an Intellectual Property (IP) policy approved by the Governing Body in 2010.

Activities to sensitise students to social issues

IIITB student body has been actively driving several diverse activities under the guidance of the Office of the Coordinator of Student Affairs. The Institute has conducted POSH training for faculty, staff, and students, since 2019, to inculcate awareness of the POSH Act 2013, on Sexual Harassment of Women at Workplace (Prevention, Prohibition, Redressal). During work from home period, IIITB faculty have started organizing public talk series, called book-reading sessions, which are faculty and expert talks to promote literature in the regional languages of India.

Page 8/106 04-08-2021 04:47:01

Infrastructure and Learning Resources

Physical Facilities Highlights

- IIITB has created a state-of-the-art higher education campus infrastructure which is eco-friendly and incorporates natural elements perfectly within its symbiotic design. There are 5 seminar halls with an individual seating capacity in the range of 150-200.
- The Institute has 21 well-appointed laboratories spread across 2,697 sqm. These laboratories are managed by suitably qualified staff members.
- IIITB's computing infrastructure benefits from a close oversight by faculty members with deep research interests in electronic systems, databases and systems software, networking and information security. High performance servers available for conducting advanced experiments in AI and ML.
- To ensure the physical fitness of its students, the Institute has well-equipped gymnasia, both for men and women. Trainers are available to advise and cater to specific individual needs.

Library Highlights

- The Institute Library has a total seating capacity of over 85 persons. It has a collection of over 14,500 print titles as well as access to various electronic databases with many more titles.
- Fully air-conditioned library functions throughout the year with extended working hours during exams.

Eco-friendliness

- IIITB Campus was awarded as Green University under Platinum category by third-party audit
- With a total area of 11,238 sqm, close to one-thirds of the campus is covered by greenery, consisting of lawns, trees, flowering plants and water bodies. Safe and hygienic seating arrangements have been created within these green spaces for students and other IIITB community members to engage in relaxing and engaging academic discussions.

Hostel Facility Highlights

- Student hostels on campus have multiple RO Water Dispenser, seven heavy duty automatic washing machines and two dryers to take care of all the laundry requirements.
- In-house catering facility with a modern kitchen set-up and adequate facilities for hygienic and safe cooking for over 1000 persons at a time.
- Access to two ATM counters. Round-the-clock security arrangements are provided with suitably trained personnel and adequate CCTV coverage of key spots. A medical room staffed by two visiting doctors is available to take care of immediate student needs while arrangements with nearby multi-specialty hospitals exist for emergency situations. WiFi is available throughout the campus.

Student Support and Progression

The Student Activities Council (SAC) at IIITB is a student-elected, student-governed body, consisting of equal membership from its under-graduate and post-graduate programme students.

The SAC:

- Acts as a bridge between the Institute administration and the student community.
- Addresses and escalates important issues of the student community to the Institute management and helps in resolving them.
- Plans and executes student performances at all important events such as Convocation Day, Foundation Day and Alumni Day.
- Coordinates with all the other student committees and student clubs for smooth functioning and scheduling of all student activities on campus.
- Plans and coordinates various events during the year--annual inter-college cultural festival (Infini8), Freshers' Night, Teachers' Day, Farewell for graduating students, etc. It also plans such as Republic Day, Independence Day, Gandhi Jayanti, Dussehra, Diwali, Christmas, Onam, Sankranthi etc.
- Serves as the central platform for discussion of student opinions, concerns, plans and activities.
- Counsels students regarding academic, disciplinary and extra-curricular matters.

Apart from SAC, the Institute has the following committees too:

- Alumni Committee: Constantly interacts with the alumni, seeks their help for various activities on campus, such as invited talks, mock interviews, and for conducting the Annual Alumni Day.
- Branding Committee: Coordinates and executes all activities related to the Institute's branding and outreach.
- Food Committee: Interfaces with the food vendors of the Institute mess and café, decides the weekly
 menu, inspects hygiene conditions, works with the vendors to prevent food wastage, seeks student
 feedback about food quality and menu, etc.
- Placement Committee: Participates in all placement-related activities, which include, contacting and coordinating with companies – for internships and full-time placements, and assisting students in preparation of CVs, interview skills, etc.
- Sports Committee: Organizes sports events throughout the year, including Spandan, the Institute's annual Sports Festival.
- Counseling Services: YourDost to help students overcome stress and other emotional issues

The Institute encourages students to pursue some extra-curricular activities that has led to the formation of following clubs:

- Art (Tabeer)
- Competitive Programming
- Dance
- Debate
- Innovation Studio
- Lean In (women in technology)
- Literature (Aks)
- Magazine (8-bit)
- Movie
- Music
- Photography (Chhayachitra)

- Programming (Zense)
- Robotics (Enigma)
- Social Service (Aikyam)
- Spirituality (Turiya)
- Theatre (Parvazz)

Governance, Leadership and Management

Institutional Vision and Leadership Highlights

- The chairman of the IIITB Governing Body Mr. Kris Gopalankrishnan is recognized as a global business and technology thought leader who provides outstanding mentorship to the entire management team of IIITB
- The Governing Body also includes senior bureaucrats in Government of India, Government of Karnataka and senior executives of the IT industry
- The Industry Advisory Board (IAB), an invited group of top leaders from the industry brings in an external perspective provides constant inputs to maintain industry-relevance to the education provided in IIITB
- Former Director and Founder of IIITB Prof. S Sadagopan is a luminary and highly respected educationist of the country

Strategy Development and Deployment Highlights

• The offices of the Director and the Deans provide day-to-day leadership in managing the various affairs of the Institute. The Registrar, CFO, CAO and their offices oversee all other administrative activities at the Institute.

Faculty Empowerment Strategies

- A majority of functions of the institute are headed by specially designated "Faculty-In-charge." They are supported by an able and efficient administrative staff to effectively implement the strategies put forward
- IIITB has a well formulated HR Policy document that lists down various other avenues through which the Institute takes care of the welfare and development of its employees. These relate to pay and allowances, leaves, medical benefits and forums for grievances redressal, including the ICC for preventing sexual harassment.

Financial Management and Resource Mobilization Highlights

- Due to the high quality of education provided, very few seats go vacant in the flagship programmes of M.Tech. and Integrated M.Tech.
- Financial stability is ensured by conducting training programmes for working professionals under the aegis of Continuing Professional Education (CPE)
- IIITB raises funds for capital expenditure like lab and classroom construction
- Funds are received through CSR (Corporate Social Responsibility) from leading corporates
- Robust internal audit and statutory audit processes ensure adherence to highest standards of financial management

IQAS Highlights

• IIITB has a well-established IQAC that constantly reviews all academic activities of the institute. IQAC provides critical inputs to the Senate, which is the highest academic decision making body of the institute.

Institutional Values and Best Practices

The Institute follows a non-discriminating policy and all admissions of students and recruitment of staff and faculty members. To sensitize students on values, rights, duties and responsibilities, the Institute has taken certain initiatives:

- Orientation seminar to create awareness on the nature and scope of the sexual harassment of women at the workplace at the beginning of the academic year.
- Constituted Internal Complaints Committee (ICC) and Gender cell handle internal complaints.
- Formed Anti-ragging committee ensures students do not indulge in any kind of ragging.
- Female guards are designated throughout the girls' hostel.
- Installed CC cameras at all strategic points around the campus.
- Tied up with YourDOST, an online platform to provide counselling for students, staff and faculty
- The Institute celebrates important national festivals and international days to inculcate cultural integrity amongst the students, staff and faculty.
- The Institute has taken various initiatives to reduce waste and is trying to adopt the philosophy of "reduce reuse recycle"
- Exam tablets or e-pads are used for examinations
- Plastics have been banned in the campus. All bottles are being replaced with glass bottles.
- Paperless transactions by way of e-approvals for financial transactions.
- · Solid waste is segregated into wet, dry and reject waste
- Waste composter is installed in the kitchen and garden
- All the water discharged in the campus is sent to the sewage treatment plant and is treated and reused for flushing toilets and watering the plants in the campus.

IIITB takes initiatives to embrace inclusivity in all aspects of its functions.

- IIITB has graduated two visually impaired students along with other normally-abled students.
- Regular blood donation camps are organized.
- In 'Theater Club', students enact plays on women empowerment and other social issues.
- Students are given training for soft skill development enhancement, resume writing, interview skills, personal grooming for interviews.
- Students are encouraged to debate on important topics of national and international importance through the student-run Debating Club.
- During the lockdown due to the pandemic, students, faculty and staff helped migrant workers with money and food. More than 1250 food packets were distributed to the needy in E city for 24 days.



2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the University					
Name	INTERNATIONAL INSTITUTE OF INFORMATION TECHNOLOGY				
Address	International Institute of information Technology Bangalore 26/C Electronics City Phase 1 Hosur Road Bangalore				
City	Bangalore				
State	Karnataka				
Pin	560100				
Website	www.iiitb.ac.in				

Contacts for Communication

Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Director	S Sadagopan	9180-41407777	9446027439	9180-285276 27	director@iiitb.ac.in
IQAC / CIQA coordinator	Chandrasheka r Ramanathan	080-41407777	9845943079	080-2852762 7	dean-academics@ii itb.ac.in

Nature of University	
Nature of University	Deemed University

Type of University	
Type of University	Unitary

Establishment Details					
Establishment Date of the University	18-09-1998				
Status Prior to Establishment,If applicable					

Recognition Details						
Date of Recognition as a University by UGC or Any Other National Agency:						
Under Section Date View Document						
2f of UGC						
12B of UGC						

University with Potential for Excellence	
Is the University Recognised as a University with Potential for Excellence (UPE) by the UGC?	No

Location,	Area and A	activity of Ca	ımpus				
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.	Program mes Offered	Date of Establishment	Date of Recognition by UGC/MHRD
Main campus	International Institute of information Technology Bangalore 26/C Electronics	Urban	8.82	57658	Post Graduate and Research Program mes in In formation Technolo gy		
	Phase 1 Hosur Road Ba ngalore						

2.2 ACADEMIC INFORMATION

Furnish the Details of Colleges of University

Type Of Colleges	Numbers
Constituent Colleges	0
Affiliated Colleges	0
Colleges Under 2(f)	0
Colleges Under 2(f) and 12B	0
NAAC Accredited Colleges	0
Colleges with Potential for Excellence(UGC)	0
Autonomous Colleges	0
Colleges with Postgraduate Departments	0
Colleges with Research Departments	0
University Recognized Research Institutes/Centers	0

Is the University Offering any Programmes Recognised by any Statutory : Yes Regulatory Authority (SRA)

SRA program	Document
AICTE	102973_6349_1_1622887802.P DF

Details Of Teaching & Non-Teaching Staff Of University

Teaching Faculty												
	Professor				Associate Professor			Assistant Professor				
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned				18				12				16
Recruited	17	1	0	18	7	5	0	12	9	7	0	16
Yet to Recruit				0				0				0
On Contract	4	2	0	6	1	0	0	1	3	0	0	3

Non-Teaching Staff							
	Male	Female	Others	Total			
Sanctioned				33			
Recruited	16	17	0	33			
Yet to Recruit				0			
On Contract	5	4	0	9			

Technical Staff							
	Male	Female	Others	Total			
Sanctioned				6			
Recruited	3	3	0	6			
Yet to Recruit				0			
On Contract	1	0	0	_1			

Qualification Details of the Teaching Staff

				Perman	ient Teach	ers				
Highest Qualificatio n	Professor				Assistant Professor					
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	17	1	0	7	5	0	9	7	0	46
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0

	Temporary Teachers									
Highest Qualificatio n	Professor				Assistant Professor					
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0

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

Distinguished Academicians Appointed As

	Male	Female	Others	Total
Emeritus Professor	0	0	0	0
Adjunct Professor	3	1	0	4
Visiting Professor	3	1	0	4

Chairs Instituted by the University

Sl.No	Name of the Department	Name of the Chair	Name of the Sponsor Organisation/Agency
1	Information Technology	Infosys Chair Professor	Infosys Foundation

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

Programme		From the State Where University is Located	From Other States of India	NRI Students	Foreign Students	Total
Doctoral (Ph.D)	Male	0	0	0	0	0
	Female	0	0	0	0	0
	Others	0	0	0	0	0
PG	Male	3	152	0	0	155
	Female	4	41	0	0	45
	Others	0	0	0	0	0

Does the University offer any Integrated Programmes?	Yes
Total Number of Integrated Programme	2

Integrated Programme	From the State where university is located	From other States of India	NRI students	Foreign Students	Total
Male	19	118	0	0	137
Female	0	9	0	0	9
Others	0	0	0	0	0

Details of UGC Human Resource Development Centre, If applicable

Year of Establishment	Nill
Number of UGC Orientation Programmes	0
Number of UGC Refresher Course	0
Number of University's own Programmes	0
Total Number of Programmes Conducted (last five years)	0

Accreditation Details

Cycle Info	Accreditation	Grade	CGPA	Upload Peer Team
				Report
Cycle 1	Accreditation	A	3.08	

NAAC.pdf

2.3 EVALUATIVE REPORT OF THE DEPARTMENTS

Department Name	Upload Report
Information Technology	View Document



Extended Profile

1 Program

1.1

Number of programs offered year-wise for last five years

2019-20	2018-19	2017-18	2016-17	2015-16	
7	7	7	7	7	

File Description	Document
Institutional data in prescribed format	View Document

1.2

Number of departments offering academic programmes

Response: 1

2 Students

2.1

Number of students year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
1005	927	847	811	648

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

2.2

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

2019-20	2018-19	2017-18	2016-17	2015-16
253	244	249	218	167

File Description	Document
Institutional data in prescribed format	View Document

2.3

Number of students appeared in the University examination year-wise during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
869	814	742	714	582

File Description	Document
Institutional data in prescribed format	View Document

2.4

Number of revaluation applications year-wise during the last 5 years

2019-20	2018-19	2017-18	2016-17	2015-16
12	9	9	0	4

3 Teachers

3.1

Number of courses in all programs year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
138	141	134	126	132

File Description	Document
Institutional data in prescribed format	View Document

3.2

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

2019-20	2018-19	2017-18	2016-17	2015-16
46	46	43	41	38

File Description		Document			
Institutional data in prescribed format		View 1	<u>Document</u>		

3.3

Number of sanctioned posts year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16	
46	46	43	41	38	

File Description	Document
Institutional data in prescribed format	View Document

4 Institution

4.1

Number of eligible applications received for admissions to all the programs year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
5493	2688	2335	2893	2347

File Description	Document
Institutional data in prescribed format	View Document

4.2

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

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	0	0	0

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

4.3

Total number of classrooms and seminar halls

Response: 19

_

4.4

Total number of computers in the campus for academic purpose

Response: 1051

4.5

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

2019-20	2018-19	2017-18	2016-17	2015-16
10916.82	8156.06	7518.97	3107.63	6935.65



4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curriculum Design and Development

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

Response:

IIITB was established as an educational institution focusing exclusively on Information Technology. Since its inception, the institute has sought to leverage Bangalore's track record in the IT sector and to propel India towards playing a key role in the global IT scenario. At the core of the institute's vision of continuous innovation in IT education, research and entrepreneurship are to direct such innovation towards significantly transforming the lives of individuals and society, including their deployment in sustainable businesses, social enterprises, and the government. These aspects of the institute's mission and vision are reflected in the Integrated MTech, MTech, and MSc (Digital Society) programmes offered by the institute and incorporated in the curricula, course delivery, and assessments under these programmes.

IIITB's approach to IT education can be characterized by three dimensions: Hardware, Software, and Society. In other words, Information Technology solutions are defined by a combination of hardware and software used in the context of solving a specific problem for the society at large. Hardware elements dominate IIITB's programmes in the Electronics and Communication Engineering branch. Software aspects are dealt with in great detail predominantly in the Computer Science and Engineering programme. IIITB's teaching and research in the "IT and Society" contributes the third dimension of our IT education.

Take for instance the two-year interdisciplinary master's programme, MSc Digital Society, the most recent in the list of innovative programmes designed and offered at IIITB, which was started in 2015. Situated at the intersection of information technology and social sciences, this programme trains students to critically evaluate how digital technologies can be designed and deployed to be inclusive of the developmental needs of populations in varied socio-economic contexts. Courses on Technology and Society, Technology and Development, and Human-Computer Interaction allow students to understand the complex and multidimensional process of technological decision making, to assess user needs and the context-specific application of technologies. Courses on Information Communication Technology Policy and Regulation expose students to the history of ICTs and Telecom policies and their implications across different sectors. Quantitative and qualitative research methods course train students on specific methods and techniques of data collection and analysis with an aim to prepare them for conducting empirically grounded research on the digital society. In these ways, the programme and its constituent courses also align with the Institute's focus on generating knowledge pertinent to local developmental needs.

Another example is the joint program of IIITB with the Institute of Bioinformatics and Applied Biotechnology, Post-graduate Diploma Programme in Big Data Biology sanctioned by the Department of BioTechnology (DBT). This programme is intended to fill the gap of professionals equipped with both data science and biological training, to look at biological and medical data to transform the healthcare, and related sectors in the country. One of the courses offered as a part of this program is on clinical trials, which imparts knowledge for a critical requirement that has emerged during the pandemic.

Page 25/106 04-08-2021 04:47:12

File Description		Document	
Link for Additional information	Vi	iew Document	

1.1.2 Percentage of Programmes where syllabus revision was carried out during the last five years.

Response: 100

1.1.2.1 How many Programmes were revised out of total number of Programmes offered during the last five years

Response: 07

1.1.2.2 Number of all Programmes offered by the institution during the last five years.

Response: 07

File Description	Document		
Minutes of relevant Academic Council/BOS meeting	View Document		
Institutional data in prescribed format	View Document		
Details of Programme syllabus revision in last 5 years	View Document		
Link for additional information	View Document		

1.1.3 Average percentage of courses having focus on employability/ entrepreneurship/ skill development offered by the institution during the last five years

Response: 58.37

1.1.3.1 Number of courses having focus on employability/ entrepreneurship/ skill development year-wise during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
91	94	74	69	65

File Description	Document
Programme/ Curriculum/ Syllabus of the courses	<u>View Document</u>
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	View Document
Institutional data in prescribed format	<u>View Document</u>

1.2 Academic Flexibility

1.2.1 Percentage of new courses introduced of the total number of courses across all programs offered during the last five years.

Response: 63.68

1.2.1.1 How many new courses were introduced within the last five years.

Response: 128

1.2.1.2 Number of courses offered by the institution across all programmes during the last five years.

Response: 201

File Description	Document
Minutes of relevant Academic Council/BOS meeting	View Document
Institutional data in prescribed format	<u>View Document</u>

1.2.2 Percentage of Programmes in which Choice Based Credit System (CBCS) / elective course system has been implemented (Data for the latest completed academic year).

Response: 100

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

Response: 7

File Description	Document
Minutes of relevant Academic Council/BOS meetings	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document

1.3 Curriculum Enrichment

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

Response:

Faculty members at the institute have come up with a variety of innovative pedagogical techniques to improve and enhance students' learning. For instance, mandate-oriented learning involves modeling a course into several "learning mandates." Each mandate represents a collective goal for the class as a whole, to achieve. There is no dichotomy or adversarial relation between teacher and student-- everybody in the class is called a "learner." The set of topics for each learning mandate is set up apriori, and relevant learning materials are also provided. Every learner in the class including the teacher, makes "mandate contributions" as part of each mandate. The mandate contributions by the teacher is typically in the form of lectures-- although, it could also contain other forms of learning activities facilitated by the teacher.

So that the students get to practice what they have learnt in theory and understand the differences between practical deployments and theory, faculty members have also leveraged **gamified learning**. One faculty member uses a spectrum auction game on an auction platform, with student groups taking on the role of different operators who bid to get their share of spectrum put on block at their valuation. Closely mimicking the auction conducted by the Government of India, this game helps students understand the nuances of Simultaneous Multiple Round Ascending auction pioneered by the Economics Nobel Prize winner Prof Milgrom. In a course on News Literacies in a Digital Society, students work on publishing a four page ity newspaper to practice what they have learnt about news values, news selection, and gatekeeping practices in the class.

As part of a core course in application development for a connected society, students work on assignments in which they assess and critique existing web applications, and build web applications with third-party software tools or programming (depending on their expertise in a class with graduate students from diverse backgrounds.). Essay writing on web-applications with a specific theme or use case, to allow students to research widely on the latest technology. Apart from improving their research and writing skills, students also get ideas for creating their own web applications as a course project. Electives in computer graphics and data visualization too encourage students to explore publicly available data, which especially for data visualization projects allow students to work with large-scale datasets.

Besides these specific project-based deliverables, several classes focus on learning through discussions among students. These discussions might focus on analysing publications from top-tier conferences (for a graphics course, this includes journals in graphics (ACM SIGGRAPH) and data visualization (IEEE VISWeek) and contemporary policy debates (say on data localization or privacy). Classes also emphasise writing and presentation of research papers.

Project Electives offer another opportunity for students to learn by doing. PEs often draw their project statements from IIITB's many research centres. The **Electronic Health Research Centre**, for instance, encourages students to start with a problem of relevance in healthcare, typically articulated by a doctor, and where an IT-based solution seems feasible.

Page 28/106 04-08-2021 04:47:14

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

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

Response: 65

1.3.2.1 How many new value-added courses are added within the last five years.

Response: 65

File Description	Document
Institutional data in prescribed format	View Document
Brochure or any other document relating to value added courses	View Document

1.3.3 Average Percentage of students enrolled in the courses under 1.3.2 above.

Response: 100

1.3.3.1 Number of students enrolled in value-added courses imparting transferable and life skills offered year-wise during the last five years.

2019-20	2018-19	2017-18	2016-17	2015-16
1005	927	847	811	648

1.3.4 Percentage of students undertaking field projects / research projects / internships (Data for the latest completed academic year).

Response: 87.86

1.3.4.1 Number of students undertaking field projects or research projects or internships.

Response: 883

File Description	Document
List of Programmes and number of students undertaking field projects research projects//internships (Data Template)	View Document
Any additional information	<u>View Document</u>
Link for additional information	View Document

1.4 Feedback System

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

Response: A. All 4 of the above

1000	
File Description	Document
URL for stakeholder feedback report	View Document
Institutional data in prescribed format	View Document
Action taken report of the University on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management (Upload)	View Document

1.4.2 Feedback processes of the institution may be classified as follows:

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

File Description	Document
URL for feedback report	View Document
Institutional data in prescribed format	View Document

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Demand Ratio (Average of last five years)

Response: 8.26

2.1.1.1 Number of seats available year wise during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
390	390	390	370	360

File Description	Document
Demand Ratio (Average of Last five years) based on Data Template upload the document	View Document
Any additional information	View Document

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

Response: 0

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

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	0	0	0

File Description	Document
Average percentage of seats filled against seats reserved (Data Template)	View Document
Any additional information	View Document

2.2 Catering to Student Diversity

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

Response:

Advanced learners at the institute are identified, nurtured and encouraged through the **Deans' List** programme. Top performing students on the Deans' List are given merit scholarships, invited to serve as student volunteers in world-class research conferences, and receive opportunities to work in Research Centers. Some of the top performing students in the Integrated M.Tech. program also spend summers in universities in North America and Europe for summer internships in academia in universities, such as MIT, EPFL, etc. through the university exchange program or through scholarships, such as MITACS, DAAD, etc. Such academic internships are strongly encouraged at IIITB, and these students are allowed to start late in the subsequent semester in case of slight delays in completion of internship. Similarly, in the research programs, students doing well in the Master of Science by Research (MSR) programme may be recommended for the Ph.D. program through a selection committee, without going through the regular admissions process.

Towards providing more personalized attention to all students, teaching assistants are assigned to all large classes with one TA is assigned for every 30 students, so as to handle the diversity of learning levels as well as performances in large classes, especially in core courses.

IIITB has a dedicated Academic Performance Management Committee (APMC) that creates guidelines and monitors the evaluation of students whose work needs improvement. Students are provided opportunities to improve their performance in multiple ways. In the past, those needing extra attention have been provided with extra tutorial sessions during the weekend, for instance in the Programming I course. Students who need extra time to complete course requirements at the end of the semester can be given an incomplete grade I. The I grade gives the concerned student two weeks after grade submission date to complete course requirements, after which the incomplete grade must be converted to a letter grade. This is especially useful for students who fall behind coursework during the semester owing to medical reasons, or personal emergencies. Students are allowed to repeat a course should they wish to improve their performance in it. In order to protect their academic continuity, students who repeat a course may do so under the "Guided Study" programme where the concerned faculty member provides guidance for the student repeating the course. The guided study programme allows students to complete course requirements without having to attend classes, by using extra guidance from the instructors and teaching assistants. Students who have failed a course as well as those who have poor grades can elect to take "Grade Improvement Exams," with no cap on the improvement exams the student can take for completion of graduation requirements. For MSR/Ph.D. programs, the students are given one semester in probation for improving on the unsatisfactory grade gotten the previous semester for their work towards thesis units. If the student does not improve during the probation period for thesis units equivalent to 16-20 course credits, only then does the student get deregistered from the research degree program.

File Description	Document
Upload Any additional information	View Document

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

Response: 22:1

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

Response:

Faculty members at the institute have come up with a variety of innovative pedagogical techniques to improve and enhance students' learning. For instance, mandate-oriented learning involves modelling a course into several "learning mandates." Each mandate represents a collective goal for the class as a whole, to achieve. There is no adversarial relation between teacher and student—everybody in the class is called a "learner." The set of topics for each learning mandate is set up apriori, and relevant learning materials are also provided. Every learner in the class including the teacher, makes "mandate contributions" as part of each mandate. The contributions by teacher is typically in the form of lectures-although, it could also contain other forms of learning activities facilitated by the teacher.

So that the students get to practice what they have learnt in theory and understand the differences between practical deployments and theory, faculty members have also leveraged gamified learning. One faculty member uses a spectrum auction game on an auction platform, with student groups taking on the role of different operators who bid to get their share of spectrum put on block at their valuation. This game helps students understand the nuances of Simultaneous Multiple Round Ascending auction pioneered by the Economics Nobel Prize winner Prof Milgrom. In a course on News Literacies in a Digital Society, students work on publishing a four page city newspaper to practice what they have learnt about news values, news selection, and gatekeeping practices in the class.

As part of a core course in application development for a connected society, students work on assignments in which they assess and critique existing web applications, and build web applications with third-party software tools or programming (depending on their expertise in a class with graduate students from diverse backgrounds.). Essay writing on web-applications with a specific theme or use case, to allow students to research widely on the latest technology. Apart from improving their research and writing skills, students also get ideas for creating their own web applications as a course project. Electives in computer graphics and data visualization too encourage students to explore publicly available data, which especially for data visualization projects allow students to work with large-scale datasets.

Besides these specific project-based deliverables, several classes focus on learning through discussions among students. These discussions might focus on analysing publications from top-tier conferences (for a graphics course, this includes journals in graphics (ACM SIGGRAPH) and data visualization (IEEE VISWeek) and contemporary policy debates (eg data localization or privacy). Classes also emphasise writing and presentation of research papers.

Project Electives offer another opportunity for students to learn by doing. PEs often draw their project statements from IIITB's many research centres. This teaches them to Iterate on the design of the solution, in collaboration with the doctor, design the technical solution, implement it, and test against the use cases

for usability, functionality and performance. In the process, they identify technologies that could be relevant, and learn to apply them to the problem at hand.

File Description	Document	
Upload any additional information	View Document	

2.3.2 Teachers use ICT enabled tools including online resources for effective teaching and learning process.

Response:

The Learning Management System (LMS) is the platform used for online quizzes, which has been especially used heavily during the online teaching mode in 2020-21. An exam LMS has been installed through moodle over the intra-net, which has been upgraded to an AWS cloud in the online teaching setting. The exam LMS at https://exam.iiitb.net is on a dedicated LMS server that is additionTimely tutorials are published on the faculty page on LMS to familiarize them with using LMS for assessment and grade publication. The grading on exam LMS for quizzes with multiple-choice questions is automated as well as the statistics report gives a statistical analysis of performance on the quiz. These mechanisms help the instructors and students to use the logistics for required timely action, e.g. re-tests. There are other features on exam LMS that can help with creating question banks, generating manual grading reports, etc. These features enable in customizing the exam LMS usage for different types of requirements arising from a variety of courses. An EC2 instance of the AWS cloud deployment of Moodle exam LMS server is used, with the following system requirements: 2 GB RAM, 2 core AMD EPTYE 7000 series processors, and network bandwidth 5 Gbps, which are supported by IIITB Datacenter. The online exam LMS also helps in reducing malpractice during the exams with the feature of randomization of questions, customized pagination of the question paper, etc.

IIITB has institutional accounts with Urkund, and with Turnitin in the past, for plagiarism checks to ensure students produce original work, and for internal assessment of report submissions for courses and external examination of the theses required for fulfilling degree requirements, as per the regulatory requirements by UGC and AICTE.

A large computer center of ~120 desktops is used for programming exams, on campus, where intranet connectivity is used to control access to the internet during the exam. Another digital medium initiated for examinations, especially for core courses, is the Digital Exampad, which cuts down the usage of paper, reduces malpractice with randomization of questions, and enables grading by faculty members remotely. This has enabled faculty members to submit grades on a timely basis even when they have a busy conference travel schedule. There is constant support from PEXA, the Exampad service provider, throughout the entire coordination of exams.

The official position of the Controller of Examinations has been instantiated, whose role is to ensure timely and smooth conduct of examinations, and assessment for all active courses internally, and to ensure compliance with the rules and regulations as stated by external regulatory authorities. The Controller of Examinations also maintains the documentation and publishing of the examination manual at the Institute. Another reform is in the timely conduct of grade improvement examinations to support slow learners at the

beginning of the subsequent semester. The timely conduct of these improvement opportunities also enables the concerned students to make important decisions about repeating the course in its next offering and to plan their workload in subsequent semesters.

File Description	Document
Upload any additional information	View Document
Provide link for webpage describing the "LMS/ Academic management system"	View Document

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

Response: 22:1

2.3.3.1 Number of mentors

Response: 46

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

2.4 Teacher Profile and Quality

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

Response: 100

1		
File Description	Document	
Year wise full time teachers and sanctioned posts for 5 years	View Document	
List of the faculty members authenticated by the Head of HEI	View Document	
Any additional information	View Document	

2.4.2 Average percentage of full time teachers with Ph.D./D.M/M.Ch./D.N.B Superspeciality/D.Sc./D'Lit. year-wise during the last five years

Response: 100

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

2019-20	2018-19	2017-18	2016-17	2015-16
46	46	43	41	38

File Description	Document	
List of number of full time teachers with Ph D/D M/M Ch/D N B Superspeciality/DSc/D Lit and number of full time teachers for 5 years	View Document	
Any additional information	<u>View Document</u>	

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

Response: 7.31

2.4.3.1 Total experience of full-time teachers

Response: 336.1

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

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

Response: 51.4

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

2019-20	2018-19	2017-18	2016-17	2015-16
5	2	3	5	7

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

2.5 Evaluation Process and Reforms

2.5.1 Average number of days from the date of last semester-end/ year- end examination till the declaration of results year-wise during the last five years

Response: 13.4

2.5.1.1 Number of days from the date of last semester-end/ year- end examination till the declaration of results year wise during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16	
13	13	14	13	14	

File Description	Document
List of Programmes and date of last semester and date of declaration of results	View Document
Any additional information	<u>View Document</u>

2.5.2 Average percentage of student complaints/grievances about evaluation against total number appeared in the examinations during the last five years

Response: 0.88

2.5.2.1 Number of complaints/grievances about evaluation year wise during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
12	9	9	0	4

File Description	Document
Number of complaints and total number of students appeared year wise	View Document
Any additional information	View Document

2.5.3 IT integration and reforms in the examination procedures and processes (continuous internal assessment and end-semester assessment) have brought in considerable improvement in examination management system of the institution

Response:

The Learning Management System (LMS) is the platform used for online quizzes, which has been especially used heavily during the online teaching mode in 2020-21. An exam LMS has been installed through moodle over the intra-net, which has been upgraded to an AWS cloud in the online teaching setting. The exam LMS at https://exam.iiitb.net is on a dedicated LMS server that is additionTimely tutorials are published on the faculty page on LMS to familiarize them with using LMS for assessment and grade publication. The grading on exam LMS for quizzes with multiple-choice questions is automated as well as the statistics report gives a statistical analysis of performance on the quiz. These mechanisms help the instructors and students to use the logistics for required timely action, e.g. re-tests. There are other features on exam LMS that can help with creating question banks, generating manual grading reports, etc. These features enable in customizing the exam LMS usage for different types of requirements arising from a variety of courses. An EC2 instance of the AWS cloud deployment of Moodle exam LMS server is used, with the following system requirements: 2 GB RAM, 2 core AMD EPTYE 7000 series processors, and network bandwidth 5 Gbps, which are supported by IIITB Datacenter. The online exam LMS also helps in reducing malpractice during the exams with the feature of randomization of questions, customized pagination of the question paper, etc.

IIITB has institutional accounts with Urkund, and with Turnitin in the past, for plagiarism checks to ensure students produce original work, and for internal assessment of report submissions for courses and external examination of the theses required for fulfilling degree requirements, as per the regulatory requirements by UGC and AICTE.

A large computer center of ~120 desktops is used for programming exams, on campus, where intranet connectivity is used to control access to the internet during the exam. Another digital medium initiated for examinations, especially for core courses, is the Digital Exampad, which cuts down the usage of paper, reduces malpractice with randomization of questions, and enables grading by faculty members remotely. This has enabled faculty members to submit grades on a timely basis even when they have a busy conference travel schedule. There is constant support from PEXA, the Exampad service provider, throughout the entire coordination of exams.

The official position of the Controller of Examinations has been instantiated, whose role is to ensure timely and smooth conduct of examinations, and assessment for all active courses internally, and to ensure compliance with the rules and regulations as stated by external regulatory authorities. The Controller of Examinations also maintains the documentation and publishing of the examination manual at the Institute. Another reform is in the timely conduct of grade improvement examinations to support slow learners at the beginning of the subsequent semester. The timely conduct of these improvement opportunities also enables the concerned students to make important decisions about repeating the course in its next offering and to plan their workload in subsequent semesters.

File Description	Document
Year wise number of applications, students and revaluation cases	View Document
Link for additional information	View Document

2.5.4 Status of automation of Examination division along with approved Examination Manual

Response: 100% automation of entire division & implementation of Examination Management System (EMS)

File Description	Document
Current manual of examination automation system and Annual reports of examination including the present status of automation	View Document
Current Manual of examination automation system	View Document
Any additional information	View Document
Annual reports of examination including the present status of automation	View Document

2.6 Student Performance and Learning Outcomes

2.6.1 The institution has stated learning outcomes (generic and programme specific)/graduate attributes which are integrated into the assessment process and widely publicized through the website and other documents

Response:

The attributes of all postgraduate programs at IIITB are design-driven, outcome-oriented, strong foundational knowledge, and wherever applicable, provision of opportunities for procuring experiential knowledge. The program design incorporates the outcomes of courses, as its building blocks, into its overall attributes in a modular fashion. For the modular implementation, most courses at IIITB use elements of projects for hands-on experiential learning, along with conventional practices of written or oral exams during midterm and end term for conceptual learning. The project assessment is done by the instructor, using a rubric based on the attributes of the program fulfilled by the course at the time of its design. The overall assessment scheme of the course is left to the discretion of the instructor to fit to the role played by the course in the entire program. The IIITB Senate, that is concerned in the matter of curricula and implementation, oversees the way courses are designed, proposed, circulated for comments, approved, and implemented. At the same time, the IIITB Senate through its sub-committees ensure the implementation of each program as per its design, using periodic reviews where feedback from all relevant stakeholders, i.e. alumni, industry, external academic experts, etc., is incorporated for relevant revision of the program design as well as implementation.

As an example of a design-driven program, the Integrated Master of Technology (IMTech) program has

been architected based on the undergraduate-level courses specified by the Computing Curricula 2005 (CC2005), published by ACM-IEEE for universal adoption. The CC2005 report and recommendations are specifically for Baccalaureate Degree Programs in (a) Computer Engineering, (b) Computer Science, (c) Information Systems, (d) Information Technology and (e) Software Engineering; with periodic updates for each of these. The report along with the most recent recommendations were used in 2013 to formulate the focus of the program, which also emphasizes on competency analysis, attainment of appropriate skill proficiency level, outcome based curriculum and practices of ensuring the same. Thus, these are incorporated at the level of courses, implicitly. Just as IMTech, Master of Science in Digital Society program (MScDT) is another example where learning outcomes have been integrated from its genesis. To take a specific instance, the project-based learning undertaken in MScDT is directed towards addressing challenges of the digital society by applying learnings from all its courses.

Additionally, IIITB is institutionally active in research and implements big state-level, national, and international projects relevant directly to outcome-based education. The participation of students from the different programs at IIITB in projects such as MINRO, MOSIP, etc., of which some culminate as masters theses, have been useful in implementation of the learning outcomes of the respective programs. The assessment process in such a scenario is based on how well the project implementation or innovation through thesis work has benefited the larger project.

File Description	Document
Upload COs for all courses (exemplars from Glossary)	View Document
Upload COs for all courses (exemplars from Glossary)	View Document
Paste link for Additional Information	View Document

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

Response:

IIITB has been established as an educational institution focusing exclusively on Information Technology. Since its inception, the institute has sought to leverage the track record of the ecosystem in Bangalore in the IT sector and to propel India towards playing a key role in the global IT scenario. At the core of the institute's vision of continuous innovation in IT education, research and entrepreneurship are to direct such innovation towards significantly transforming the lives of individuals and society, including their deployment in sustainable businesses, social enterprises, and the government. These aspects of the institute's mission and vision are reflected in the Integrated MTech, MTech, and MSc (Digital Society) programmes offered by the institute and are incorporated in the curricula, course delivery, and assessments under these programmes.

In order to ensure that all programmes at the Institute align with the institute's vision and mission objectives, every programme offered at the institute is reviewed periodically and approved by the Senate. As part of this process, all the courses included in the programme are reviewed for the alignment of the

programme objectives, the course structure, the reading and other course material they intend to use, and the assessment structure with the objectives of the broader programme. A Senate sub-committee is created to design a new programme or to revise an existing programme. The sub-committee presents their report to the Senate, which is deliberated in multiple iterations. Both core and elective courses are proposed by the concerned faculty members to the Senate, where core courses are proposed at its first offering or subsequent revision of the program. Only once these reports and proposals are passed by the Senate do the programmes and courses respectively come into being. Prior to the formal Senate process, the proposal of new programmes also includes feedback from relevant domain experts in the research area and in the industry, which is gathered by the Senate sub-committee. Such an exercise is practised to include inputs from experts and potential employers of our students in structuring the curriculum, to effectively include the outcome of employability of students graduated from the programme at the time of programme design. This outcome is evaluated by a similar set of stakeholders during the programme review.

There is a need of periodic evaluation of the programmes to keep them up-to-date. Hence, in addition to the review at the start of the programme, programmes are regularly reviewed (every three years) to ensure they are in alignment with the institute's larger vision and quest for local and global relevance. This review process is focused on incorporating feedback from alumni and industry experts to make relevant revisions of the programmes. Since the courses are designed to fit with the outcomes of the programmes, courses are evaluated and revised at the time of review of programmes to fit with the revised outcomes of the programme.

File Description	Document
Upload any additional information	<u>View Document</u>
Paste link for Additional Information	View Document

2.6.3 Pass Percentage of students(Data for the latest completed academic year)

Response: 100

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

Response: 253

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

Response: 253

File Description	Document
Upload list of Programmes and number of students passed and appeared in the final year examination	View Document
Upload any additional information	<u>View Document</u>
Paste link for the annual report	View Document

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process	
Response:	
File Description	Document
Upload database of all currently enrolled students View Document	



Criterion 3 - Research, Innovations and Extension

3.1 Promotion of Research and Facilities

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

Response:

IIITB has the following modalities of research engagements with students:

- PhD research scholars
- MS (by Research) scholars
- MTech thesis students
- iMTech thesis students
- · Research associates and visiting scholars

In addition to the above, IIITB has laid out several institutional mechanisms to foster a culture of research and aid researchers in reaching out to stakeholders in the industry and society at large. These include the following:

Research Centers: Research centers are domain-specific research groups with a substantial endowment and interaction with external stakeholders. Faculty members are strongly encouraged to align their research activities with the broad objectives of one or more research centers and actively collaborate with other researchers and external stakeholders to create meaningful research output.

Ethics Committee: IIITB has constituted a research ethics committee that not only oversees but also offers advice and guidance on matters concerning research ethics, especially when involving issues like human subjects, data privacy, etc.

Research Council: IIITB has instituted an internal committee called the Research Council (RC) that oversees strategic issues like sponsored research collaborations, IP policies, research funding assistance, etc.

Samvaad: Samvaad is a weekly research gathering of the institute, where faculty members or members of their research group, present their research to the rest of the institute, including external attendees and collaborators. Samvaad talks are recorded and shared with the rest of the world, through the institutional YouTube channel, to help disseminate research ideas in a timely manner. Every faculty member is expected to give at least one research talk as part of each Samvaad cycle.

Travel Fellowships: IIITB has instituted a travel fellowship to facilitate research scholars and faculty members to present their research at major international conferences across the world. The fellowship is based on a limited endowment, and the policy for grant of fellowships is updated in the institute research portal.

RISE: Research, Innovation, Society and Entrepreneurship (RISE) is an annual 3-day event held by the institution that is aimed at promoting our research and increasing its social impact. It comprises a PhD colloquium, an open day for research centers and labs, as well as an "open innovation" day to interface our

research personnel with the startup and innovation ecosystem.

In addition to the above, several more structural initiatives to promote research, are on the anvil. These include the creation of an institutional repository for pre-prints and technical reports, and facilitation with book publishers to empower our faculty to author textbooks and popular science books.

File Description	Document
URL of Policy document on promotion of research uploaded on website	View Document

3.1.2 The institution provides seed money to its teachers for research (average per year, INR in Lakhs)

Response: 11.6

3.1.2.1 The amount of seed money provided by institution to its faculty year-wise during the last five years (INR in lakhs).

2019-20	2018-19	2017-18	2016-17	2015-16	
24.9	4.9	13.2	10	5	

File Description	Document
Institutional data in prescribed format	View Document
Budget and expenditure statements signed by the Finance Officer indicating seed money provided and utilized	View Document
Any additional information	View Document

3.1.3 Percentage of teachers receiving national / international fellowship / financial support by various agencies for advanced studies / research during the last five years.

Response: 13.08

3.1.3.1 The number of teachers who received national / international fellowship / financial support by various agencies for advanced studies / research year-wise during the last five years.

2019-20	2018-19	2017-18	2016-17	2015-16
8	8	4	3	5

File Description	Document
Institutional data in prescribed format	View Document
e-copies of the award letters of the teachers	View Document
Any additional information	View Document

3.1.4 Number of JRFs, SRFs, Post Doctoral Fellows, Research Associates and other research fellows enrolled in the institution during the last five years.

Response: 119

3.1.4.1 The Number of JRFs, SRFs, Post Doctoral Fellows, Research Associates and other research fellows enrolled in the institution year-wise during the last five years.

2019-20	2018-19	2017-18	2016-17	2015-16	
27	39	18	20	15	

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

3.1.5 Institution has the following facilities to support research

- 1. Central Instrumentation Centre
- 2. Animal House/Green House
- 3. Museum
- 4. Media laboratory/Studios
- 5. Business Lab
- 6. Research/Statistical Databases
- 7. Mootcourt
- 8. Theatre
- 9. Art Gallery

Response: A. 4 or more of the above

File Description	Document
Upload the list of facilities provided by the university and their year of establishment	View Document
Paste link of videos and geotagged photographs	View Document

3.1.6 Percentage of departments with UGC-SAP, CAS, DST-FIST, DBT, ICSSR and other recognitions by national and international agencies (Data for the latest completed academic year)

Response: 100

3.1.6.1 The Number of departments with UGC-SAP, CAS, DST-FIST, DBT, ICSSR and other similar recognitions by national and international agencies.

Response: 1

File Description	Document
Institutional data in prescribed format	View Document
e-version of departmental recognition award letters	View Document
Any additional information	View Document

3.2 Resource Mobilization for Research

3.2.1 Extramural funding for Research (Grants sponsored by the non-government sources such as industry, corporate houses, international bodies for research projects) endowments, Chairs in the University during the last five years (INR in Lakhs).

Response: 19073.93

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

2019-20	2018-19	2017-18	2016-17	2015-16	
1830.27	14927.52	1702.49	107.76	505.89	

File Description	Document
Institutional data in prescribed format	View Document
e-copies of the grant award letters for research projects sponsored by non-government	View Document
Any additional information	View Document

3.2.2 Grants for research projects sponsored by the government agencies during the last five years (INR in Lakhs).

Response: 8621.53

3.2.2.1 Total Grants for research projects sponsored by the government agencies year-wise during the last five years (INR in Lakhs).

2019-20	2018-19	2017-18	2016-17	2015-16
3615.45	3516.21	924.29	89.02	476.56

File Description	Document
Institutional data in prescribed format	View Document
e-copies of the grant award letters for research projects sponsored by government	View Document

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

Response: 10

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

Response: 92

3.2.3.2 Number of full time teachers worked in the institution year-wise during the last five years...

Response: 46

File Description	Document
Supporting document from Funding Agency	<u>View Document</u>
Institutional data in prescribed format	<u>View Document</u>
Any additional information	View Document

3.3 Innovation Ecosystem

3.3.1 Institution has created an eco system for innovations including Incubation centre and other initiatives for creation and transfer of knowledge.

Response:

As a precursor to the Innovation Center at IIITB, during 1999-2008, startups have run their offices from the IIITB campus, along with interactions with faculty under the leadership of the Director, Prof. S. Sadagopan. The Innovation Center was incorporated in 2009, under the leadership of Prof. Rajagopalan, as a hub for ICT4D research, innovation, and entrepreneurship. IIITB faculty follow an Intellectual Property (IP) policy approved by the Governing Body in 2010. The Center has been set up as a section-8-not-forprofit company, with the objectives of supporting and incubating new ventures from startups outside of IIITB, promoting commercialization of Intellectual Property (IP) by faculty and students of IIITB, and encouraging industry to set up R&D centers at IIITB as an effort to foster collaboration between IIITB fraternity and industry sector. The Innovation Center started out as an incubator during 2008-14 and undertook themed innovations thereafter. Since 2014, the Innovation Center runs an initiative called IMACX (IOT to Mobility Apps for Community Excellence). IMACX has been a response to the Vision 2020 Initiative by the Government of Karantaka. As a part of the IMACX initiative in 2015, a Startup Accelerator IMACX Accelerator has been launched to help civic-tech startups that focus on sociallyrelevant applications in the areas of healthcare, education, transportation, energy, governance, and culture. Since 2017, IMACX has facilitated research-led collaborative, social innovations in collaboration with the research centers at IIITB, namely, E-Health Research Center, Center for IT & Public Policy, Center for Machine Intelligence and Robotics, etc. Since 2014, IMACX has supported 5 cohorts under specific themes. Since 2019, the Innovation Center has physically moved to the new academic block named Ramanujan Block, with 90-seater incubation space for building an ecosystem for research-led innovations. The Innovation Center is currently supporting 19 startups and has supported 59 in all. All information about the efforts of the center is available at https://www.iiitb.ac.in/innovation-center and http://www.iiitb.org

The Center provides mentoring, faculty guidance, industry connect, branding space, post-program support, business mentor services, customer connect, co-creation opportunities, showcase events, pilot deployment, and knowledge transfer. IIITB Innovation Center also works closely with the Center of Excellence of Machine Intelligence and Robotics (MINRO) at IIITB, which is one of 6 K-Tech Innovation Centers of Excellence, by Karnataka Innovation and Technology Society, Government of Karnataka. The vision of the Centers of Excellence as a part of the Startup Karnataka Policy is to boost the accelerator support to the startup ecosystem to drive innovation and entrepreneurship in the State of Karnataka. IIITB Innovation Center is also a Group-2 TIDE 2.0 Center, by Ministry of Electronics and Information Technology (MeitY), Government of India, under Technology Incubation and Development of Entrepreneurs (TIDE 2.0) Scheme. The objective of this scheme is to nurture innovation by students and startups, by providing a technology-enabling environment and entrepreneurship-supporting ecosystem.12-month grants under the scheme are TIDE 2.0 Startup Grant for INR 7 lakhs for early-stage startups by professionals under the age of 35, and the TIDE 2.0 EIR (Entrepreneurs-in-Residence) Grant for INR 4 lakhs for student-run startups.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

3.3.2 Number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR),entrepreneurship, skill development during the last five years.

Response: 43

3.3.2.1 Total number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR),entrepreneurship, skill development year-wise during the last five years.

2019-20	2018-19	2017-18	2016-17	2015-16
10	11	10	7	5

File Description	Document
Report of the event	View Document
Institutional data in prescribed format	View Document
Any additional information	<u>View Document</u>

3.3.3 Number of awards / recognitions received for research/innovations by the institution / teachers / research scholars / students during the last five years.

Response: 70

3.3.3.1 Total number of awards / recognitions received for *research* / innovations won by institution / teachers / research scholars / students year-wise during the last five years.

2019-20	2018-19	2017-18	2016-17	2015-16
14	17	14	9	16

File Description	Document	
Institutional data in prescribed format	View Document	
e- copies of award letters	View Document	

3.4 Research Publications and Awards

3.4.1 The Institution ensures implementation of its stated Code of Ethics for research through the following: 1. Inclusion of research ethics in the research methodology course work 2. Presence of Ethics committee 3. Plagiarism check through software 4. Research Advisory Committee

Response: A. All of the above

File Description	Document
Code of ethics for Research document, Research Advisory committee and ethics committee constitution and list of members on these committees, software used for Plagiarism check, link to Website	View Document
Any additional information	View Document

3.4.2 The institution provides incentives to teachers who receive state, national and international recognitions/awards 1.Commendation and monetary incentive at a University function 2. Commendation and medal at a University function 3. Certificate of honor 4. Announcement in the Newsletter / website

Response: B.. 3 of the above

File Description	Document
Institutional data in prescribed format	<u>View Document</u>
e- copies of the letters of awards	View Document

3.4.3 Number of Patents published / awarded during the last five years.

Response: 24

3.4.3.1 Total number of Patents published / awarded year-wise during the last five years.

2019-20	2018-19	2017-18	2016-17	2015-16
5	6	5	5	3

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

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

Response: 0.82

3.4.4.1 How many Ph.D's are awarded within last five years.

Response: 27

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

Response: 33

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document
URL to the research page on HEI web site	View Document

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

Response: 1.71

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

2019-20	2018-19	2017-18	2016-17	2015-16	
14	21	7	16	15	

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

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

Response: 8.41

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

2019-20	2018-19	2017-18	2016-17	2015-16
85	61	85	72	57

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

3.4.7 E-content is developed by teachers :

- 1. For e-PG-Pathshala
- 2.For CEC (Under Graduate)
- 3. For SWAYAM
- 4. For other MOOCs platform
- 5. For NPTEL/NMEICT/any other Government Initiatives
- 6. For Institutional LMS

Response: B. Any 4 of the above

File Description	Document
Institutional data in prescribed format	View Document
Give links or upload document of e-content developed	View Document

3.4.8 Bibliometrics of the publications during the last five years based on average citation index in Scopus/ Web of Science or PubMed

Response:

File Description	Document
Bibliometrics of the publications during the last five years	View Document
Any additional information	View Document

3.4.9 Bibliometrics of the publications during the last five years based on Scopus/Web of Science - hindex of the Institution

Response:

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

3.5 Consultancy

3.5.1 Institution has a policy on consultancy including revenue sharing between the institution and the individual and encourages its faculty to undertake consultancy.

Response:

IIITB is a repository of skills and knowledge, which can be of use to other organizations. As is the tradition with premier teaching and research institutions, IIITB will offer the services of its faculty to other organizations in a limited way for consultancy on academic and technical matters. Employees of IIITB cannot directly offer consultancy.

All Individual consulting assignments need to be recommended Dean-R&D and approved by the Director. Consultancy involvement of an individual is limited to one day's duration per week. Consultancy fee is the fee for the actual consultancy work done by faculty members. A consultancy project may have other charges in addition to consultancy fees.

File Description	Document
Upload soft copy of the Consultancy Policy	<u>View Document</u>
Upload minutes of the Governing Council/ Syndicate/Board of Management related to consultancy policy	View Document
Paste URL of the consultancy policy document	View Document

3.5.2 Revenue generated from consultancy and corporate training during the last five years (INR in Lakhs).

Response: 1626.41

3.5.2.1 Total amount generated from consultancy and corporate training year-wise during the last five years (INR in lakhs).

2019-20	2018-19	2017-18	2016-17	2015-16
253.46	349.84	286.07	437.31	299.73

File Description	Document
Institutional data in prescribed format	View Document
Audited statements of accounts indicating the revenue generated through consultancy	View Document
Any additional information	View Document

3.6 Extension Activities

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

Response:

IIITB student body has been actively driving several diverse activities under the guidance of the Office of the Coordinator of Student Affairs. Specifically, IIITB student clubs drive the extension activities actively by conducting events to improve awareness of persistent and relevant social issues and to mobilize for taking action. IIITB Theatre Arts club participates in intra- and inter-collegiate events with themes related to social issues including gender inequality, environmental issues, etc. IIITB Aikyam is a student-run social wing that undertakes charity activities, especially during festivals, including providing essentials to slum-dwellers, e.g. in Swami Vivekanda Nagar in 2019 for Diwali; serving special lunch and organizing events with gifting for families of IIITB support staff (housekeeping, gardening, maintenance, mess, security) for Diwali since 2018; spending time and organizing events with gifts for children at Surabhi Orphanage, 5km from IIITB, for Children's Day in 2019. During the pandemic, Aikyam organized the participation of Surabhi Orphanage during the Republic Day celebrations at IIITB in 2020. During International Women's Day in 2019, all women support staff were honored in a gathering attended by faculty, administrative staff, and students. IIITB has dedicated effort in supporting activities for the disabled, including supporting activities with the Indian Association of Blind, events by the Center for Accessibility in Global South http://cagsiiitb.org/, startup at the IIITB Innovation Center, VisionEmpower, http://visionempowertrust.in/ The Institute works with the Rotary-Bangalore TTK Blood Bank to run annual voluntary blood donation camps at the Institute encouraging students and others on campus to donate blood. The Institute has conducted POSH training for faculty, staff, and students, since 2019, to inculcate awareness of the POSH Act 2013, Government of India, on Sexual Harassment of Women at Workplace (Prevention, Prohibition, Redressal).

The Institute conducts regular sessions of Happy Healthy Hour for faculty and staff to build an ecosystem that fosters physical and mental well being. The sports events at the Institute include International Yoga Day celebrations by staff and faculty performing yoga along with students since 2015, in addition to other sports activities by students, e.g. Spandan, an intra-collegiate sports fest. For cultural awareness, the Institute holds ethnic days periodically for festivals, cultural events by students during key events at the Institute (e.g., Foundation Day), and conferences hosted by IIITB (e.g., ACM CODS COMAD 2021), art competitions (e.g., Kalamrutham art competition by Turiya club, annual photography competitions by Chhayachitra club, Kavyanajali -- a poetry contest by Aksh club), etc. IIITB traditionally holds a dusk-to-dawn SPICMACAY event during October 31-November 1, culminating in commemorating Kannada Rajyotsav on November 1. IIITB SPICMACAY chapter also promotes world heritage in addition to Indian art forms, e.g. organizing a piano recital by Balasz Fulei, a renowned pianist from Hungary in March 2017. During work from home period, IIITB faculty have started organizing public talk series, called book-reading sessions, which are faculty and expert talks to promote literature in the regional languages of India. For Kannada Rajyotsav in 2020, IIITB also conducted a book-reading session focused on Vachana Sahitya, a form of Kannada poetry.

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

3.6.2 Number of awards received by the Institution, its teachers and students from Government /Government recognised bodies in recognition of the extension activities carried out during the last five years

Response: 9

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

2019-20	2018-19	2017-18	2016-17	2015-16
3	1	1	1	3

File Description	Document
Institutional data in prescribed format	View Document
e-copy of the award letters	<u>View Document</u>

3.6.3 Number of extension and outreach programs conducted by the institution including those through NSS/NCC/Red cross/YRC during the last five years (including Government initiated programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. and those organised in collaboration with industry, community and NGOs).

Response: 32

3.6.3.1 Number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc. (including Government initiated programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. and those organised in collaboration with industry, community and NGOs) year-wise during the last five years.

2019-20	2018-19	2017-18	2016-17	2015-16
6	8	8	6	4

File Description	Document	
Reports of the event organized	View Document	
Institutional data in prescribed format	View Document	

3.6.4 Average percentage of students participating in extension activities listed at 3.6.3 above during the last five years

Response: 57

3.6.4.1 Total number of students participating in extension activities listed at 3.6.3 above year-wise during the last five years.

2019-20	2018-19	2017-18	2016-17	2015-16	
467	490	640	480	330	

File Description	Document	
Report of the event	View Document	
Institutional data in prescribed format	View Document	

3.7 Collaboration

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

Response: 8

3.7.1.1 Total number of Collaborative activities with other institutions / research establishment / industry for research and academic development of faculty and students year-wise during the last five years.

2019-20	2018-19	2017-18	2016-17	2015-16	
8	7	8	9	8	

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

3.7.2 Number of functional MoUs with institutions/ industries in India and abroad for internship, onthe-job training, project work, student / faculty exchange and collaborative research during the last five years.

Response: 244

3.7.2.1 Number of functional MoUs with institutions/ industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research year-wise during the last five years.

2019-20	2018-19	2017-18	2016-17	2015-16
50	52	55	48	39

File Description	Document
Institutional data in prescribed format	View Document
e-copies of the MoUs with institution/ industry	View Document

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

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

Response:

IIITB has created a state-of-the-art higher education campus infrastructure which is eco-friendly and incorporates natural elements perfectly within its symbiotic design. Natural light and green patches blend perfectly with its modern architectural spaces and provide a perfect ambience for the conduct of teaching-learning activities.

The Institute presently has two academic blocks, Aryabhatta and Ramanujam, with a total constructed area of 8,340 square metre (sqm). There are 14 classrooms with individual seating capacities in the range of 30-60 and a total constructed area of 2,593 sqm. All these classrooms are well ventilated, have a provision for air-conditioning, and are equipped with LED lights, high-resolution video projectors, laptops, Waqom electronic teaching pads and contain facilities for live video streaming and recording of class sessions/lectures. There are 5 seminar halls with an individual seating capacity in the range of 150-200. These seminar halls are also equipped with all the requisite facilities for conducting academic activities, both in an offline and online mode simultaneously.

The Institute has 21 well-appointed laboratories spread across 2,697 sqm. These laboratories are managed by suitably qualified staff members and have clearly laid down instructions and guidelines for usage Some labs with high-value and sensitive equipment and are also provided with an access control facility. In all the computer labs, a dedicated computer is made available to every student.

IIITB has many research centres, such as Machine Intelligence and Robotics Centre, E-Health Research Centre, Centre for IT and Public Policy, Cognitive Computing Centre of Excellence etc. and all of them have exclusive lab/working spaces with specialized equipment/infrastructure to cater to their specific needs which all the interested students have access to. In addition, there are enough small and medium sized meeting rooms for the faculty members and students to engage in project and research related discussions.

IIITB's computing infrastructure benefits from a close oversight by faculty members with deep research interests in electronic systems, databases and systems software, networking and information security. The Institute provides best-in-class computing facilities among similar-sized institutions in the country. At present, this includes close to 450 desktop/laptop computers, 25 high-speed servers (from Dell, HP, IBM and Sun), a IBM SAN storage of 700 GB and a backup of 160 TB. The campus has two high speed internet links, of 500 Mbps and 1Gbps respectively and WiFi connectivity is available in all academic spaces as

Page 58/106 04-08-2021 04:47:28

well as student hostels.

The Institute Library has a total seating capacity of over 85 persons. It has a collection of over 14,500 print titles as well as access to various electronic databases with many more titles. The Library is fully air-conditioned which helps it to function throughout the year from 0900 to 2300 hrs with extended working hours during exams. The Institute also has a reprographic facility well equipped with photocopier machines and printers.

IIITB campus has access to 24-hour uninterrupted power supply through its own substation, generators and UPS. The campus is friendly for persons-with-disabilities and lifts, disabled-friendly toilets, wheelchairs and well-designed ramps are available in all buildings.

File Description	Document	
Upload any additional information	View Document	
Paste link for additional information	View Document	

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

Response:

Participation in recreational activities is an important part of living, learning, and keeping everything in balance. To develop a well-rounded personality, IIITB students are encouraged to participate in a varied range of extra-curricular activities, including performing and creative arts, literature, sports and games.

A well-equipped modern auditorium with a seating capacity of 1100 persons is currently under construction and is expected to get ready for operations by 31st March 2021. The auditorium will have state-of-the-art professional quality sound and lighting systems for music, dance and theatre based cultural performances. The Institute has a 52 square metre (sqm) music room for practice and jamming sessions by its band and other active members of its music club. Another 52 sqm fully equipped room is used by students for dance and theatre practice sessions and workshops. A meeting room of 35 sqm is available for exclusive use by the various cultural clubs for discussions and event planning purposes.

To ensure the physical fitness of its students, the Institute has well-equipped gymnasia, both for men and women. Trainers are available to advise and cater to specific individual needs. An indoor yoga room of 370 sqm is also available for use by the students where regular sessions are conducted for their physical and

emotional well-being.

Adequate facilities for outdoor and indoor games and sports are available and actively used by the students. These include a cricket-cum-football ground, a volleyball-cum-throwball court, and basketball and tennis courts, recently upgraded to international standards. There is a 1 km long marked jogging track inside the campus and various other smaller informal spaces for students to engage in traditional games and sports. The indoor games facilities include three badminton courts, and multiple table-tennis, carom and chess boards.

The Institute administration provides all the required support to the students to self-organize into special interest groups and clubs and indulge in their favourite cultural and sporting activities. A Sports Committee managed by the students takes care of organizing various intra-college and inter-college events. They are guided by a Faculty-in-Charge of Sports & Games and other staff members trained in various aspects of physical education. The office of the Coordinator (Student Affairs) works along with the Student Activities Council (SAC) and various other clubs in organizing an annual cultural festival and various other events throughout the year. All these events are well attended by students from within the Institute and other colleges and Universities.

File Description	Document	
Geotagged pictures	View Document	
Paste link for additional information	View Document	

4.1.3 Availability of general campus facilities and overall ambience

Response:

The IIITB campus is a blend of modern and natural, perfectly embodying the Institute's focus on a symbiotic relationship of cutting edge technological research and education grounded in Indian ethos and value systems. Nestled amidst a major and sprawling IT hub of the country – Bengaluru's Electronic City, IIITB's well-maintained and tastefully designed campus spaces provide a serene environment conducive to the flowering of knowledge, while insulated from the surrounding corporate hustle and bustle.

With a total area of 11,238 sqm, close to one-thirds of the campus is covered by greenery, consisting of lawns, trees, flowering plants and water bodies. The campus flora is also home to various types of birds, butterflies and fishes. Safe and hygienic seating arrangements have been created within these green spaces for students and other IIITB community members to engage in relaxing and engaging academic discussions.

The constructed areas in the campus, consisting mainly of academic blocks, hostels and food court are designed to provide adequate natural lighting and ventilation and functional satisfaction to their user groups. An elaborate maintenance protocol consisting of periodic repairs and restoration as well as daily cleaning and conservancy ensure all the campus facilities have a high level of availability and usage.

The Institute manages its waste in the most responsible manner and as per the guidelines laid down by the municipal agencies of the city. Two sewage treatment plants, of capacity 140 KLD and 50 KLD respectively, ensure there is zero discharge into the city's already stressed sewerage system. Other eco-friendly initiatives at the Institute involve solar water heating facilities in all the hostels and complete segregation of waste at source.

Student hostels on campus have seven heavy duty automatic washing machines and two dryers to take care of all the laundry requirements. All the hostel blocks have RO plants for dispensing safe drinking water. Suitably equipped pantries are also provided in hostels to cater to contingent and specific needs of the students; a bakery shop on campus is kept open till 2 AM to attend to their late night hunger needs.

The Institute has an in-house catering facility with a modern kitchen set-up and adequate facilities for hygienic and safe cooking for over 1000 persons at a time. There is a large, well ventilated and furnished dining area with four serving counters and capacity to accommodate close to 450 persons simultaneously. Various student driven initiatives ensure food waste is kept to a minimum. The kitchen is also equipped with a Winter Halter dishwasher to clean used plates in the most hygienic manner.

IIITB students have access to two ATM counters. Round-the-clock security arrangements are provided with suitably trained personnel and adequate CCTV coverage of key spots. A medical room staffed by two visiting doctors is available to take care of immediate student needs while arrangements with nearby multispecialty hospitals exist for emergency situations. WiFi is available throughout the campus. Uninterrupted power supply is ensured through UPS and two dedicated diesel generators with capacity 320 KVA and 75 KVA.

File Description	Document	
Upload any additional information	View Document	
Paste link for additional information	View Document	

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

Page 61/106 04-08-2021 04:47:28

Response: 29.7

4.1.4.1 Expenditure for infrastructure augmentation, excluding salary during the last five years (INR in lakhs)

2019-20	2018-19	2017-18	2016-17	2015-16
517.91	218.86	2942.69	493.30	5968.03

File Description	Document	
Upload audited utilization statements	View Document	
Institutional data in prescribed format	View Document	

4.2 Library as a Learning Resource

4.2.1 Library is automated using Integrated Library Management System (ILMS) and has digitisation facility

Response:

The vision of IIITB Library is to contribute to a dynamic environment conducive for teaching, learning and research activities of the Institute community and to provide and organize information resources and services that are *avant-garde*, diverse, and of top quality. In accordance with the vision and mission of the Institute, the Library has been developing a comprehensive collection of scholarly literature over the years, in both print and electronic formats, along with curricula based resources that its users consider valuable.

IIITB Library uses *Koha* (open source ILMS software, version 16.05.01.000) to automate its library functions - cataloging, circulation and OPAC and to provide remote access facility to its e-resources. Due to its open source nature and a strong in-house support for customization, *Koha* has been preferred over the proprietary *Libsys*, which was used before 2016. Barcode technology is used to manage circulation and inventory operations. The Library uses Dewey Decimal Classification Scheme to manage library print book collection for arrangement and easy retrieval of books and provides *Koha* Web OPAC search/browse facility to its print and electronic collection.

The print collection mainly comprises of over 14,500 titles related to Computer Science & Engineering/IT, Physical Sciences, Social Sciences & Literature with few Management and GIS related titles and are grouped into three sections - Circulating, Reference and Course Reserve. The digital resource collection comprises of approximately 5,000 journals, 29,000+ conference proceedings, 12,000+ ebooks and 4,300+ standards. Access to these electronic resources is provided through IP enabled WiFi access anywhere in the campus, while remote access is provided by using Shibboleth user-authentication mechanism through

INFED. Some of the digital/online resources include:

- 1. ACM Digital Library published by Association for Computing Machinery
- 2. Chaos published by American Institute of Physics (AIP).
- 3. Economic and Political Weekly published by Sameesksha Trust.
- 4.IEL published by Institute of Electrical and Electronics Engineers (IEEE).
- 5. Institute of Physics (IoP) Journals published by Institute of Physics
- 6. Journal of Chemical Theory and Computation published by American Chemical Society (ACS).
- 7. JSTOR (Archival access)
- 8. IEEE-Wiley ebooks on IEL platform (perpetual access).
- 9. MIT Press ebooks on IEL platform (perpetual access).
- 10. Morgan & Claypool Synthesis Digital Library on IEL platform (perpetual access).
- 11. Springer 2020 Computer Science & LNCS Collection (Springer ebooks) on Springerlink
- 12.ITU iLibrary collection of 460+ titles.

IIITB Library is an associate member of *eShodhSindhu* (Consortium for Higher Education Electronic Resources), subscribes to its electronic resources and uploads all Ph.D theses on the *Shodhganga* portal. IIITB is a registered user of NDL facility and provides enrollment facility into NDL for all its users. The Library provides a collaborative cloud-based LaTeX editor, *Overleaf*, which helps it user community in drafting/editing documents and access to official journal LaTeX templates and direct submission links to a wide range of publishers.

The Library also caters to its users by conducting similarity checks of their report and article publications by using the *Urkund* plagiarism detection software provided by INFLIBNET. Previously, *Turnitin* software was used for this purpose.

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

4.2.2 Institution has access to the following: 1. e-journals 2. e-ShodhSindhu 3. Shodhganga Membership 4. e-books 5. Databases 6. Remote access to e-resources

Response: A. Any 4 or more of the above

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

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

Response: 65.42

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

2019-20	2018-19	2017-18	2016-17	2015-16	
108.49	85.60	54.09	38.10	40.82	

File Description	Document	
Institutional data in prescribed format	View Document	
Audited statements of accounts	View Document	

4.2.4 Percentage per day usage of library by teachers and students (foot falls and login data for online access) during the last completed academic year

Response: 100

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

Response: 1051

File Description	Document
Details of library usage by teachers and students (Library accession register, online accession details to be provided as supporting documents)	View Document

4.3 IT Infrastructure

4.3.1 Percentage of classrooms and seminar halls with ICT - enabled facilities such as LCD, smart board, Wi-Fi/LAN, audio video recording facilities. (Data for the latest completed academic year)

Response: 100

4.3.1.1 Number of classrooms and seminar halls with ICT facilities

Response: 19	
File Description	Document
Upload any additional information	View Document
Institutional data in prescribed format	<u>View Document</u>
Paste link for additional information	View Document

4.3.2 Institution has an IT policy, makes appropriate budgetary provision and updates its IT facilities including Wi-Fi facility

Response:

The IT Policy of the Institute covers all aspects of access and use of the campus IT infrastructure and facilities. Relevant sections are included in the HR Policy of the Institute and in the admissions documents for students.

Key features of the IT policy are as follows:

- All students, staff, faculty members and other authorized users are provided access to the campus network and internet, which is to be used legally and responsibly, for academic and official purposes, and authorized personal use.
- All students, faculty members and staff are provided with an official email id for official communication within the Institute and with external entities.
- Rules related to Information security and privacy of data, passwords, confidentiality of emails, antivirus agents, copyrighted material or other intellectual property, and attempts at compromising the infrastructure.

The Institute ensures adequate computing and network access to all its users through a state-of-the-art data center, a campus-wide network, and computing equipment in labs, offices and classrooms. The WiFi network features 802.11ac access in all academic and administrative areas and hostels, including classrooms, labs, offices, libraries, hostel rooms and common areas. All faculty and staff members are provided desktops or laptops based on their role and need. Authorized users can connect their official or personal devices to the network, through a secure login mechanism. The campus has two high speed internet links, of 500 Mbps and 1Gbps respectively.

The IT infrastructure related processes are implemented and managed by the Data Center, headed by the Technical Manager (IT), and overseen by the Computing/IT Committee comprising faculty members of the Institute. The committee meets periodically to:

- plan for and monitor the operations of the IT infrastructure and adherence to policies
- review any changes in implementation plans

- approve budgets and expenses related to common IT infrastructure.
- review proposed changes, enhancements and upgrades to the infrastructure.

Budgeting for the operational and capital expenses of IT infrastructure is part of the Institute's annual budget exercise. Annual plans incorporate any expansions or alterations that would require upgrading the IT infrastructure, including planned additions to academic, administrative and hostel facilities, increases in class sizes, to ensure adequate access to computing and networking infrastructure across the campus. These plans include additions or upgrades of data center equipment, network elements, internet bandwidth, cloud subscriptions, desktops, laptops, printers and related equipment. The budget provision for FY 2019-20 and FY 2020-21 were 1.96 Cr and 2.58 Cr respectively. Budget utilized in FY19-20 was 1.53 Cr.

Some key upgrades to the IT infrastructure over the last 5 years:

- 2015: WiFi provided in new boys' hostel
- 2017: WiFi and wired network, along with computing facilities for classrooms and labs of new academic building
- 2018: Data Center servers upgraded
- 2018: WiFi upgraded to 802.11ac with new switches/routers for entire campus
- 2018: Internet bandwidth from primary ISP increased from 100 to 500 Mbps
- 2020: (ongoing) migrating services to the cloud for increased availability and flexibility
- 2021: (in progress) Network and computers for new floors of academic building

File Description	Document	
Upload any additional information	View Document	
Paste link for additional information	View Document	

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

Response: 1:1

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

4.3.4 Available bandwidth of internet connection in the Institution (Leased line)

Response: A. ?1 GBPS

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

4.3.5 Institution has the following Facilities for e-content development

- 1. Media centre
- 2. Audio visual centre
- 3. Lecture Capturing System(LCS)
- 4. Mixing equipments and softwares for editing

Response: A. All of the above

File Description	Document	
Upload any additional information	<u>View Document</u>	
Institutional data in prescribed format	<u>View Document</u>	
Links of photographs	View Document	

4.4 Maintenance of Campus Infrastructure

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

Response: 7.82

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

2019-20	2018-19	2017-18	2016-17	2015-16
736.63	668.42	559.5	387.14	294.19

File Description	Document
Institutional data in prescribed format	View Document
Audited statements of accounts	View Document

4.4.2 There are established systems and procedures for maintaining and utilizing physical, academic

Page 67/106 04-08-2021 04:47:31

and support facilities - laboratory, library, sports complex, computers, classrooms etc.

Response:

The aesthetic appeal and functional utility of the IIITB campus infrastructure is carefully nurtured and enhanced by the hard work and committed efforts of its dedicated team of maintenance personnel and supervisory staff. Under the able guidance of the Chief Administrative Officer (CAO), this team looks after day-to-day cleaning and conservancy activities of the built spaces, upkeep of the gardens and green spaces and maintenance of electrical and mechanical equipment. The campus administration and facilities team have put in place daily and periodic repairs and maintenance protocols in accordance with the guidance provided by equipment manufacturers and generally accepted best practices. Annual maintenance contracts for generators, sewage treatment plant, lifts and other such equipment are in place with the OEMs (original equipment manufacturers). Standard operating procedures (SOPs) have been devised for the use of all equipment and facilities on campus and the concerned staff ensure they get followed diligently by all authorized users.

All the hostel rooms, toilets and bathrooms in the men's and women's blocks are regularly cleaned. The academic blocks also see daily cleaning of all offices, meeting and discussion rooms and classrooms. Common areas go through dry and wet cleaning twice a day using suitable disinfectants and sanitization protocols. Waste handling is done most responsibly as per the guidelines provided by the local municipal authority.

The Institute's digital/IT infrastructure is attended to very carefully by the IT Support team under the guidance of Technical Manager (IT) and overseen by the Computing/IT Committee comprising faculty members of the Institute. Here too, annual maintenance contracts exist with OEMs to ensure suitable upkeep and timely upgrades. Dedicated personnel are available in all academic blocks of the Institute during regular class hours to ensure any help, if required, is immediately available while classroom activities are being conducted.

Specialized equipment in the various labs of the Institute are carefully maintained by the lab-in-charges. Wherever required, access control mechanisms are provided to prevent unauthorized usage. The Library resources are attended to with utmost care to ensure longer shelf-life of books and periodicals. Periodic maintenance as per prescribed standards are carried out under the guidance of the Librarian and other Library staff.

While most cultural and sports activities on campus are managed by various student clubs and committees, the office of the Student Affairs Coordinator, with dedicated and trained personnel for coordinating cultural and sports activities respectively, ensure appropriate usage guidelines exist for efficient and effective usage of various facilities and equipment. Regular stock taking, repairs and other periodic maintenance and upgrades, as and when required, ensure the students are able to indulge in these extracurricular activities with minimal disturbances.

A round-the-clock team of security officers and personnel ensure the protection of the Institute's physical infrastructure from any trespass or transgression by unauthorized external entities. This team also ensure all campus residents feel safe and secure at all times and are able to undertake their teaching-learning activities unhindered by any form of threat or fear.

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



Criterion 5 - Student Support and Progression

5.1 Student Support

5.1.1 Average percentage of students benefited by scholarships and freeships provided by the institution, Government and non-government agencies (NGOs) during the last five years (other than the students receiving scholarships under the government schemes for reserved categories).

Response: 34.3

5.1.1.1 Number of students benefited by scholarships and freeships provided by the institution, Government and non-government agencies (NGOs) year wise during the last five years (other than the students receiving scholarships under the government schemes for reserved categories).

2019-20	2018-19	2017-18	2016-17	2015-16	
491	316	244	228	205	

File Description	Document	
Upload self attested letter with the list of students sanctioned scholarship	View Document	
Upload any additional information	View Document	
Institutional data in prescribed format	View Document	
Link for additional information	View Document	

5.1.2 Average percentage of students benefited by career counseling and guidance for competitive examinations offered by the Institution during the last five years.

Response: 100

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

2019-20	2018-19	2017-18	2016-17	2015-16
1005	927	847	811	648

File Description	Document
Institutional data in prescribed format	<u>View Document</u>
Any additional information	View Document
Link for additional information	View Document

5.1.3 Following Capacity development and skills enhancement activities are organised for improving students capability 1. Soft skills 2. Language and communication skills 3. Life skills (Yoga, physical fitness, health and hygiene) 4. Awareness of trends in technology

Response: A. All of the above

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

- 5.1.4 The institution adopts the following for redressal of student grievances including sexual harassment and ragging cases 1. Implementation of guidelines of statutory/regulatory bodies
- 2. Organisation wide awareness and undertakings on policies with zero tolerance
- 3. Mechanisms for submission of online/offline students' grievances
- 4. Timely redressal of the grievances through appropriate committees

Response: A. All of the above

File Description	Document
Upload any additional information	View Document
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	View Document
Link for additional information	View Document

5.2 Student Progression

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

Response: 100

5.2.1.1 Number of students qualifying in state/ national/ international level examinations (eg: IIT/JAM/ NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government

Page 71/106

examinations, etc.)) year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
166	160	166	176	150

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

2019-20	2018-19	2017-18	2016-17	2015-16	
166	160	166	176	150	

File Description	Document
Upload supporting data for the same	View Document
Institutional data in prescribed format	<u>View Document</u>
Link for additional information	View Document

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

Response: 86.88

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

2019-20	2018-19	2017-18	2016-17	2015-16
209	206	225	194	147

File Description	Document
Self attested list of students placed	View Document
Institutional data in prescribed format	View Document
Link for additional information	View Document

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

Response: 3.95

5.2.3.1 Number of outgoing student progressing to higher education.

Response: 10

File Description	Document
Upload supporting data for student/alumni	<u>View Document</u>
Institutional data in prescribed format	<u>View Document</u>
Any additional information	<u>View Document</u>
Link for additional information	View Document

5.3 Student Participation and Activities

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

Response: 49

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

2019-20	2018-19	2017-18	2016-17	2015-16	
7	16	5	9	12	

File Description	Document
Institutional data in prescribed format	View Document
e-copies of award letters and certificates	View Document
Link for additional information	View Document

5.3.2 Presence of Student Council and its activities for institutional development and student welfare.

Response:

The Student Activities Council (SAC) is a student-elected, student-member body, consisting of equal membership from under-graduate and post-graduate students. It is an elected student body which consists of regular and full-time students only, as per the recommendations of the Lyngdoh Committee set up by the Ministry of Human Resource Development, Government of India. A structured election system is followed and students of all degree programs at the Institute select a set of eight SAC members every year.

The elected SAC members decide on allocating portfolios among them based on competency and interest. SAC act as a bridge between the Institute administration and the student community. It steps in to address students grievances related to academic and administrative matters. SAC meets regularly to resolve student concerns and plan for various student led curricular and extra-curricular activities on campus. Various Student Committees are formed to guide and involve students such as • Alumni Committee collaborates with alumni • Branding Committee maintaining a presence on various social media platforms and poster design. • Food Committee interfaces with the food vendors for the mess. • Infin8 Committee organizes the annual cultural event. • Placement Committee placementrelated activities. • Sports Committee organizes sports events throughout the year. Student Clubs Aikyam help the poor and the needy in the society. 8Bit magazine run by the students. Dance Club organizes dance events and competitions. Parvaaz (Theatre Club) performs theatre and street plays. Music club organizes musical nights and perform at all key events of the Institute. Aksh (Lireature Club) forum to showcase their poetic and story writing abilities. Debate Club to enhance their interpersonal skills, communication and leadership capabilities. Enigma (Robotics Club) to develop interest in Robotics and Artificial Intelligence. SPICMACAY IIIT Bangalore Chapter organizes classical music, dance, folk arts and classic cinema screenings. Lean In Club promotes and mentors female students in computing, open source and research. Zense Club conducts Hackathons and promote Open Source culture. Movie Club to develop acute movie watching skills, depth in film viewing and appreciation. Events and Festivals: • Infin8 three-day annual event with simulation games, cultural activities and fun field games. • Yamini annual event takes place on 31st October. It consists of dance and music performances by renowned artistes across the country. • Spandan annual sports event conducted in March. The threeday event is fully loaded with outdoor as well as indoor games. • Sangam annual event exclusively for the alumni organized by the Alumni Committee. • Foundation Day celebrated on 15th September, every year. • Convocation Day held on 1st Sunday of July, every year. • Ramanujan Math and IT conference (RMIT) is annual event is held in remembrance of mathematician, Srinivasa Ramanujan. • Research Innovation, Society Entrepreneurship (RISE): The three-day event to showcase the Institutes focus and contribution in research and innovation dimensions. • Winter School is a three-day annual event by CITAPP. • Summer School aims to give students knowledge on algorithmic and theoretical aspects of machine learning.

File Description	Document
Upload any additional information	View Document
Link for additional information	View Document

5.3.3 Average number of sports and cultural events / competitions organised by the institution per year

Response: 23.4

5.3.3.1 Number of sports and cultural events / competitions organised by the institution year - wise during the last five years.

2019-20	2018-19	2017-18	2016-17	2015-16
36	22	21	19	19

File Description	Document
Report of the event	<u>View Document</u>
Institutional data in prescribed format	<u>View Document</u>
Link for additional information	View Document

5.4 Alumni Engagement

5.4.1 The Alumni Association / Chapters (registered and functional) contributes significantly to the development of the institution through financial and other support services.

Response:

As we believe that every student in IIITB is a Brand Ambassador, we have over 3300 Brand Ambassadors who have graduated from the institute, over the last 21 years. The vision of the Alumni Association is to build a strong and enduring relationship between IIITB and our students that is mutually beneficial.

While IIIT Bangalore has single-mindedly focused on providing the finest education to its students, our Alumni are strengthening its reputation with their noteworthy contributions to society.

Here are a few areas where IIIT Bangalore are leveraging the Alumni Network:

- 1. In building the University's reputation, which depends on how successful graduates are in the real world to a great extent.
- 2. Since the Alumni are constructing a perfect legacy in the corporate world with their knowledge and values, our students have better job prospects.

Following are the support and contribution of IIITB Alumni in the last 5 years:-

- 1. Placement Mentorship Program: Approximately 52 Alumni coordinated with Placement Cell in conducting CV review, mock interviews and guidance sessions for the graduating batch.
- 2. Alumni joined the institute for mentorship in various entrepreneur boot camp programs like TIDE, RISE etc.
- 3. Since COVID-19, the association has initiated "Alumni Connect", a monthly webinar series where alumni, professors and students interact and broaden their horizons.
- 4. The association has initiated "Alumni Higher Education Mentorship", another webinar series led by alumni who went for higher studies. The aim of the series is to guide the pre-final and final year students interested in higher studies, in and out of the whole process.
- 5. Alumni had generously donated (crowdsourced among the alumni) for the institute's effort to support

Page 75/106 04-08-2021 04:47:35

daily wage workers in the Electronic City region during the pandemic-induced lockdown in 2020.

- 6. Alumni participate enthusiastically in annual cultural and sports fests.
- 7. Alumni association organizes Sangam (Annual Alumni Meet) which allows alumni to come to campus and relive their college days, allowing the institute to continue to maintain strong bonds with them.
- 8. Engaged with the institute as RAs and faculty members. Some alumni have taken up positions of heads of various research labs in the campus like EHRC, MINRO, CAGS etc.
- 9. Few alumni have entered the world of startups through their own entities at the incubation center of the campus after graduating.
- 10. Few alumni head the Entrepreneurship Committee (IMACX) which evaluates startups and student innovations. These act as mentors, when required.
- 11. Alumni contribute blogs with their internship and job experiences which act as guidance for senior batches.
- 12. Alumni meet with the incoming batch each year for fireside chats to have some candid conversations and lift the spirits of the new students.
- 13. Many alumni have been featured in the institute run podcast called "Technology, Together" where they showcase their research.
- 14. Alumni actively engage on Google Groups and Alumni Portal for lateral job posting.
- 15. Alumni participate in various student-led activities not just as participants but as judges and facilitators.

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

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

Response: C. 20 Lakhs - 50 Lakhs

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

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1 The institution has a clearly stated vision and mission which are reflected in its academic and administrative governance.

Response:

IIITB has clearly articulated vision and mission statements which have been arrived at after due consultation and consideration of its strengths, and the aspirations of its varied stakeholders. IIITB's Vision is "to contribute significantly to Information Technology for transforming lives of individuals & society and efficient conduct of sustainable businesses, social enterprises, and governments through continuous innovation in Information Technology education, research and entrepreneurship". IIITB has used the following Mission statement to guide its activities all through the years: "To build on IT leadership provided by India in general and Bangalore in particular, through a world-class Institute focused on education & research, entrepreneurship and innovation".

To further its vision and mission, the Institute is guided by the motto of $J\tilde{n}$?nam Uttamam (knowledge is supreme) and core values of excellence, ethics & integrity, equity & non-discrimination, freedom of thought, and value creation through scholarly research and entrepreneurship.

The academic and administrative ethos of the Institute derives from its vision, mission and core values. The focus of most of the Institute's research and scholarly activities has been towards contributing to the needs of the country as well as similar regions in the world which are currently under-served. This includes a focus on accessibility, affordability and availability of Information Technology (IT) solutions in the area of healthcare for marginal social groups at the Institute's E-Health Research Centre, working towards inclusive technology designs and applications in the fields of governance and development through the Centre for IT and Public Policy, the Centre for Accessibility in the Global South and the Machine Intelligence and Robotics Centre, and ongoing efforts on creating an open-source and modular identity platform (MOSIP) as a global public good.

Academic programmes and course structures at the Institute are aligned to promote efficiency and effectiveness of IT designs and applications for all sections of the society, including established businesses and start-ups. Interdisciplinary course designs provide opportunities to incorporate a holistic and well-rounded view of technology production and consumption, in line with our aforesaid guiding principles. A non-departmental and unitary academic structure allows cross-pollination of ideas and faculty collaboration on teaching and research activities. Research centres at the Institute, as the ones mentioned above, are also formed in a manner that furthers the spirit of mutual sharing and respect beyond traditional disciplinary boundaries.

Page 77/106 04-08-2021 04:47:35

Innovation and entrepreneurship is encouraged not only through academic inputs to the students, but also through the activities of the IIITB Innovation Centre which has facilities for incubation of start-ups and caters to their early-stage funding and mentoring requirements.

The administrative structure of the Institute is fully geared to act as a catalyst for its academic and scholarly pursuits. The administrative staff work very closely with faculty members on various panels and committees to ensure they are sensitized to each other's needs and constraints. A supportive administrative governance and close interactions among all constituents of the Institute's ecosystems ensure alignment with overall vision and mission and rapid course corrections in case of any deviations

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

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

Response:

The overall management and administration of the affairs of the Institute is vested in the Governing Body which consists of not less than seven members and not more than seventeen members at a given time. The Governing Body has representation from the Government of India, Government of Karnataka, the IT industry, academia and the Institute alumni. The current constitution of the IIITB Governing Body is available in the Institute website.

The leadership from the Chairman and Members of the Governing Body has been instrumental in establishing world-class systems and processes for teaching-learning and research activities at the Institute as well as for the recruitment, retention and growth of its faculty members. Timely intervention by the Governing Body has also been helpful in requisite liaisoning with government agencies in securing capital grants as well as for land and other statutory approvals. The Governing Body has always provided an interference-free environment to sustain intellectual freedom at the Institute, while constantly pushing for excellence in all its activities.

Mr.N.R.Narayana Murthy, Co-Founder of Infosys stayed as the Chairman of the Governing Body of IIITB for nearly twelve years demonstrating his commitment in nurturing the Institute. The transition to the current Chairman, Mr. S Gopalakrishnan, also happened smoothly with due process of consultation, discussion and decision through an open process, leading to continuity all through the years. All Governing Body meeting dates are fixed well in advance with practically no rescheduling. The Governing Body meetings are held regularly and they provide critical and useful inputs for the strategic direction and operations of the Institute. The Governing Body regularly invites faculty members to its meetings to present key aspects of their research, teaching and other professional development activities.

In the discharge of its responsibilities, the Governing Body is advised by the Senate (consisting of faculty members, external experts and key Institute staff) on all academic matters, including policy making, programme and course designs and ascertaining graduation requirements.

Day to day management is overseen by the Director with the assistance of the Deans, Programme Coordinators, Registrar, Chief Financial Officer, Chief Administrative Officer and other faculty-in-charges and staff officers. In matters related to academic practices, course instructors are provided reasonable freedom to innovate at the time of delivery, to cater to specific class compositions and requirements, within the broad parameters laid down and approved by the Senate.

Nurturing of academic freedom and instilling a sense of individual responsibility and commitment to a common purpose has been the hallmark of the Institute's leadership culture. It is evident in all its management practices cutting across different functional domains, both in the academic and administrative realms. This leadership style is not only restricted to the Institute's key official positions and their conduct but even cascades down to the way student activities are managed and organized on campus. Students are actively encouraged to self-organize and take on greater responsibility in the Institute's operations.

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

6.2 Strategy Development and Deployment

6.2.1 The institutional Strategic plan is effectively deployed.

Response:

The key forums for strategic planning at IIITB are the meetings of the General Body, Governing Body, Industry Advisory Board (IAB), Senate and the dedicated strategic planning workshops termed as "Faculty Retreat "attended by faculty members and other key officers. Besides these forums, for research activities the institute has a forum called Technology Innovation and Research Assistance Council (TIRAC) to steer and strategize research activities in the institute. These forums help provide critical inputs spanning multiple perspectives that are crucial for the Institute to understand its response strategies to emergent changes in its external environment, at national and global levels.

With representation from senior bureaucrats in Government of India and Government of Karnataka as well as senior executives of the IT industry, including those from among the Institute alumni, the Governing Body is perfectly poised to offer strategic direction to the Institute. A perusal of the institute website https://www.iiitb.ac.in/governing-body will highlight the eminence of its members and the institute's seriousness in planning its strategy and implementing the same. Meetings of the Governing Body are held every quarter with minutes meticulously circulated, acted upon and action taken report duly documented. New infrastructures implemented in the last five years are one such example of strategic decisions taken by the Governing Body.

The strategic planning for the institute's curriculum development takes place through the Senate which also meets once in a quarter with minutes meticulously circulated, acted upon and action taken report duly documented. The Senate consists of senior faculty members of IIITB, eminent educationist of repute and other industry experts. Chairman of the Senate forms a committee for development of any new program. The curriculum development for each program is done by faculty expert of that area by multiple discussions and meetings. Then the curriculum is presented to all the faculty members. Later to Senate members. Similarly, each course is strategically planned and designed by a faculty, presented to all the faculty members, then to Senate. Implementation of a curriculum or course happens only on the basis of an approved Senate document. The M Sc Digital Society program is one such example of new program curriculum introduced and implemented through strategic planning of the Senate. Host of new courses offered are also a result Senate strategic planning.

To encourage out of the box loud thinking and strategies long term, the faculty meets once in six months in a forum called "Faculty Retreat" and chalks out long term strategies and priorities for the institute. The minutes of these meetings also serve as a document for future implementation.

Recommendations from the Industry Advisory Board (IAB), which largely brings in an external perspective and also current needs of the industry, and the internal perspectives from the day-long strategy workshops, conducted every six months, provide useful inputs to the Governing Body to take considered and well-informed decisions on matters related to the Institute's positioning and alignment while attending to matters of viability and sustenance over the longer term.

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

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

Response:

All the key bodies at IIITB have been performing the duties assigned to them diligently and with the shared common purpose of advancing the vision and mission of the Institute in the areas of education, research, innovation and entrepreneurship, and in accordance with its core guiding values.

The Governing Body has the overall responsibility of all academic and administrative matters of the Institute and their compliance to prescribed statutory provisions. The Governing Body has been meeting every quarter all these years, without fail, to discharge its duties and has been providing the required strategic direction and support to all the Institute's activities.

The IIITB Senate is the principal academic body of the Institute tasked with ensuring compliance to extant provisions of UGC, AICTE and other relevant regulatory agencies, while carefully attending to quality of course designs and pedagogical approaches to ensure a good learning experience for its student cohorts, at par with the best in the country and the world. The Senate meets every two months and takes stock of

ongoing academic activities, including admissions, assessments, graduation and other critical milestones achieved by students of research degree programmes. It also considers specific cases of poorly performing students and advises on corrective measures to ensure they are able to catch-up. Senate meetings also provide an opportunity for discussions on innovative teaching-learning processes and futuristic course and programme designs aligned to societal and industry requirements.

IIITB's Industry Advisory Board (IAB) is an invited group of top leaders from the industry and provides guidance to the Institute on matters related to academic and research activities as well as on high-level strategic planning. Over the past few years, IAB has been meeting once in six months and has helped the Institute with valuable inputs on programme development, curriculum reforms, generating better employment opportunities for graduating students, applied research opportunities for faculty members, and has also been acting as an external advocate for the Institute administration.

The offices of the Director and the Deans provide day-to-day leadership in managing the various affairs of the Institute. They are ably supported by coordinators of various educational programmes, internships and placements, and controller of examinations on academic matters. The Registrar, CFO, CAO, Wardens, Student Affairs Coordinator and their offices oversee all other administrative activities at the Institute. There are other Institute committees consisting of faculty members to take care of IT and Library requirements, attend to sexual harassment complaints and promote co-curricular and extra-curricular activities among students. Appointment and nominations for all these positions are handled in a transparent manner and in full compliance with the prescriptions laid down in the Institute's HR manual. A rotation policy on most faculty managed administrative positions ensures continuous inflow of fresh ideas and inputs and contributes to desired efficiency and effectiveness in operations and policy making

File Description	Document
Any additional information	View Document
Link to Organogram of the University webpage	View Document
Link for Additional Information	View Document

6.2.3 Institution Implements e-governance covering following areas of operation

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

Response: A. All of the above

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

6.3 Faculty Empowerment Strategies

6.3.1 The institution has a performance appraisal system, promotional avenues and effective welfare measures for teaching and non-teaching staff.

Response:

Regular performance appraisals are conducted for teaching and non-teaching staff of the Institute as part of their capacity building efforts. The principal objective behind these appraisals is developmental, to provide an opportunity to the employees to self-reflect and discuss with a panel of appraisers on suitable measures required for improvement and better contributions.

For faculty members, comprehensive appraisals are conducted at the time of their promotion as per the processes mentioned under the rules of Selection and Promotion of Faculty members approved by the IIITB Governing Body on 23rd February 2016. These rules have been framed to encourage and provide incentives to faculty members who perform well as well as to advice and facilitate self-improvement of those not up to the mark.

All Assistant and Associate Professors, who are Regular faculty members until superannuation, become eligible to apply for promotion after serving at least three years in their position. Those with prior post-Ph.D. experience may become eligible after the completion of their probationary period. Faculty members eligible for promotion to the next level submit a formal request to Dean (Faculty) along with a dossier comprising of (i) a Self-Assessment Report highlighting academic and other professional achievements and contributions to the Institute since being appointed to the Institute, or since the previous promotion, in a prescribed format, (ii) a research statement, (iii) a teaching statement, and (iv) a list of 4-6 referees who are not members of the faculty or staff of the Institute, and are familiar with the work of the concerned faculty member.

If considered suitable after scrutiny by the Director and Dean (Faculty), a Faculty Selection and Promotion Committee is constituted to review the application and reports from the external referees and to interview the faculty member to assess performance, especially with respect to publications, teaching & student supervision, sponsored research & consulting activities and institutional building & professional service.

Non-teaching staff members at IIITB are considered for promotion to the next grade on completion of eight years of service (including periods spent on promotion as probation, but excluding periods on leave without pay) in the existing grade. A Promotion Committee consisting of a faculty member, the registrar or

Page 82/106 04-08-2021 04:47:37

the chief administrative officer, and the finance adviser or an officer from the finance department is constituted. The case for promotion is decided based on good conduct & service, a review of annual performance appraisals over the last eight years, self-appraisal report and career vision of the employee. The committee interviews the candidate and may have discussions with the candidate's immediate supervisor and colleagues to obtain feedback on performance before making its decision.

IIITB has a well formulated HR Policy document, last revised and approved by the Governing Body on 19th November 2019, which lists down various other avenues through which the Institute takes care of the welfare and development of its employees. These relate to pay and allowances, leaves, medical benefits and forums for grievance redressal, including the Internal Complaints Committee for preventing sexual harassment.

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

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

Response: 67.41

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

2019-20	2018-19	2017-18	2016-17	2015-16	
26	42	25	30	22	

File Description	Document
Details of teachers provided with financial support to attend conferences, workshops etc. during the last five years (Data Template)	View Document
Link for Additional Information	View Document

Other Upload Files	
1	<u>View Document</u>

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

Response: 12.2

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

2019-20	2018-19	2017-18	2016-17	2015-16
12	15	14	10	10

File Description	Document	
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff (Data Template)	View Document	
Any additional information	View Document	
Link for Additional Information	View Document	

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

Response: 97.3

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

2019-20	2018-19	2017-18	2016-17	2015-16
44	45	40	41	38

File Description	Document
Details of teachers attending professional development Programmes during the last five years (Data Template)	View Document
Any additional information	View Document

6.4 Financial Management and Resource Mobilization

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

Response:

There are two main sources of finances for the Institute, which include (i) students' fees from the various degree programmes, and (ii) grants from industry and government for funding research projects and fellowships for research degree programmes (Doctor of Philosophy and Master os Science by Research). Apart from these, the Institute has also developed many continuing education (Diploma and Certificate) programmes for working professionals in emerging areas of Big Data, Artificial Intelligence (AI), Data Anlaytics, and Cyber Security. Revenue from these programmes contribute to both operational expenses of the Institute as well as to the Institute corpus.

The Institute has recently been creating customized programmes in specific sectors such as banking, IT and utilities, in collaboration with EdTech start-ups such as upGrad and Simplilearn, that bring in substantial revenues. The Institute is also driving fund raising campaigns from the Institute alumni for contribution to its corpus.

In its pivotal role as a pioneering IT Institute in the State of Karnataka, IIITB has been providing consulting for various IT projects of the Government through its expert faculty members and research staff. These consulting engagements with the Government of Karnataka, as well as with other agencies of the government in other States and at the Union level, have also helped the Institute position itself as a centre of excellence in areas such as Machine Intelligence and Robotics, E-Health, Internet of Ethical Things etc. that are being generously funded by the State Government.

The Institute has also pioneered many research initiatives in the areas of Digital Identity, E-Health, Web Sciences, 6G networks which are being funded by many national and global funding agencies such as Bill & Melinda Gates Foundation, Omidyar Networks, Tata Trusts and Department of Science and Technology of the Government of India.

The Institute has also set up an Innovation Centre which incubates start-ups, broadly in the area of sociotech in education, healthcare and other projects of relevance to the society at large. Many large IT firms such as Mphasis, Accenture Technologies, Sonata, to name a few, have contributed their Corporate Social Responsibility (CSR) funds to the Innovation Centre. It is the objective of the Institute to integrate the incubated projects as part of research activities of the faculty of the Institute and encourage technology licensing between the incubated firms and the Institute.

For all its sponsored research and consulting projects, the Institute follows laid down procedures of accounting and record keeping, to ensure fund utilizations adhere to specific contractual obligations while complying to generally accepted accounting practices. In most cases, separate ledger accounts are created and expenses incurred only after following the due process involving approvals from the Principal Investigator(s), Dean (R&D), the Registrar/CFO and the Director. Similarly, all expenses on academic and other activities are undertaken with concurrence of the appropriate Institute officers and in accordance with budgets approved by the Governing Board

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

6.4.2 Funds / Grants received from government bodies during the last five years for development and maintenance of infrastructure (not covered under Criteria III and V) (INR in Lakhs).

Response: 3195

6.4.2.1 Total Funds / Grants received from government bodies for development and maintenance of infrastructure (not covered under Criteria III and V) year wise during the last five years (INR in Lakhs).

2019-20	2018-19	2017-18	2016-17	2015-16	
246	55	1050	200	1644	

File Description	Document
Details of Funds / Grants received from government bodies during the last five years (Data Template)	View Document
Annual statements of accounts	View Document

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

Response: 2008

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

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	400	1608	0

File Description	Document
Institutional data in prescribed format	View Document
Annual statements of accounts	View Document

6.4.4 Institution conducts internal and external financial audits regularly

Response:

The audit practices at the Institute are in accordance with the Finance Manual, last modified and approved by the Governing Board on 13th November 2019.IIITB's Governing Board has the responsibility to ensure that the affairs of the Institute are conducted in a manner conducive to the interests of the IIITB Society's objectives, and also to ensure that the property and assets of the Institute are duly protected. In the discharge of this responsibility, the Board and its Audit Committee have to be assured that adequate internal control systems are in place and that the operations of the Institute are conducted in strict compliance with the control and other procedures laid down. Towards this, the Board or its Audit Committee, in consultation with the Director, appoints a qualified person or firm to be the Internal Auditor for the Institute. The audit practices at the Institute are in accordance with the Finance Manual, last modified and approved by the Governing Board on 13th November 2019.

The Internal Auditor so appointed responds and reports to the Board and its Audit Committee, and carries out audit exercises in consultation with and as directed by the Board or its Audit Committee to provide an independent evaluation of the control procedures in place and the extent of compliance therewith. In order to protect the Internal Auditor's independence, all matters relating to their appointment, remuneration, replacement and other such matters are always subject to the prior approval of the Board or its Audit Committee. Moreover, the external statutory auditor(s) of the Institute, and any related individual or firm is not eligible for appointment as the Internal Auditor(s) of the Institute.

The Internal Auditor, under the supervision and guidance of the Board or its Audit Committee, liaises and coordinates with the Institute's external statutory auditors, the Director, and the CFO in determining the scope, extent, and detail of the internal audit programme.

The auditor examines the books and records, Income and Expenditure Statement, Receipts and Payments, and balance sheet and the internal audit report. Audit report ensure/covers the following aspects. • Sufficient and appropriate evidences are available for entries made in books of account • All transactions are being recorded in books of account, i.e. there is no omission • Information contained in the financial statements is clear and unambiguous • Amounts shown in financial statements are properly classified, described and disclosures are made in conformity with applicable accounting Standards • Financial statements reflect true and fair view of financial results and financial position as on the Reporting date. Auditor report was placed before the Audit and Finance committee of the governing body and after its recommendation, it is paced before the Governing body. The financial statement along with audit report is finally adopted in the Annual General Meeting of the members of the society and afterwards it will be filed with the Registrar of the Society.

File Description	Document
Any additional information	View Document

6.5 Internal Quality Assurance System

6.5.1 Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes by constantly reviewing the teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals.

Response:

Special "preparatory term" was introduced for M.Tech students to bring students coming from diverse standards in under-graduation to the same page.

- 2. Collaboration initiated with "sister institutions" to promote inter-disciplinary collaboration. MoU signed with IBAB for offering a joint programme in Big Data Biology.
- 3. Steps initiated to encourage data-driven decision making by using analytics. One faculty member attended the Tableau conference in USA to study the best-practices of using analytics for decision making.
- 4. New tools were introduced to reduce manual work with increased automation in administration. At the institution level, investment of Admin staff were provided with commercial mail-merge tool to send personalized e-mails; PDF tools for flexibility of working with large PDF files;
- 5. A special committee headed by eminent retired professor from IIT Kanpur, Prof. Prabhu, was constituted for reviewing the Senate structure. The suggestions improved the quality of inputs received in Senate meeting.
- 6. In order to keep up with current requirements of employability, a new specialization named Signal Processing and Pattern Recognition was started.
- 7. In any institution, poor-performing students need special attention and guidance. In order to provide individualized attention, a special initiative called "Guided Study" was created for poor-performing students. As part of this initiative, students were provided with individual learning plan in courses where they failed or received low grades.
- 8. In order to encourage and recognize high-performing students, new GOLD MEDALS were initiated for the new Integrated MTech and M.Sc. (Digital Society) programmes.
- 9. To motivate new students of Integrated M.Tech. to perform well, a new process was approved by the Senate to give Integrated M.Tech. students branch to change branch at the end of the first year of study.
- 10. Dean's List used to be announced at the end of every semester. In order to ensure that sustained good performance is recognized and rewarded, the frequency of announcing the list was changed to once a year.
- 11. Scholarship was announced for top students across all years of Integrated M.Tech. As per the new scheme, merit scholarship was provided to Rs. 50,000 to 18 students each year.
- 12. IIITB has tried to keep the curriculum updated and current. Under the direction of the Sentate, curriculum of M.Tech., Integrated M.Tech., and M.Sc. Digital Society was initiated. Curriculum review committees include experts drawn from both academia and industry.
- 13. One of the challenges faced in research programmes like PhD in India is that some of the students do not make progress at a pace that will lead to timely graduation. The Senate of IIITB advised periodic process to be initiated to identify students who need counseling for completing the milestones of PhD in a timely manner. Students who were not in a position to cope with the demands of the programme were

advised to leave the programme while the rest were provided additional special attention to facilitate progression in their research.

14. IIITB implemented many initiatives to help with continuity of academic activity in online mode during COVID-19.

File Description	Document	
Any additional information	View Document	

6.5.2 Institution has adopted the following for Quality assurance 1. Academic Administrative Audit (AAA) and follow up action taken 2. Conferences, Seminars, Workshops on quality conducted 3. Collaborative quality initiatives with other institution(s) 4. Orientation programme on quality issues for teachers and students 5. Participation in NIRF 6. Any other quality audit recognized by state, national or international agencies (ISO Certification, NBA).

Response: C. 3 of the above

File Description	Document
Upload e-copies of the accreditations and certifications	View Document
Upload details of Quality assurance initiatives of the institution (Data Template)	View Document
Any additional information	View Document
Paste web link of Annual reports of University	View Document

6.5.3 Incremental improvements made for the preceding five years with regard to quality (in case of first cycle), Post accreditation quality initiatives (second and subsequent cycles).

Response:

IIIT Bangalore (IIITB) prides itself as being a new-age institute that is preparing next generation technology professionals who are leaders in their profession contributing to consolidating India's position as a global leader in Information Technology.

This document outlines some key initiatives taken by IIITB following the first cycle of NAAC accreditation. These initiatives are reflective of the feedback received during the first cycle of accreditation and is an attempt to launch in the institution to the top tier of performance in education, research and innovation.

Initiative #1: Improve student support systems

Initiative #2: Promote multi-disciplinary collaboration

Initiative #3: Analytics-driven decision making

Initiative #4: Increased Automation

Initiative #5: Curriculum Reviews

Initiative #6: Increased interaction with external experts

Initiative #7: Specializations

Initiative #8: Helping under-performing students

Initiative #9: Research in the Air

Initiative #10: Technology-enabled learning environments

Initiative #11: Increased Leadership Focus

Initiative #12: New Gold Medals

Initiative #13: Emphasis on Co-Curricular Activities

Initiative #14: Ensure mental well-being of students

Initiative #15: Procure tools to support high-quality research

Initiative #16: AI / ML Specialization

Initiative #17: PhD Programme Improvements

Initiative #18: COVID-19 Initiative – Online Teaching / Learning Infrastructure

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

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

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

Response:

The Institute Regulations and Policy guidelines for admissions of students and recruitment of staff and faculty is without any differentiation to gender, caste, creed or religion. The Institute follows a non-discriminating policy and all admissions and recruitment.

The following is a list of methods in which awareness and sensitization of students, staff and faculty will be conducted:

- (i) An orientation seminar is organized to discuss the nature and scope of the sexual harassment of women at the workplace (Prevention, Prohibition and Redressal) Act 2013, at the beginning of the academic year.
- (ii) One or more workshops/seminars annually where external experts on the subject will interact with all employees and students
- (iii) Seminars, performances and discussion forums where gender sensitization and gender awareness will be the focus
- (iv) Spreading awareness of the policy and implementation of the same through intranet, websites, etc
- (v) Encouraging overall development of students through the organizing various programs

a. Social Security

The Institute has a Disciplinary authority to ensure discipline is maintained in the campus. There is also an Internal Complaints Committee (ICC) and Gender cell for the welfare of the women faculty, staff and students. There are also other committees in place to handle internal complaints and to ensure smooth functioning of the Institute.

There is also 24 X 7 security throughout the campus. There are female guards designated throughout the girls hostel. Besides this there are CC surveillance cameras at all strategic points around the campus. This is monitored round the clock by the data center.

b. Counselling

The Institute has a contract with an online platform called "YourDOST". This is an online counselling and emotional wellness coach. It is a platform that allows you to connect with experts to discuss issues related to work, studies, personal etc. Awareness and counseling has been generated to ensure that complaints will be dealt with in a sensitive, equitable, fair, timely and confidential manner.

Page 91/106 04-08-2021 04:47:40

c. Common Room

There are separate hostels for boys and girls and they cannot enter each other's hostels. Also each faculty has a separate cabin. There are also separate washrooms for boys, girls and Divyanjana students in all the building throughout the Institute campus.

There are 2 wardens appointment for each of the hostels (2 female faculty for girls hostel and 2 male faculty for the boys hostel)

A lady doctor is available to cater to the needs of the girls in the hostel. The doctors (male and female) are available for students, staff and faculty.

- d. **Separate gym for women students** There is a separate gym for women students in the women's hostel called "Calorie Bee". On a daily basis a woman gym coach has also been made available to the students.
- e) Women's Day celebrations. Women's day is celebrated in a grand manner on March 08 every year. Faculty, Staff, Students, House Keeping staff and security staff participate actively in the events.

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

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

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

Response: A. 4 or All of the above

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

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

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

Response:

The Institute has taken various initiatives to reduce waste and is trying to adopt the philosophy of "reduce - reuse – recycle". Some of the initiates are:-

- (i) The office stationery for example is slowing moving to recycled paper.
- (ii) Exam tablets or e-pads are used for examinations. These are digital writing devices with a stylus instead of the traditional pen and paper exams. This has reduced the use of paper drastically, contributing in a small way towards protecting the environment.
- (iii) Plastics have been banned in the campus. All bottles are being replaced with glass bottles.
- (iv) Paper less transactions by way of e-approvals even for financial transactions are being employed in a big way. (Platforms being used are Adobe, Docuvity)

The waste generated from the Institute is disposed as given below:-

1. Solid waste management

The waste generated from routine activities such as paper, plastic, glass, metal, food etc This waste is segregated into separate bins. There are separate bins around the campus to collect wet, dry and reject waste.

- (i) There are blue bins which are used to collect dry waste.
- (ii) There are green bins which are used to collect wet waste.
- (iii) There are red bins which are used to collect reject waste.

The dry waste and reject waste are picked up by ELCITA (Electronic City Industrial Township Authority) vendor separately on a daily basis. The leftover food in the canteen and other waste is given to the piggeries on a daily basis. The Institute also has a food waste composter to handle the wet waste generated in the kitchen, hostels and garden. The composer comes in a pair and can handle 18kgs of wet waste in a day. This hot pile de – centralized composter is simple, hassle free and labour saving, The compose produced at the campus is used as manure for the huge landscape of trees and plants in Institute. The excess manure is also given to the staff and faculty for their gardens at home.

As far as sanitary waste is concerned, a MOU has been signed with Cannon hygiene and the units have been installed in the women's washroom across the campus. The waste is disposed through Rentokil Initial Hygiene India.

2. Liquid waste management

The liquid generated from the campus is

- (i) Sewage waste
- (ii) Laundry and cafeteria effluent waste

All the water discharged in the campus is sent to the sewage treatment plant and is treated and reused for flushing toilets and watering the plants and trees in the campus. The silt generated from the STP is disposed off from time to time.

3. E-waste management

Computers, laptops, printers etc are sold as scrape to recognized vendors or exchange options are used. The other e waste which cannot be reused or recycled are being collected and disposed off. There are designated bins located at a centralized location in the institute. The e-waste is collected and disposed through the ELCITA vendor.

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

7.1.4 Water conservation facilities available in the Institution:

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

Response: A. Any 4 or all of the above

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

7.1.5 Green campus initiatives include:

- 1. Restricted entry of automobiles
- 2. Use of Bicycles/ Battery powered vehicles
- 3. Pedestrian Friendly pathways

- 4. Ban on use of Plastic
- 5.landscaping with trees and plants

Response: Any 4 or All of the above

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

7.1.6 Quality audits on environment and energy regularly undertaken by the Institution and any awards received for such green campus initiatives:

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

Response: A. Any 4 or all of the above

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

7.1.7 The Institution has disabled-friendly, barrier free environment

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

Response: A. Any 4 or all of the above

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

7.1.8 Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities (within 500 words).

Response:

The Institute, like the country, values and encourages a rich diversity of students, faculty and staff. The students of the institute are from across the country and the globe too. The campus supports and encourages cross – cultural understanding and global awareness. The advantages are

- (i) Exposure to diversity helps students understand and embrace all communities, cultures, beliefs and attitudes.
- (ii) It prepares students for the real world. Students are sensitive to human differences and the ability to associate with people of various backgrounds. The diversity lays the foundation for students to work in a global society.
- (iii) The diverse environment helps the students respect each other's differences. Learning in such an environment facilitates self awareness and learning.
- (iv) A culturally diverse staff and faculty benefit the university and gives an exposure to alternative perspectives and experiences.

IIITB an inclusive institution embraces everyone, celebrates differences and prepares students for a global society. The initiatives taken by the institute in this aspect are as follows

- (i) Admissions are based purely on merit. There is no payment seat or reservations. All potential candidates are given the same preference. Caste, creed or religion has no added advantage for admission.
- (ii) A one day orientation program for students and parents on the first day of admission is done. The program is conducted to welcome students and the students are oriented on inclusive environment of the Institute. There is also a mentorship program where first year students have a fellow third year student as a mentor to discuss and guide their institute experiences.
- (iii) The canteen in the campus caters to the requirements of the cross cultural students. There is a student food committee fixes the menu after considering the requirements of all students.

Page 96/106 04-08-2021 04:47:42

- (iv) Language classes are taken for out of state and international students. The sessions are taken in the first semester. The tutoring classes are spread over 10 hours per week and the students are split into groups depending on their proficiency levels.
- (v) Interactive workshop for students through music and performing arts. The session is build cultural awareness about Indian culture and performing arts.
- (vi) Communication skill development classes are also taken for students to ensure quality and effectiveness of communication. An environment is created to encourage and support students to express and improve his views.
- (vii) The Institute celebrates all important international and national days and also religious festivals to bring harmony and integration among the students who come from different parts of the world.
- (viii) The Institute participates in intercultural exchange programs. The program brings together local and international students for workshops and projects.
- (ix) Disabled students are not differentiated and the necessary initiatives are taken to make learning possible and comfortable

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

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

Response:

Human values are virtues that guide us to be better human beings. Human values need to be inculcated and are vital for students to manage and cope with their lives. Life skills and values are required to today's world to meet the changing and challenging environment.

The Institute takes various initiatives and teaches these skills as given below

- (i) There are soft skill sessions taken for Integrated MTech and MTech students. The sessions are on technical communication (oral and written) and personality development. It helps the students in positive thinking, negotiations, building self-esteem, self-confidence and empathy. Activities are done to improve decision making skills, body language and in groups as well to learn to work in teams and improve interpersonal skills and to learn to work in a team.
- (ii) Town Hall Meetings these sessions are conducted to address students on conduct and related issues, academic ethics, integrity etc. Director, Deans, Program Coordinators, Hostel Wardens, Student Affairs Coordinator and Registrar are present for these sessions. These sessions also help address student

problems.

- (iii) There are also sessions on health and hygiene, physical education and yoga. International yoga day is also celebrated every year with Faculty, staff and students taking in the yoga session.
- (iv) Gender Sensitization session is taken. They are interactive workshop to educate students on the inequalities faced by women in India and how to recognize and alleviate them.
- (v) Inculcating values and creating responsible citizens
- (a) Blood donation Blood donation camps are organized in the Institute from time to time. Faculty, staff and students are encouraged to donate blood.
- (b) The theater club of the students enacts plays on women empowerment, food wastage etc. This creates awareness and ensures just acts are minimized and creates responsible citizens.
- (c) Aikyam another students club comprising of alumni also adopt a slum every year and donate rice, dhal and other essentials especially during Diwali. They also educate the people in the slum on health and hygiene. On Children's day, they go to an orphanage with sweet boxes, books and toys for children.
- (d) The students also celebrate Diwali every year with Institute housekeeping, security and maintenance staff and their families. There is a special event organized by the students themselves with games, performances and lunch. Sweets and gifts for the children are distributed.
- (e) Students are also given training, through soft skill development programs, on resume writing, interview skills, personal grooming for interviews, report writing etc.
- (f) During the lockdown due to the pandemic the migrant workers residing in ECity were out of job and food. The staff and Faculty of IIITB donated money and food was cooked in the campus (1250 packets daily) and distributed to the migrant labourers residing in ECity for 24 days.
- (g) Students are encouraged to debate on important topics of national and international importance through the student-run Debating Club.
- 7.1.10 The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard.
 - 1. The Code of Conduct is displayed on the website
 - 2. There is a committee to monitor adherence to the Code of Conduct
 - 3. Institution organizes professional ethics programmes for students, teachers, administrators and other staff
 - 4. Annual awareness programmes on Code of Conduct are organized

Response: A. All of the above

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

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

Response:

The Institute celebrates various national and local festivals and also organizes events on international days to inculcate cultural integrity amongst the students, staff and faculty.

Festivals

- 1. Makara Sankranthi / Lohri / Pongal is celebrated every year by the students with rangoli competition / kite flying and bonfires along with music and dance.
- 2. Ganesh Charthuti Students celebrate the birth of Lord Ganesha every year. An idol of ganesha (made of Clay only) is kept on a decorated pandal.
- 3. Onam The students make traditional flower rangoli "pookalam" and came in traditional clothes. There is several games organized including the traditional vadam vali (tug of war). Students, faculty and staff take part in the celebrations.
- 4. Ayudha puja/ saraswathi puja the festival for the goddess of studies is celebrated with prayers being offered to the saraswathi idol. There is also a garba night organized as part of the Dussehra celebrations.
- 5. Diwali the festival of lights is celebrated in the institute in a grand manner. There are events organized and the housekeeping, security, maintenance and mess staff along with their families is invited by the students and games and programs are organized for them. Sweets, gifts and firecrackers are arranged. Aikyam also visits a nearby slum and distributes essential products.
- 6. Holi celebrated with students playing with colours.
- 7. In holy month of Ramadan, we arrange food/Iftar to the concerned as per their required timing & Special Lunch is arranged in the Food Court on EID ul Fitr
- 8. Christmas day is celebrated in front X-Mass tree

National dates

Page 99/106 04-08-2021 04:47:42

- 1. Gandhi Jayanthi observed
- 2. Independence Day every year the flag is hoisted by the Director followed by his speech and there is a special cultural program held in the Institute. Trees are also planted in the Institute to mark this day.
- 3. Republic Day the Flag is hoisted by the Director and special programs are organized.
- 4. May Day observed
- 5. Ethnic Day celebrated
- 6. State Formation Day (Kannada Rajyothsava) is celebrated on 1st November of every year.

International Days

- 1. International Yoga day is observed in the institute by organizing a yoga session for faculty, staff and students. Followed by, Institute will provide free healthy bites and juices at the end
- 2. International Women's day is celebrated with special events and programs and movie screening for the students, staff and faculty.
- 3. Teachers Day students organize a special function for the faculty every year. Faculty members are honored with gifts and programs are organized for them.
- 4. Engineers Day the Foundation Day of the college is celebrated on this day. There are many events and performances by students, staff and faculty. It is a fun filled day with the families of staff and faculty also invited to enjoy the program.
- 5. World Health Day a doctor was called and asked to speak about the COVID pandemic. It was an interactive session where participants were allowed to ask questions regarding COVID

File Description	Document
Geotagged photographs of some of the events	View Document
Annual report of the celebrations and commemorative events for the last five years	View Document

7.2 Best Practices

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

Response:

Best Practice 1 State of the art research paper reading and presentation 2. Objectives of State-of-the-art research paper reading: - a) Encourage students to take up thesis in their final year. b) Give confidence to the students that what they have learnt as part of course work is enough to read state of the art research papers. c) Encourage students to take up research career in the long run. 3. The Context Several good students do not experience what it means to aspire for a research career and lack the confidence if they can aspire for such a career path. A baby step in that direction is to make the students read and present state-of-the-art research papers e.g. papers published in top research conferences in the year 2019/20 for a course in

2020. We believed that an automatic side effect of this will be that student start aspiring to do a thesis in the final year, and make decisions whether they would like to pursue PhD or a career in research. 4. The Practice This initiative was practised as part of the Advanced Visual Recognition course, an elective offered as part of the AIML specialization, with a class strength of 30 students. The class instructor identified around 20 papers to be discussed in groups from the top conferences in computer vision e.g. Computer Vision and Pattern Recognition (CVPR) or International/European Conference on Computer Vision (ICCV/ECCV). Every student is part of a group reading papers within a theme. Each student has to own and present two papers during the course. The instructor gives some instructions regarding how to read a paper in multiple rounds – i.e. focusing on the top level contribution and the main ideas, followed by understanding the details. The students discuss with the instructor and their group their understanding of the paper. The student then records a video presentation and shares it with the instructor. The instructor gives feedback on the presentation to improve it further. Finally all the students present their paper in the form of a seminar, and are graded. 5. Evidence of Success The student feedback showed several positives of this type of offering. This includes: a) students gain confidence seeing they are able to read papers published in 2019/20, and that too published in top research conferences. b) personalized attention given to the students while they read (e.g. the main point and the context of the paper or certain important detail left out), c) students appreciate how to present their understanding so that the audience can understand in the first attempt. d) students mentioned that this course makes them feel that they really are in the Masters level course. e) interest from a relatively larger number of students to take up thesis in this area in the final year. 6. Problems Encountered and Resources Required Initially, as this approach deviated from classroom based lecturing, the students were not sure if things would work out. Also, they were under confident that they will be able to manage the whole exercise. Finally after one round, they really enjoyed and started appreciating this approach. Of course, one challenge will be when we try to scale up this course to even larger class strength, say 60 students. In the next offering, teaching assistants who are MS/PhD students can be assigned as mentors to help the students with initial round of reading as well. Best Practice -2 1. Automation in finance process. 2. Objective of the practice: - (a) To maximize return on investments (b) To reduce unnecessary paper work (c) To have efficient control and monitoring of Finance process. 3. The Context The university income comprises of tuition fees, hostel and mess fees, Fees from continuing Professional Education, Interest income from investments of surplus funds and consulting income. The University expenditure under major heads are faculty salary, Staff salary, Housekeeping, Security arrangements, Annual maintenance of buildings, Labs, computers and other administrative overheads. The surplus of income over Expenditure are invested in Fixed deposits of banks after meeting working capital requirements in the savings account with the banks. While tuition fees are collected twice in a year, expenditure is incurred on continuing basis, that is salary of Faculty and Staffs on monthly basis thus results in a mismatch between income and expenditure on monthly time scale basis. Investments matured in a particular month are to be reinvested again after meeting working capital requirements. Further the University undertakes various RD projects funded by external agencies and University itself. The university also executing various Capital expenditures projects. In view of timing uncertainties on receipt and expenditure, the institute is facing practical difficulties as explained below. a) How much surplus funds has to be invested in fixed deposits and on which tenure and how much to park in savings account to meet operational expenses. b) Monitoring of RD projects funded by external agencies so that expenditure does not exceed budget of the projects. c) Monitoring of cash flow of Continuing professional education domain. 4. The Best Practices a) Separate bank accounts are maintained for receipts from Continuing professional education and receipts from Campus students. b) Separate bank accounts are being maintained for RD projects. c) One-time instruction has been issued to the bank to transfer the surplus funds from Current account which fetches no interest to savings account as detailed below. (I) Transfer excess funds over Rs 25 lakhs available in the current account to savings bank account. (II) Periodicity is On Daily basis in the morning. (III) Separate bank account is identified for capital expenditures and Revenue expenditures.

5. Automation in Investment decisions a) Investment pocket is defined as Rs 3 Crores, equivalent to estimated revenue expenditures in a month. If any surplus amount is received, then it will be considered to fill the pocket of a month. b) For example, the balance in the savings account is sufficient to meet, say January and February Month revenue expenditure in a particular year and subsequently the institute receive Rs 5 Crores cash inflow in February, then it will be considered to fill March pocket of Rs 3 Crores andApril pocket of Rs. 2 Crs and so on. This standard operating procedures enables the Officer in charge of working capital management to collect quotes from banks for FD amount of Rs 3 Crs to be invested in March and for FD amount of Rs 2 crs in April and accordingly investment will be made

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

7.3 Institutional Distinctiveness

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

Response:

- 1. A clear focus on our raison d'être It is our vision to leverage the power of Information Technology to transform the lives of individuals and society through continuous innovation in IT education, research, and entrepreneurship. Apart from imparting technical knowledge, the various programs at IIITB teaches managerial and other cognate skills essential for those who seek a career in the IT industry. IIITB is thus truly a cradle for IT Leadership. The best universities share a common trait (a) ability to attract talented faculty, (b) Open environment that fosters creativity, critical thinking and knowledge sharing, (c) genuine commitment to make a lasting contribution to the society. At IIITB, these serve as guideposts in our pursuit of excellence in teaching, research and student development.
- 2. Over two decades of excellence in IT education As a deemed-to-be university, we have consistently been at the forefront of IT education and innovation for the past 21 years. Intersecting between technology and society, IIITB has grown in stature to become a highly reputed institute with its unique model of education, research, and industry interaction. In an acknowledgement of IIITB's academic capabilities, the Government of India selected the Institute to establish and run the Myanmar Institute of Information Technology, Mandalay, Myanmar under the Indo-Myanmar MoU. The Indian government had also asked IIITB to mentor two new public institutions: the Indian Institute of Information Technology campuses in Naya Raipur (Chattisgarh) and in Dharwad (Karnataka).
- 3. A global outlook and an industry-ready curriculum We attract students from all over India and abroad and have the unique distinction of selecting 100% students on merit, pushing up the level of discourse and peer group at the institute. We offer interdisciplinary courses which criss-cross information technology and social sciences. As part of its degree programs, IIITB has always had student/faculty exchanges with universities in various countries. Ongoing exchange programs include the Massachusetts Institute of Technology (MIT) in the US, the University of Nottingham (UK), Hof University and the Free University of Berlin (Germany). Prominent exchanges in the past included a 5-year arrangement with Malmo University (Sweden) under the Linnaeus-Palme program between 2008 and 2012, the University of

Kaiserslautern (Germany) and the University de la Reunion (France).

4. Research Focus - Research is the driving force at IIITB which has three key research centres with customized infrastructure and multiple labs managed by a group of expert Faculty members. Research on the campus is showcased through different forums round the year such as IIITB Rise, Samvaad talk series, conferences, presentations and publications. Faculty research (and teaching) interests span major areas of information technology: Computer Science, Data Sciences, Electronics Systems Design, Information Technology and Society, Mathematics and Basic Sciences, Networking Communication and Signal Processing, and Software Engineering. Faculty research is organized into various centers that pool expertise. Research at IIITB is supported by a range of organizations. Publicly funded international agencies include the International Development Research Center (IDRC – Canada), the National Science Foundation (NSF – US), the European Union (EU-FP7), the UK-India Education and Research Initiative (UKIERI – UK), the Centre National de la Recherche Scientifique (CNRS – France), the Riksbanken Jubliemsfond (Sweden), and the Institute of Developing Economies (IDE – Japan). Other nongovernmental sources of support include the Bill and Melinda Gates Foundation (US), the Leverhulme Foundation (UK) and the Wallenberg Foundation (Sweden).

The Government of India's Department of Scientific and Industrial Research has recognized IIITB as a Scientific Industrial Research Organization. Thus, the Institute has received research support from the Government of India's Department of Electronics and Information Technology, Department of Science and Technology, and the Ministry of Human Resources Development, and the Government of Karnataka.

- 5. World-class Faculty We have outstanding faculty drawn from the some of the best institutions across the world such as MIT, Cornell University, Pennsylvania State University, University of California Berkeley, IISc, and University of Toronto. The institute's pool of distinguished professors has the right mix of academic expertise, research experience, global industry exposure and insights. To enhance social impact, the Institute and its faculty members offer consulting services, often pro-bono, to government agencies, industry and other universities. Areas of expertise shared by faculty include technology assessment, project management, product and process design, modelling and simulation, software development and testing. In addition, the Institute offers short-term executive education programs, in areas such as Business Analytics, Software Testing, and Strategic Product Management for working professionals to address much needed industry needs.
- 6. 100% Placements IIITB has recorded 100% placement with major companies in the areas of product, hardware, research and development consistently visiting the campus. Students have also bagged international offers with record salaries. Some of the consistent recruiters include Cisco, Morgan Stanley, TCS, Accenture, Telstra, MediaTek and MathsWorks.
- 7. A vibrant Alumni community We are proud of our 3600+ alumni, many of whom currently hold leadership positions in over 100 blue-chip MNCs and large companies in the areas of IT products and services, in India and abroad.
- 8. Innovation Hub IIITB Innovation Centre collaborates with exceptional researchers, innovators, entrepreneurs, users, and communities to co-create knowledge and socially-relevant solutions using cutting-edge technologies for a wide range of social needs. Our portfolio of solutions and startups help us, our communities and our governments. The centre nurtures research-led innovations, and offer pre-seed and seed-stage investments.

- 9. Campus and Location: The nine-acre campus in Electronic City, the heart of the IT Industry in Bengaluru,has five main buildings with facilities like Innovation Centre, academic blocks, research labs, state-of-the-art classrooms, playground, library, food court, four student residence halls, medical room and multipurpose hall.
- 10. World-class facilities and amenities: The institute has around 90,000 sq ft of air conditioned space. The campus has modern facilities for various outdoor and indoor sports including basketball, cricket, football, volleyball, lawn tennis, throw ball, badminton, table tennis, carom and chess. To take the institute's capabilities and infrastructure to the next level to meet its ever growing needs, a state-of-the-art 1100 seater auditorium-cum-conference complex is also under construction.

File Description	Document
Appropriate web in the Institutional website	View Document

5. CONCLUSION

Additional Information:

D	1	
к	esearcl	h

IIIT-B has strong research groups that were developed in the years since attaining Deemed University status. Notable achievements by these groups have been:

- · Next generation network Research funding from HP on IMS & Cognitive Radio, creating a new IEEE International Conference (IMSAA) and hosting it for 3 years in a row, 15 M Tech Theses, 1 PhD Thesis and more than 35 International Publications.
- · Web 2.0 – Bringing the WWW 2011 Conference to India after 4 years of effort, 12 M Tech theses, 3 PhD Theses and more than 20 publications.
- · IT & Society Research funding from Ministry of IT, Bill & Melinda Gates Foundation, Canadian, UK and Euro funding agencies, part of the most prestigious conference ACM / IEEE ICTD 2006, 2007, 2008; 2007 conference hosted in Bangalore, 4 M.Tech theses, 1 PhD thesis and 15 publications.
- · Technology in Education Research funding from Ministry of IT & international agencies, IEEE International Conference in Bangalore (July 2009), part of OCW Consortium, co-working with MIT, 3 M.Tech Theses, 2 PhD students, 4 teacher training programs.
- · Global software engineering Hosting the IEEE International Conference on Global Software Engineering in IIIT-B (Aug 2007), new M Tech course on Software Architecture, 1 Patent on Supply Chain, 12 M.Tech Theses and 2 PhD students.

In an acknowledgement of IIITB's academic capabilities, the Government of India selected the Institute to establish and run the Myanmar Institute of Information Technology, Mandalay, Myanmar under the Indo-Myanmar MoU. The Indian government had also asked IIITB to mentor two new public institutions: the Indian Institute of Information Technology campuses in Naya Raipur (Chattisgarh) and in Dharwad (Karnataka).

IIIT-B, with its strong focus on research and high quality graduate level teaching, has had numerous publications during its short period of existence. Faculty members have contributed to over 1000 publications in International Journals and Research Conferences. They have published over 20 scholarly books, and have edited 7 research oriented books. As an outcome of the research work, IIIT-B faculty members have obtained 24 patents .

Concluding Remarks:

As a deemed-to-be university, IIITB has consistently been at the forefront of IT education and innovation for the past 21 years. Intersecting between technology and society, IIITB has grown in stature to become a highly reputed institute with its unique model of education, research, and industry interaction.

In summary

- IIIT- B is a Registered "Not for profit" Society
- IIITB is a UGC Recognized Degree Granting Deemed University under the De Novo Category
- Governing Board is autonomous, with representation from all stake-holders
- Independent academic Senate with faculty and outside experts
- State Government supports with land, infrastructure grants and also involve institute in State's policy formulation activities
- Industry supports with chairs, scholarships, research grants, and labs
- Innovation and incubation is an important activity, apart from teaching and research.
- Student fees are reasonable by most measures