Annual Report
&
Annual Accounts
(2019 – 2020)

राष्ट्रीय प्रौद्योगिकी संस्थान दिल्ली
NATIONAL INSTITUTE OF TECHNOLOGY DELHI

(An autonomous Institute under the aegis of Ministry of HRD, Government of India)

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DIRECTOR'S MESSAGE

From the Director's Desk...

It gives me immense pleasure to present the Annual Report and Annual Accounts for the year 2019-2020 of NIT Delhi comprising of academic and co-curricular activities along with the audited balance sheet and accompanying SAR from CAG of India. As Director, NIT Delhi, I would like to highlight that, faculty of the institute had accomplished several significant academic and research activities with value added research outputs. Further, I would like to mark the progress of the Construction works going on the permanent site of the campus which includes Mini Campus, Administrative Block, Start-up Centre and Playground and required external development is about to be completed in near future. Faculty, Staff and Students have outreached several social initiatives in the growth and development of the society. NIT Delhi always works incomparably keeping in view the Vision, Mission and Quality Policy of the Institute.

In the year 2019-2020, the institute has set up the laboratories well equipped with latest infrastructure and state of art technology. Further, I am happy to mention that NIT Delhi has recruited number of talented faculty members to build the future engineers which is a step forward towards the nation building and contribution towards future economy. This year, faculty members have been sanctioned major research projects from DST, SERB, etc and I believe that the number will increase in coming days.

The placement record of the students is excellent and enabling to develop a strong relation between the institute and industries. Students have been places in renowned industries and resulting in strong Alumni of the institute. The T&P cell is putting continuous efforts with an objective of placement for all students with good packages under each department.

The students of the institute are participating in inter-institute tournaments and are achieving positions. Also, the cultural events, technical fest and Sports activities are conducted with full enthusiasm supported by all faculty and staff.

I would like to thank the officials of MHRD and Members of Board of Governors, Finance Committee and Building Works Committee for their constant support provided in all spheres in building the institute. I wish, the Institute will focus and grow more and more each day strategically with good governance and professional ethics.

Prof. Praveen Kumar
Director, NIT Delhi

Part – I
Annual Report
(2019 – 2020)

1.0 INTRODUCTION

National Institute of Technology Delhi (NIT Delhi) is an autonomous institute of national importance, established by an act of parliament in year 2010. NIT Delhi functions under the aegis of Ministry of Human Resource Development, Government of India. It aims to provide instructions and research facilities in various disciplines of Engineering, Science and Technology, Management, Social Sciences and Humanities for advanced learning and dissemination of knowledge.

1.1 VISION

Committed to holistic development of lives and society by imparting knowledge of science and technology and crystallizing the future.

1.2 MISSION STATEMENT

Application of knowledge through learning and inculcating research oriented mindset towards design and innovative development for realistic societal solutions.

1.3 QUALITY POLICY

- To create an environment for holistic learning and development.
- To provide academic excellence, good governance, team work, spirit towards the development of responsible citizen.
- To provide opportunities for research, innovation, creativity initiatives to reflect high level of intellectual professionalism towards achieving excellence.
- To provide infrastructure and facilities bench marked to reflect the high standard and latest technology.
- To provide state-of-the-art laboratories with latest equipment and instruments.
- To provide the highest level of cleanliness, hygiene, safety, discipline and environmental consciousness in the institute.

1.4 EDUCATION SYSTEM

NIT Delhi follows a choice based credit system to develop holistic technical human resource of excellence suitable for global requirements as under:

- Choice based credit system: All the programmes follow the choice based credit system for teaching and evaluation.
- The academic year is divided into two semesters, namely, the Autumn and Spring semesters.

- Attendance: Attendance in all classes (lectures, tutorials, laboratories, workshops etc.) is compulsory. A student may be debarred from appearing in the examination on grounds of unsatisfactory attendance, which is less than 75% of number of classes held in each course.
- Registration: Every student is required to be present and register on the day of commencement of each semester as notified in the academic calendar. The registration is done online through the IMS (ERP) system.

2.0 OVERVIEW

National Institute of Technology Delhi (NITD) is one of the ten new NIT(s) established in the year 2010 by an act of parliament and has been declared as an Institute of national importance. NIT Delhi is an autonomous institute which functions under the aegis of Ministry of Human Resource Development, Government of India. It aims to provide instructions and research facilities in various disciplines of Engineering, Science and Technology, Management, Social Sciences and Humanities for advance learning and dissemination of knowledge.

NIT Delhi has started its initial academic session in 2010 at NIT Warangal with three undergraduate B. Tech. degree programmes in Computer Science and Engineering, Electronics and Communication Engineering & Electrical and Electronics Engineering. Later it moved to a temporary campus at Dwarka, New Delhi in June 2012 and now currently running at NILERD Campus, Narela (since February 2014).

Academic Programmes underway at NIT Delhi:

Admission of students into undergraduate programme in Computer Science and Engineering, Electronics and Communication Engineering, and Electrical and Electronics Engineering started from academic session 2010-11 with first batch of 30 students in each discipline. From the session 2013-14 the strength of each B. Tech. programme has been increased to 60 students.

Postgraduate (M.Tech.) programme in the discipline of Electronics and Communication Engineering with an intake of 15 students was introduced from the academic year 2013-14. M.Tech. Programme in Computer Science and Engineering (Analytics) with an intake of 15 students was started in academic year 2014-15. M.Tech. Programme in Mechanical Engineering with specialization in CAD/CAM with an intake of 15 students started from academic year 2016-17. The M.Tech. programs in Electronics and Communication Engineering

(VLSI Design) and in Electrical Engineering (Power Electronics and Drives) from August 2017.

In order to give boost to research activities, Ph.D. programmes were also started from January 2014 in Computer Science and Engineering, Electronics and Communication Engineering, Mechanical Engineering, Chemistry, Physics, Mathematics, and Management.

Admissions to the B. Tech. programmes are through the Joint Entrance Examination (JEE-Mains) followed by centralised counselling process of JoSAA. Admissions to 50% of the seats are reserved for the students of Delhi & Chandigarh and the remaining 50% seats are made available for other states on the basis of All-India ranking of the aspiring applicants.

Admissions to the M. Tech. programmes are based on the performance in GATE (Graduate Aptitude Test in Engineering) examination followed by CCMT counseling.

While, admissions to Ph.D. Programmes are done twice in a year on the written entrance examination followed by personal interview conducted by respective departments.

2.1 LOCATION

National Institute of Technology Delhi is running academic and administrative activity from its transit campus (NILERD) located in Narela sub-city of North-west Delhi district of NCT. It is well connected by rail and road. The nearest Metro station is Jahangirpuri (16.2 kms) on yellow line of Delhi Metro rail system, whereas the airport is located at a distance of 38.2 kms, nearly 1 hour by road.

The location has good living environment with nearby market where almost all the basic amenities are easily available at numerous retail stores.

Contact:
National Institute of Technology Delhi

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Tel: 011 – 33861000-1006
Fax: 011 – 27787503
Email: director@nitdelhi.ac.in (Director)
Website: www.nitdelhi.ac.in

2.2 CAMPUS

The Institute's campus is spread over an area of 17 acres on picturesque landscape. It is a harmonious mix of natural beauty with state of art architecture. The campus is not fully residential, consisting of 06 staff quarters. Two hostels for boys are available one at SRHCH and another at TDI Kundli. Girl students have been accommodated in PG hostels within the campus. The campus is self-contained having student mess, shopping booth, HPMC Canteen, ATM, Students Activity Center and Guest House.

2.3 STATUS OF PERMANENT CAMPUS

The project planned to set up academic, residential and sports zones at the site situated at FA-7, ZONE P1 (Narela Sub city), New Delhi, India, shall include academic blocks, administrative block, Learning centre, Mini campus, Auditorium block, Sports Complex, Hostels, Residential blocks, Guest House, Director villa, Football ground, Athletic track, Badminton court, Basketball court, Swimming pool etc. with open air theatre and landscaping.

The construction task of permanent campus for NIT Delhi has been assigned to NBCC Ltd. The task has been divided into four packages:

- **Mini Campus Building:** The work of construction of Mini Campus was awarded by NBCC (India) Ltd. dated 23/11/2016. The current progress is as under:

S.No.	Name of Work	Physical Progress	Financial Progress
1.	MINI CAMPUS BUILDING	80%	75%

- **Administrative Block Building:** The work of construction of Administrative Block was awarded by NBCC (India) Ltd. dated 07/04/2017. The current progress is as under:

S .No.	Name of Work	Physical Progress	Financial Progress
1.	ADMINISTRATIVE BLOCK BUILDING	95%	88%

- **Start-Up Centre Building:** The work of construction of Start-Up Centre was awarded by NBCC (India) Ltd. dated 25/11/2016. The current Physical and Financial progress is as under:

S .No.	Name of Work	Physical Progress	Financial Progress
1.	START-UP CENTRE BUILDING	95%	95%

- **Construction of Playground:** The work of construction of Play Ground was awarded by NBCC (India) Ltd. dated 23/11/2016 The current Physical and Financial progress is as under:

S.No.	Name of Work	Physical Progress	Financial Progress
1.	PLAYGROUND	95%	86%

2.4 ADMINISTRATION

National Institute of Technology, Delhi is an autonomous Institution under the aegis of Ministry of Human Resource Development. The institute functions under the overall control and guidance of the Board of Governors, with the other authorities of the institute being the Finance Committee, Building and Works Committee and the Senate. The constitution of the Board of Governors, Finance Committee, Building Works and other Committees are given in section 9. The administration of various Departments/ Centres in the Institute is looked after by respective Head of the Departments or Centre Heads.

2.5 ACADEMIC PROGRAMMES

In addition to Bachelor's and Master's programmes in engineering, Institute also offers Doctorate programmes in various branches of Engineering and Applied Sciences. The academic programmes offered by the institute are listed below:

- Bachelor of Technology (B.Tech.)
- Master of Technology (M.Tech.)
- Doctorate of Philosophy (Ph.D.)

2.6 ACADEMIC SESSION

Autumn semester: August, 2019 – December, 2020

Spring semester: January, 2020 – May, 2020

WORKING HOURS

The institute observes the daily routine working hours as under:

Working hours : 8:30 am to 5:30 pm (Monday to Friday)
Lunch break : 1.00 pm to 1.30 pm

2.7 COURSES OFFERED

Undergraduate Programmes

- Computer Science and Engineering
- Electronics and Communication Engineering
- Electrical Engineering

Post-Graduate Programme

- Electronics and Communication Engineering
- Computer Science & Engineering (Analytics)
- Mechanical Engineering (CAD/CAM)
- Electronics and Communication Engineering (VLSI Design)

- Electrical Engineering (Power Electronics and Drives)
- Doctorate Programmes
- Computer Science and Engineering
- Electronics and Communication Engineering
- Electrical and Electronics Engineering
- Applied Sciences (Physics, Chemistry, Mathematics, Environmental Science)
- Mechanical Engineering
- Humanities and Management

2.8 ADMISSION PROCEDURE

Under Graduate Programme

Admission for B.Tech programmes are made on the basis of the performance in the Joint Entrance Examination (JEE) for the Indian Nationals. Admissions to 50% of the seats are made amongst the students of Delhi & Chandigarh and the remaining 50% seats are made on the basis of All India ranking of the aspiring applicants. The admission procedure of B.Tech is through JoSAA and CSAB. The JoSAA and CSAB works under the directions of Government of India, MHRD and with full co-operation from National Informatics Centre (NIC), CBSE, and participating Institutions (PIs). The rules and regulations for the admission change from time to time. The main stages in the procedure are the conduct of the entrance test (JEE), conduct of on-line counseling, followed by reporting at the allotted institute.

Admissions for foreign nationals are carried out by Direct Admission for Students Abroad (DASA) under the Ministry of HRD. The admissions are on the basis of the SAT score of the eligible candidates. The number of seats available for in this category at NIT Delhi is 15% of intake of each branch (i.e. Electronics and Communication Engineering, Computer Science and Engineering, and Electrical Engineering).

Post Graduate Programme

Admissions to the M. Tech Programmes are made on the basis of performance in GATE (Graduate Aptitude Test in Engineering).

The admission to the M. Tech. is provided through CCMT. The idea behind the Centralized Counseling for M. Tech. is to accord convenience to the students under one platform for the admissions to the M.Tech. programmes at the participating institutes.

Eligibility Criterion

CCMT allows eligible students with valid GATE scores to apply for counseling through a common platform for the M.Tech. programmes at the NITs and other centrally funded institutes. Admission is based on the GATE scores of the candidates and the choices filled in by them during option entry.

Ph.D. Programme

Advertisement for admission to the Ph.D. programme is published on the website / newspapers (two times in a year) in the month of April for the first semester (that starts in July) of the academic year and in the month of October for the second semester (that starts in January) of the academic year depending upon the vacancy in the department/centre and availability of research supervisor(s). The advertisement may or may not include the predetermined seats and as per the guidelines of reservation policy of Government of India. A candidate interested in applying in more than one department/ category shall be required to submit separate application forms along with prescribed fees and documents. The candidate shall be required to submit a write-up (1-2 pages) of his/her proposed area of research along with the application form.

Entrance test

All the eligible candidates shall be required to appear in a National Level Written test to be organized by NIT Delhi. The written test may be of Multiple Choice Question (MCQ) mode. A candidate securing atleast 40% marks in the entrance test shall be declared qualified in the test. The syllabus for the written test will be the same as the latest GATE/NET syllabus in related branch of Engineering/ Technology/ Science/ Humanities.

2.9 STUDENTS

Admission Statistics

Total admitted students at UG ,PG & PhD Level						
Course/ Category	Open	SC	ST	OBC	DASA	Total
UG	72	26	14	49	09	170
PG	28	8	1	22	0	59
PhD	11	3	1	2	0	17
Total	111	37	16	73	9	246

2.10 EXAMINATION & EVALUATION (GRADING SYSTEM)

The grades and their description, along with equivalent numerical points wherever applicable are listed below:

Grade	Grade Points	Description
A+	10	Outstanding
A	9	Very Good
B+	8	Good
B	7	Average
C	6	Below Average
D	5	Marginal
F	0	Fail
R	0	Insufficient Attendance
NP	-	Audit Pass
NF	-	Audit Fail
I	-	Incomplete
W	-	Withdrawal
S	-	Satisfactory Completion
U	-	Unsatisfactory

The norms for the award of the letter grade are as follows:

No student can be awarded D or better grade without securing at least 30% marks in any course.

It is also mandatory that the student should secure at least 30% marks in the End Semester examination in the subject for award of D or better Grade.

The Grading shall be relative grading system.

Description of Grades:

- **'A+' Grade:** The 'A+' grade stands for outstanding achievement. The minimum percentage for the award of an 'A+' grade is 80% at least. However, individual course coordinators may set a higher performance requirement. 'A+' grade may be given to a maximum of 5% students registered in a course.

- **'A, B+, B, C, D' Grades:** The class average marks (after excluding the marks obtained by students with A+ and F grade) should be in the mid – range of B grade and other grade (A, B+, C and D) ranges are to be fixed appropriately, so that, the distribution of number of students in the pass grades is a "near normal bell curve".

- **'F' Grade:** The 'F' grade denotes poor performance and indicates fail in a course. A student has an option to take the course with F grade either in study mode or

examination mode when offered next. A student with F grade is also eligible to take Make- up Examination. In case of the elective courses in which F grade has been obtained the student may take the same course or any other course from the same category. When a student gets F grade in any subject(s) during a semester, the SGPA of that semester and the CGPA at the end of that semester will be tentatively calculated by taking 'zero point' for these subject(s). After these transitional grades have been converted to appropriate grades, the SGPA for the semester and CGPA at the end of the semester will be recalculated after taking into account the new grades.

- **'R' Grade:** Students not having the mandatory requirement of minimum 75% attendance in any subject(s), shall not be permitted to appear for the end semester examination in that particular subject(s) and is awarded 'R' Grade in that subject(s). Such student has to register/repeat in study mode for the subject in which he/she has shortage of attendance, as and when the course will be offered next. When a student gets 'R' grade in any subject(s) during a semester, the SGPA of that semester and the CGPA at the end of that semester will be tentatively calculated by taking 'zero point' for these subject(s). After these transitional grades have been converted to appropriate grades, the SGPA for the semester and CGPA at the end of the semester will be recalculated after taking into account the new grades.

- **'NP and NF' grades:** The NP Grade denotes completion of the Audit course. The NF grade denotes Audit fail. These grades are awarded in a course that the student opts to audit. Only an elective course can be audited until one week after the mid semester examination. The Audit Pass (NP) is awarded if the student's attendance is above 75% in the class and he/she has obtained at least a D grade. The Course Coordinator can specify a higher criterion for audit pass at the beginning of the semester. If either of these requirements is not fulfilled, an audit fail (NF) is awarded. The grades obtained in an audit course are not considered for the calculation of SGPA or CGPA.

- **'I' grade:** If a student misses the end-semester examinations due to a compelling reason like serious illness of himself / herself which necessitates hospitalization

or a calamity in the family, he/ she may appeal to the Dean Academics before commencement of examination through his/her Head of the Department and Institute Medical Officer for permitting himself/ herself to appear in the subsequent examination(s), when conducted next. A committee consisting of the following members may, after examining the documents and being convinced about the merit of the case, recommend permitting him/her to appear in the subsequent re examination(s), when conducted next, condoning his/ her absence. In such cases transitory grade 'I' is temporarily awarded to the student in the subject.

Sub - committee:

Dean-Academic, Chairman.
Dean- Student welfare, Member.
Concerned Head of the Department, Member.
The Institute Medical officer, Member.
The Assistant Registrar (Academic), Member.

When a student gets I Grade for any subject(s) during a semester, the SGPA of that semester and the CGPA at the end of that semester will be tentatively calculated ignoring this (these) subjects. After these transitional grades have been converted to appropriate grades, the SGPA for the semester and CGPA at the end of the semester will be recalculated after taking into account the new grades.

- **S and U grades:** The S grade denotes satisfactory performance and completion of a course. The U grade denotes unsatisfactory performance of a course and if it is a mandatory course, the student will have to register for the course until he/she obtains the S grade. The specific courses in which S/U grades are awarded are NCC/NSO/NSS, Extra Curricular Activity.

SGPA & CGPA Calculation

A Semester Grade Point Average (SGPA) will be computed for each semester. The SGPA is calculated as follows:

$$SGPA = \frac{\sum_1^n C_i GP_i}{\sum_1^n C_i}$$

where, C_i = Credit for the course
GP_i = the grade point obtained for the course
n = Number of subjects registered in the semester.

Starting from I year II semester a cumulative Grade Point Average (CGPA) will be computed for every student at the end of every semester. The CGPA would give the Cumulative performance of the student from first semester up to the end of the semester to which it refers and calculated as follows:

$$CGPA = \frac{\sum_1^n S_i C_i}{\sum_1^n C_i}$$

where, n = the total number of semesters under consideration
C_i = Total number of credits registered during a particular semester
S_i = SGPA of the semester

The CGPA, SGPA and the grades obtained in all the subjects in a semester will be communicated to every student at the end of every semester except eighth semester. In its place a consolidated grade sheet is issued. This consolidated grade sheet supersedes all the earlier grade sheets.

Both SGPA and CGPA will be rounded off to the second place of decimal and recorded as such. Whenever these grade point averages are to be used for the purpose of determining the inter se merit ranking of a group of students, only the rounded off values will be used.

Assessment of Academic Performance

- **Theory Course:** 100 marks with the following weightages:

Continuous Evaluation	20 Marks
Mid Semester Examination	25 Marks
Marks for Course Attendance	5 Marks (Maximum)
End Semester Evaluation	50 Marks

Continuous evaluation comprises of class tests/surprise tests/assignments/quizzes, which will be decided by course coordinators.

Maximum 5 marks for course attendance is distributed as follows:

Attendance (%age)	Marks
75% and above	3
80% and above	4
90% and above	5

Attendance to be rounded off to the nearest integer.

- **Laboratory Course:** 100 marks with the following weightages:

Continuous Evaluation	50 Marks
End Semester Examination	50 Marks

The components of continuous evaluation, may be taken as following example for evaluation:

For Every laboratory course there will be 5 marks. Suppose number of labs conducted is 14 in that semester then 70 marks will be scaled down to 50 for continuous evaluation and if number of labs conducted is 8 then the 40 marks will be scaled up to 50.

5 marks of each laboratory will be given on following breakups by scaling down of total 50 marks.

Laboratory Report	10 marks
Viva Voce Laboratory	20 marks
Laboratory Performance	20 marks

The mode and nature of the evaluation and the corresponding weightages, for the subcomponent shall be intimated to the students at the beginning of the semester along with the lecture schedule.

- **Theory Course with Laboratory**

    A course having theory as well as laboratory component will be evaluated with 60% weightages to theory and 40% weightages to laboratory for overall grading, with independent marking system given above for theory and laboratory courses.

    Mid Semester and End Semester Examination:

    The mid-semester examination are conducted after 7 or 8 weeks of commencement of the course, as notified in the academic calendar. The mid semester and end semester examinations are conducted centrally by the examination section.

- Students are not allowed to leave the examination hall without submitting the answers script. They are not permitted to enter the examination hall after 30 minutes of commencement of examination and to leave the examination hall half time of the closure of examination.

- re-Mid Examination: If a student fails to appear for the mid semester examination in any subject(s) due to compelling reason like serious illness of himself/herself which necessitates hospitalization, he/she shall apply to the Dean (Academic) along with relevant certificates and duly recommended by the respective Head of the department, within one week after completion of the examinations or as per the date notified by Dean (Academic). All such cases will be refereed by institute medical officer and scrutinized by a committee. On the recommendation of committee the approved list of candidates shall be permitted for a re-mid examination. The re-mid examination of such candidates will cover the course content upto one class day before the date of such re-exam.

- Students will be permitted to appear in the examinations in only those subjects for which they have registered either for study or for examination mode at the beginning of the semester.

- The final grades awarded to the students in a subject must be submitted by the course instructor/ coordinator, within the dates mentioned in academic calendar or according to the notification by the office of Academics. The DAC-UG will compile all the grades submitted by the faculties of the respective departments and submit the final grades after moderation to the office of COE.

- Any change of grade of student in a subject consequent upon the detection of any genuine error of omission and/or commission on part of the concerned instructor must be recommended by the DAC–UG and shall be forwarded by the instructor/ coordinator through the Head of concerned department within 20 (twenty) days from the commencement of next semester.

- As a process of learning by students and also to ensure transparency the answer scripts after correction of class tests, mid semester examination etc. will be shown to the students within one week from the date of test /examination.

- In order to ensure transparency in the evaluation of the scripts of end semester examination, those answer scripts also will be shown to the students upto one day before the finalization of grades in DAC-UG. Once the grades are finalized by DAC-UG, the students will no longer have any right to verify his/her answer scripts.

- The student can appeal to DAAC for any arbitration with in twenty days from the date of official publication of the result in the institute website.

- A student of B. Tech. degree programme must complete the prescribed course work with a minimum requirement of 175 credits within a maximum period of eight years.
- A student who has passed all the courses without securing R, X, or F grades during the period of study and with a CGPA of 8.0 and above is considered eligible for the award of first division with distinction.
- A student failing to satisfy above rule even if he / she gets a CGPA of 8.0 or more will be eligible for the award of First division only.
- A student with the CGPA of 6.5 and above but less than 8.0 is considered eligible for the award of First division.
- A student with a CGPA of 5.0 and above but less than 6.5 is considered eligible for the award of second division.
- The valued scripts shall be preserved for a maximum period of 6 months after publication of results.
- Examination record of all students shall be maintained in both soft copy and hard copy form in the academic section.

Make Up Examination

- Students appearing in Make–Up Examination shall be governed by the following rules:
- Students with 'R' grade are not eligible for writing the Make-Up examination.
- Students with 'F' or 'I' grade are only eligible to write Make-Up examination
- Make-Up examination is offered only once in an academic year, during summer.
- Make-Up examination will be in examination mode only.
- A student who has obtained 'F' grade in makeup examination may register in the subsequent semester for the course either for study or examination mode.
- The schedule for makeup examination is given in the academic calendar.
- A student can register for makeup examination in any number of courses.
- A student securing 30% or more marks in a course in the Make-Up examination shall be awarded only 'D' grade otherwise 'F' grade will be awarded.

Promotion rules

There are no restrictions for promotion from odd semester to even semester, however restrictions are imposed for promotion from even to odd semester. These restrictions are as follows:

From I Year to ll Year: To be able to register in the third Semester, a student should have completed, with D or better grade, at least 30 credits at the end of first year (in first and second semesters and make up examinations put together).

From II Year to III Year: For promotion to Third year, a student should have (i) Cleared all the Course Work requirements of First Year and (ii) passed, with D or better Grade, at least 30 credits at the end of second year (third Semester, fourth semester and make up examinations put together).

From lll Year to lV Year: For promotion to Fourth year, a student should have (i) Cleared all the Course Work requirements of first year, second year and (ii) passed, with D or better Grade, at least 30 credits at the end of third year (fifth semester, sixth semester and make up examinations put together).

2.11   DEGREE REQUIREMENTS

The requirements for a student to B. Tech. Degree program are as follows:

S .No.	Courses	Credits
1.	Basic Science Courses	≥ 24
2.	Departmental Core Courses	≥ 60
3.	Other Engineering Core Courses	≥ 30
4.	Humanities and Social Science Courses	≥ 10
5.	Departmental Elective Courses	≥ 15
6.	Open Elective Courses	≥ 03
7.	Mandatory Courses	≥ 09
8.	Projects	= 14

Mandatory Courses

S .No.	Courses	Credits
1.	Seminar / Colloquium / Industrial Lecture	02
2.	Environmental Studies	03
3.	Summer Internship	02
4.	Extra Academic Activity	02

Minimum Credits

The Departmental Board of Studies will discuss and finalize the exact credits offered for all the courses. The semester-wise distribution of the courses and credits as well as the syllabi of all B. Tech. Programmes offered by the department should be revised from time to time and recommend the same to the Senate for consideration and approval.

Major Project

The major project is a 14 credits course

It carries 04 credits in seventh semester and 10 credits in eighth semester.

Minimum and Maximum Credit in a Semester

- The minimum number of credits that a student can register in any given semester is 16.
- Maximum number of credits that can be registered in a semester is 32 inclusive of backlog courses registered in study mode.
- Maximum credit registered is 35 inclusive backlog subject registered in study mode as well as examination mode.

2.12   PLACEMENTS

Placement of B.Tech. (2015-2019) and M.Tech. (2017-2019) batch

Campus Interviews were arranged for the final year B.Tech. and M.Tech. students. A handsome number of reputed Industrial houses in the country visited the Institution and selected/short listed the final year students as Engineers. Some of the Companies invited the students to their Corporate Offices for the interviews. (Details are given under section 6.0).

2.13   SPORTS & GAMES

The students entering in the Institute are required to undergo two-credit mandatory courses in first year towards the completion of their degree. The students have to opt for one of these activities based on the enrolment procedure and their choice. A total of 100 hours of prescribed activities are to be completed after registration in the first year. In case the requirements are not met in the first year, the same shall be completed in the second year i.e. end of the 4th Semester. If a student does not obtain a satisfactory grade in the respective registered course within the first two years of his/her stay at the Institute, he/she will not be registered

for the higher semester after second year.The students will be satisfactorily allowed to register in sports activities of the institute as detailed in section 5.0.

2.14   STAFF POSITION

2.14.1 Chief Academic and Executive Officer

Position	Name
Director	Prof. Praveen Kumar

2.14.2   Academic Staff: Sanctioned & Filled

Total Sanctioned Intake of Faculty (Category Wise)						
Course/Category	UR	SC	ST	OBC	EWS	Total
Professor	3	0	0	0	0	3
Associate Professor	5	0	0	1	0	6
Assistant Professor	19	6	3	10	3	41
Grand Total	27	6	3	11	3	50

Faculty in Position (category Wise) (Regular)						
Course/Category	UR	SC	ST	OBC	EWS	Total
Professor	0	0	0	0	0	0
Associate Professor	2	0	0	0	0	2
Assistant Professor	19	6	1	10	0	36
Grand Total	21	6	1	10	0	38

Faculty in Position (category Wise) (Contractual)						
Course/Category	UR	SC	ST	OBC	PwD	Total
Professor	0	0	0	0	0	0
Associate Professor	0	0	0	0	0	0
Assistant Professor	17	0	0	1	0	18
Grand Total	17	0	0	1	0	18

List of faculty as on 31.03.2020 (Regular)

S. No.	Name	Designation	Department
1	Dr. Vivek Shrivastava	Associate Professor	Electrical & Electronics Engineering
2	Dr. Shelly Sachdeva	Associate Professor	Computer Science & Engineering
3	Dr. Anshul Agarwal	Assistant Professor	Electrical & Electronics Engineering
4	Dr. Pankaj Mukhija	Assistant Professor	Electrical & Electronics Engineering
5	Dr. Amit Pratap Singh	Assistant Professor	Applied Sciences (Chemistry)
6	Dr. Rikmantra Basu	Assistant Professor	Electronics & Communication Engineering
7	Dr. Amit Mahajan	Assistant Professor	Applied Sciences (Mathematics)
8	Dr. Anmol Ratna Saxena	Assistant Professor	Electrical & Electronics Engineering
9	Dr. Gyanendra Sheoran	Assistant Professor	Applied Sciences (Physics)

10	Dr. Abhishek Mishra	Assistant Professor	Mechanical Engineering
11	Dr. Prashant Kumar	Assistant Professor	Applied Sciences (Mathematics)
12	Dr. Anuj Kumar Sharma	Assistant Professor	Applied Sciences (Physics)
13	Dr. Rajiv Kumar Tripathi	Assistant Professor	Electronics & Communication Engineering
14	Dr. Tirupathiraju Kanumuri	Assistant Professor	Electrical & Electronics Engineering
15	Dr. V.S.Pandey	Assistant Professor	Applied Sciences (Physics)
16	Dr. Anurag Singh	Assistant Professor	Computer Science & Engineering
17	Dr. Kapil Kumar	Assistant Professor (on contract)	Environmental Sciences
18	Dr. Sachin Singh	Assistant Professor (on contract)	Electrical & Electronics Engineering
19	Dr. Baljit Kaur	Assistant Professor (on contract)	Electronics & Communication Engineering
20	Dr. D. Vaithiyanathan	Assistant Professor (on contract)	Electronics & Communication Engineering
21	Dr. Harish Kumar	Assistant Professor	Mechanical Engineering
22	Dr. Sandeep Kumar	Assistant Professor (on contract)	Electronics & Communication Engineering
23	Dr. Sushila Vikas Maheshkar	Assistant Professor	Computer Science & Engineering
24	Dr. Amit Kumar Singh	Assistant Professor (on contract)	Electrical & Electronics Engineering
25	Dr. Karan Verma	Assistant Professor	Computer Science & Engineering
26	Dr. Manisha Bharti	Assistant Professor	Electronics & Communication Engineering
27	Dr. Sachin Agrawal	Assistant Professor (on contract)	Electronics & Communication Engineering
28	Dr. Manoj Kumawat	Assistant Professor (on contract)	Electrical & Electronics Engineering
29	Dr. Rishav Singh	Assistant Professor (on contract)	Computer Science & Engineering
30	Dr. Leeladhar Nagdeve	Assistant Professor (on contract)	Mechanical Engineering
31	Dr. Chandra Prakash	Assistant Professor (on contract)	Computer Science & Engineering
32	Dr. Nitin Singh Singha	Assistant Professor (on contract)	Electronics & Communication Engineering
33	Dr. Ashok Kumar Dewangan	Assistant Professor (on contract)	Mechanical Engineering
34	Dr. Dharmendra Kumar Jhariya	Assistant Professor (on contract)	Electronics & Communication Engineering
35	Dr. Mahesh Kumar Singh	Assistant Professor (on contract)	Electronics & Communication Engineering
36	Dr. Nitesh Ahir	Assistant Professor (on contract)	Civil Engineering
37	Dr. Sonti Venu	Assistant Professor (on contract)	Electrical & Electronics Engineering
38	Dr. Chandresh Kumar Maurya	Assistant Professor (on contract)	Computer Science & Engineering

List of faculty as on 31.03.2020 (Purely on Contract / Temporary Basis)

S.No.	Name	Designation	Department
1	Dr. Sushma Hans	Assistant Professor	Computer Science & Engineering
2	Dr. Arun Singh Pundir	Assistant Professor	Computer Science & Engineering
3	Dr. Seema kharb	Assistant Professor	Computer Science & Engineering
4	Dr. Lella Rajya Laxmi	Assistant Professor	Computer Science & Engineering
5	Dr. Piyush Kumar	Assistant Professor	Computer Science & Engineering
6	Dr. Sachin Agrawal	Assistant Professor	Electronics & Communication Engineering
7	Dr. Mahesh Kumar Singh	Assistant Professor	Electronics & Communication Engineering
8	Dr. Ravi Kumar Arya	Assistant Professor	Electronics & Communication Engineering
9	Dr. Nisha Gupta	Assistant Professor	Electronics & Communication Engineering
10	Dr. Maneesh Kumar Singh	Assistant Professor	Electronics & Communication Engineering

11	Dr. Ravita Lamba	Assistant Professor	Electrical & Electronics Engineering
12	Dr. Kapil Shukla	Assistant Professor	Electrical & Electronics Engineering
13	Dr. Konark Sharma	Assistant Professor	Electrical & Electronics Engineering
14	Dr. Servesh Kumar Agnihotri	Assistant Professor	Mechanical Engineering
15	Dr. Ashish Kumar Rajak	Assistant Professor	Mechanical Engineering
16	Dr. Sudeep Singh Sanga	Assistant Professor	Applied Sciences (Mathematics)
17	Dr. Arti Gupta	Assistant Professor	Humanities & Management
18	Dr. Tulika Kakkar	Assistant Professor	Humanities & Management

DST Inspire faculty

S.No.	Name	Designation	Department
1	Dr .Suman Srivastava	DST Inspire Faculty	Applied Sciences (Chemistry)

2.14.3 Non-Teaching Staff: Sanctioned & filled:

Group A

S. No.	Post Name	Sanctioned Strength						Filled Positions						Vacant Position					
		Total	UR	SC	ST	OBC	EWS	Total	UR	SC	ST	OBC	EWS	Total	UR	SC	ST	OBC	EWS
1	Registrar	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
2	Executive Engineer	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
3	Assistant Registrar	2	2	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0
4	Assistant Librarian	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
5	SAS Officer	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
6	Medical Officer	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Total		**7**	**7**	**0**	**0**	**0**	**0**	**4**	**4**	**0**	0	0	0	3	3	0	0	0	0

Group B

S.No.	Post Name	Sanctioned Strength						Filled Positions						Vacant Position					
		Total	UR	SC	ST	OBC	EWS	Total	UR	SC	ST	OBC	EWS	Total	UR	SC	ST	OBC	EWS
1	Technical Assistant	10	6	1	0	2	1	3	3	0	0	0	0	7	3	1	0	2	1
2	Junior Engineer	2	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
3	Personal Assistant	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
4	Superintendent	4	3	0	0	1	0	1	1	0	0	0	0	3	2	0	0	1	0
Total		**17**	**12**	**1**	**0**	3	1	6	6	0	0	0	0	11	6	1	0	3	1

Group C

S.No.	Post Name	Sanctioned Strength						Filled Positions						Vacant Position					
		Total	UR	SC	ST	OBC	EWS	Total	UR	SC	ST	OBC	EWS	Total	UR	SC	ST	OBC	EWS
1	Assistant (SG II) / Sr. Stenographer	2	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
2	Senior Assistant	3	3	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0
3	Junior Assistant	6	5	0	0	1	0	6	5	0	0	1	0	0	0	0	0	0	0
4	Technician	13	8	1	0	3	1	6	4	1	0	1	0	7	4	0	0	2	1
5	Office Attendant/ Lab Attendant	7	5	1	0	1	0	4	4	0	0	0	0	3	1	1	0	1	0
Total		31	23	2	0	5	1	16	13	1	0	2	0	15	8	1	0	3	1
Total (A+B+C)		55	42	3	0	8	2	26	23	1	0	2	0	29	17	2	0	6	2

Administrative & Technical Staff (regular)

S. No.	Name	Designation	Department
1	Sh. Sushil Kumar	Registrar	Administration
2	Dr. Manisha Singh	Assistant Registrar	Administration
3	Dr. Gareema Sharma	Assistant Librarian	Central Library
4	Dr. Anidev Singh	SAS Officer	Students Activity & Sports
5	Sh. Kamal Kumar	Junior Engineer (Civil)	Office of Dean (P&D)
6	Sh. Harpreet Singh Nanda	Superintendent	Store & Purchase Section
7	Sh. Sumit Sharma	Technical Assistant	ERP Cell
8	Sh. R.V.Bhaskaran	Technical Assistant	Electrical & Electronics Engineering
9	Sh. Surender Kumar	Technical Assistant	Electronics & Communication Engineering
10	Sh. Mukul Nakra	Junior Engineer (Electrical)	Office of Dean (P&D)
11	Sh. Raushan Kumar	Technician	Computer Centre
12	Sh. Vikas Bhardwaj	Technician	Computer Science & Engineering
13	Sh. Kamaljit Singh	Technician	Mechanical Engineering
14	Sh. Krishan Pal	Work Assistant	Mechanical Engineering
15	Sh. Neeraj Kumar	Junior Assistant	Establishment Section
16	Ms. Aditi Kandari	Junior Assistant	Central Library
17	Ms. Poonam Kamboj	Junior Assistant	Office of CoE
18	Ms. Anupriya Das	Junior Assistant	Office of Training and Placement, Applied Sciences, Humanites & Management
19	Sh. Jitender Singh Bisht	Junior Assistant	Director's Office
20	Ms. Navisha Sharma	Junior Assistant	Store & Purchase Section
21	Sh. Shubham Bhardwaj	Laboratory Assistant	Applied Sciences (Chemistry)
22	Sh. Aadesh Kumar	Laboratory Assistant	Applied Sciences (Physics)
23	Sh. Lov Kumar Dubey	Multi Tasking Staff	Office of COE
24	Sh. Udit Sharma	Multi Tasking Staff	Accounts Section
25	Sh. Sonu Kumar	Multi Tasking Staff	Office of CSE
26	Sh. Bharat Singh	Multi Tasking Staff	Training and Placement Cell

3.0 STAFF

3.1 Academic Staff (Teaching)

Head of the Departments

S. No.	Department	Name
1.	Computer Science & Engineering	Dr. Shelly Sachdeva
2.	Electronics & Communication Engineering	Dr. D. Vaithiyanathan
3.	Electrical & Electronics Engineering	Dr. Anmol Ratna Saxena
4.	Applied Sciences	Dr. VS Pandey
5.	Humanities & Management	Dr. VS Pandey
6.	Mechanical Engineering	Dr. Harish Kumar

3.2 Faculty and Staff

Each department/centre is run by respective Head of the Department/ Coordinator along with faculty members. They provide implementation to the curriculum and provide essential inputs to the students in the related area. The faculty and their academic qualifications are listed as under:

Department

Computer Science & Engineering

1.	Dr. Shelly Sachdeva	Associate Professor	Ph.D.
2.	Dr. Anurag Singh	Assistant Professor	Ph.D.
3.	Dr. Karan Verma	Assistant Professor	Ph.D.
4.	Dr. Sushila Vikas Maheshkar	Assistant Professor	Ph.D.
5.	Dr. Rishav Singh	Assistant Professor (on contract)	Ph.D.
6.	Dr. Chandra Prakash	Assistant Professor (on contract)	Ph.D.
7.	Dr. Chandresh Kumar Maurya	Assistant Professor (on contract)	Ph.D.
8.	Dr. Sushma Hans	Temporary Faculty	Ph.D.
9.	Dr. Arun Singh Pundir	Temporary Faculty	Ph.D.
10.	Dr. Seema kharb	Temporary Faculty	Ph.D.
11.	Dr. Lella Rajya Laxmi	Temporary Faculty	Ph.D.
12.	Dr. Piyush Kumar	Temporary Faculty	Ph.D.

Electronics & Communication Engineering

1.	Dr. D. Vaithiyanathan	Assistant Professor	Ph.D.
2.	Dr. Baljit Kaur	Assistant Professor	Ph.D.
3.	Dr. Rajiv K Tripathi	Assistant Professor	Ph.D.
4.	Dr. Rikmantra Basu	Assistant Professor	Ph.D.
5.	Dr. Sandeep Kumar	Assistant Professor (on contract)	Ph.D.
6.	Dr. Manisha Bharti	Assistant Professor	Ph.D.
7.	Dr. Sachin Agrawal	Assistant Professor (on contract)	Ph.D.
8.	Dr. Mahesh Kumar Singh	Assistant Professor (on contract)	Ph.D.
9.	Dr. Nitin Singh Singha	Assistant Professor (on contract)	Ph.D.
10.	Dr. Dharmendra Kumar Jhariya	Assistant Professor (on contract)	Ph.D.
11.	Dr. Maneesh Kumar Singh	Temporary Faculty	Ph.D.
12.	Dr. Ravi Kumar Arya	Temporary Faculty	Ph.D.
13.	Dr. Nisha Gupta	Guest Faculty	Ph.D.

Electrical & Electronics Engineering

1.	Dr. Vivek Shrivastava	Associate Professor	Ph.D.
2.	Dr. Amit Kumar Singh	Assistant Professor	Ph.D.
3.	Dr. Anmol Ratna Saxena	Assistant Professor	Ph.D.
4.	Dr. Anshul Aggarwal	Assistant Professor	Ph.D.
5.	Dr. Pankaj Mukhija	Assistant Professor	Ph.D.
6.	Dr. Tirupathi Raju Kanumuri	Assistant Professor	Ph.D.
7.	Dr. Sachin Singh	Assistant Professor (on contract)	Ph.D.
8.	Dr. Manoj Kumawat	Assistant Professor (on contract)	Ph.D.
9.	Dr. Sonti Venu	Assistant Professor (on contract)	Ph.D.
10.	Dr. Ravita Lamba	Temporary Faculty	Ph.D.
11.	Dr. Kapil Shukla	Temporary Faculty	Ph.D.
12.	Dr. Konark Sharma	Temporary Faculty	Ph.D.

Applied Sciences & Humanities and Management

1.	Dr. Amit Mahajan	Assistant Professor	Ph.D.
2.	Dr. Amit Pratap Singh	Assistant Professor	Ph.D.
3.	Dr. Anuj Sharma	Assistant Professor	Ph.D.
4.	Dr. Gyanendra Sheoran	Assistant Professor	Ph.D.
5.	Dr. Kapil Kumar	Assistant Professor	Ph.D.
6.	Dr. Prashant Kumar	Assistant Professor	Ph.D.
7.	Dr. Vinay Shankar Pandey	Assistant Professor	Ph.D.
8.	Dr. Suman Srivastava	DST Inspire Faculty	Ph.D.
9.	Dr. Sudeep Singh Sanga	Temporary Faculty	Ph.D.
10.	Dr. Arti Gupta	Temporary Faculty	Ph.D.
11.	Dr. Tulika Kakkar	Temporary Faculty	Ph.D.

Mechanical Engineering

1.	Dr. Abhishek Mishra	Assistant Professor	Ph.D.
2.	Dr. Harish Kumar	Assistant Professor	Ph.D.
3.	Dr. Leeladhar Nagdeve	Assistant Professor (on contract)	Ph.D.
4.	Dr. Ashok Kumar Dewangan	Assistant Professor (on contract)	Ph.D.
5.	Dr. Servesh Kumar Agnihotri	Temporary Faculty	Ph.D.
6.	Dr. Ashish Kumar Rajak	Temporary Faculty	Ph.D.

Civil Engineering

1.	Dr. Nitesh Ahir	Assistant Professor (on contract)	Ph.D.

Library

1.	Dr. Gareema Sharma	Assistant Librarian	Ph.D.
2.	Ms. Aditi Kandari	Junior Assistant	Graduate

Sports

1.	Dr. Anidev Singh	SAS officer	Ph.D.

3.3 Administrative and Other Staff

3.3.1   General Administration:

Sr. No.	Dean / Department	Name of Dean /Incharge
1.	Dean Academics (I/C)	Dr. Rikmantra Basu
2.	Dean Faculty Welfare (I/C)	Dr. Rajiv Tripathi
3.	Dean Student Welfare (I/C)	Dr. Tirupathi Raju Kanumuri
4.	Dean Research & Consultancy (I/C)	Dr. Vivek Shrivastava
5.	Dean Planning & Development (I/C)	Dr. Gyanendra Sheoran

3.3.2   Hostel Administration

There are 2 boy's and 2 girl's hostels which are looked after by respective wardens. However, the overall hostel administration is looked by the Chief Warden. The hostel administration is as under:

S.No.	Name	Designation
1	Dr. Vinay Shankar Pandey	Chief Warden (upto 31st December 2019)
2	Dr. Anshul Agarwal	Chief Warden (1st January, 2020 onwards)
3	Dr. Kapil Kumar	Deputy Chief Warden
4	Dr. Karan Verma	Deputy Chief Warden (1st January, 2020 onwards)
5	Dr. Suman Srivastava	Warden, Girls Hostel -1
6	Dr. Manisha Singh	Warden, Girls Hostel - 2,3,4 (1st January, 2020 onwards)
7	Ms. Sarika	Resident Warden, Girls Hostel - 1
8	Dr. D.Vaithiyanathan	Warden, SRHCH Boys Hostel (1st January, 2020 onwards)
9	Sh. Rakesh Rai	Resident Warden, SRHCH Boys Hostel
10	Dr. Prashant Kumar	Warden, Kundli Boys Hostel
11	Sh. Ranjeet Kumar Ambast	Resident Warden, Kundli Boys Hostel

4.0   TEACHING PROGRAMS

4.1   List of Toppers

Following are the toppers of B.Tech. 2015-2019 Batch Department wise:

S .No.	Name of the Department	Name of Student
1.	Computer Science & Engineering	Yash Bhatnagar
2.	Electronics & Communication Engineering	Madhu
3.	Electrical & Electronics Engineering	Parnav Saxena

Following are the toppers of M.Tech. 2017-2019 Batch Department wise:

S .No.	Name of the Department	Name of Student
1.	Applied Sciences	Swamini Vats
2.	Computer Science & Engineering	Nishkal Prakash
3.	Electrical and Electronics Engineering	Gottapu Satyanarayana
4	Electronics & Communication Engineering	Gagandeep Kaur
5	Electronics & Communication Engineering (VLSI)	Shreya Goyal
6	Mechanical Engineering	Arnav Kumar Mishra

4.2 Admission Statistics

Total Sanctioned Intake of Students at UG & PG Level (2019-20)					
Course /Category	Open	SC	ST	OBC	Total
UG	92	27	14	49	182 + 27#
PG	40	10	5	20	75 + 10#
Grand Total	132	37	19	69	257 + 37#
# DASA Students					

Total Actual Admission At UG & PG Level (Category Wise) (2019-20)						
Course /Category	Open	SC	ST	OBC	DASA	Total
UG	72	26	14	49	9	170
PG	28	8	1	22	0	59
Grand Total	100	34	15	71	9	229

Branch - Wise Admission At UG Level (Category Wise) (2019-20)						
Course	Open	SC	ST	OBC	DASA	Total
CSE	25	10	04	17	07	63
ECE	25	07	06	16	02	56
EEE	22	09	04	16	00	51
Total	72	26	14	49	09	170

Branch Wise PG Admission (2019-20)						
Branch	Open	OBC	SC	ST	DASA	Total
ECE	6	3	1	0	0	10
CSE	5	5	2	1	0	13
ME	2	7	2	0	0	11
EEE	7	4	2	0	0	13
VLSI	8	3	1	0	0	12
Total	28	22	8	1	0	59

Branch Wise Ph.D. Admission (2019-20)						
Branch	General	OBC	SC	ST	DASA	Total
AS	4	1	00	00	00	5
CSE	3	00	00	1	00	4
ECE	1	1	1	00	00	3
EEE	2	00	2	00	00	4
ME	1	00	00	00	00	1
Total	11	2	3	1	00	17

4.3 Scholarships / Assistanceship

The students of this institute are awarded various types of scholarships from various schemes of Central Government, State Governments, Charitable Trusts/ Organizations. Following are the details of these schemes:-

S. No.	Name of the Scholarship	Name of the State/ Jurisdiction	Number of students received scholarship
1	Central Sector Scholarship of Top Class Education for SC Students: Ministry of Social Justice & Empowerment	All India	25
2	Mukhyamantri Medhavi Vidhyarthi Yojna (MMVY)	Madhya Pradesh	02
3	Post Matric Scholarship Schemes Minorities CS	All India	02
4	Post Matric Scholarship for students with disabilities	All India	02
5	Scholarship for Top Class Education for students with disabilities	All India	01
6	Foundation for Excellence (FFE) Scholarship Scheme	Private Scholarship	01
7	National Fellowship and Scholarship for higher education of ST students- Scholarship (Formally Top Class Education for Schedule Tribe Students) : Ministry of Tribal Affairs	All India	14
8	Prime Minister's Scholarship Scheme for Ministry of Railways	All India	02
9	Ishan Uday Special Scholarship Scheme for NER	All India	01
10	Merit-cum-means scholarship for professional and technical courses CS	All India	02
11	Central Sector Scheme of Scholarships for College and University Students	All India	03
12	Prime Minister's Scholarship Scheme for Central Armed Police Forces and Assam Rifles	All India	03
13	Railways Scholarship	All India	01
14	Indian Air Force Benevolent Association (IAFBA)		05
15	Rajasthan Police Benevolent Fund (RPBF)	Rajasthan	01
16	Scholarship Programme for Diaspora Children (SPDC) Ministry of External Affairs	International Scholarship	01
17	Prime Minister Scholarship Scheme	All India	01
18	Delhi Police Education Fund (DPEF)	Delhi	02
19	CRPF Welfare Merit Scholarship	All India	02
20	National Talent Search Examination (NTSE)	All India	01
21	Samsung Star Scholarship	Private Scholarship	02

Students admitted to the M. Tech./Ph.D. Programmes are provided with Scholarship assistantships, fellowships, etc. as per the MHRD norms.

5.0   SPORTS & GAMES

5.1   Sports and Games Facilities

Sports and Games are an integral part in the life of a student. A student should study hard to be successful in competitive examinations. But, he should also play games and sports to enjoy the health and vigor of life. A healthy nation is always a wealthy nation. Therefore, it is necessary to put emphasis on sports. One can think of a healthy mind only in a healthy body. Both physical and mental well-being are the prerequisites of great achievements in life. Studies have shown that exercise increases blood flow to the brain and helps the body build more connections between nerves, leading to increased concentration, enhanced memory, stimulated creativity, and better-developed problem solving skills. In short, playing sports helps your brain grow and makes it work better.

To keep the engineering students physically fit, the physical education and sports is introduced as compulsory subject for engineering student in 1st & 2nd Semester with One Credit. As a part of this, Yoga and athletics have been introduced for the students.

As a part of world-wide observation of International Day of Yoga, NIT Delhi celebrates International day of Yoga every year on 21st of June in the institute premises.

Athletics helps the students to be physically fit, while on the other hand yoga not only enriches their physical health but also helps the students maintain their mental health.

Yoga and athletics together help in the overall development of an individual. Hence, with the view of laying emphasis on health and fitness, regular practice sessions of yoga and athletics are conducted by professional coaches in the college premises after the college hours.

5.1.1 Outdoor Sports Facilities

S.No	Outdoor Games	Facility available
1.	Football	Mini ground with Flood lights
2.	Basketball	One Court with flood lights
3.	Badminton	Outdoor Court with flood lights
4.	Volley ball	One Court with flood lights
5.	Cricket	Cemented pitch with nets& flood light
6.	Kabaddi	Standard Court available
7.	Gym	Outdoor open gym

5.1.2 Indoor Sports Facilities

S.No	Indoor Games	Facility available
1.	Table Tennis	2 tables available along with playing equipment.
2.	Carrom	Carrom Boards at Institute& Hostel.
3.	Chess	Chess Board sets
4.	Gym	Indoor Gym in boy's hostel

Events Organized by the Sports Section

INTERNATIONAL DAY OF YOGA – 21ST JUNE 2019

As a part of world-wide observation of International Day of Yoga, NIT Delhi celebrates International day of Yoga every year on 21st of June in the institute premises. The goal behind the organization of the event was to spread the message of peace, harmony, happiness. The event is attended with full enthusiasm by faculty, staff and students.

INTRA TOURNAMENT

Sports section organized a FUTSAL (5 a side football), Pro Volleyball and Chess tournament for the students of the institute from 6th November -8th November 2019 to increase brotherhood, unity and to promote interaction among the students of various year and branches. Students participated with great enthusiasm and around 14 teams competed with each other for 3 days.

UNITY DAY

To observe the birth anniversary of Late Sardar Vallabhnhai Patel as "Rashtriya Ekta Diwas (National Unity Day) on 31st October 2019, Sports section organized Unity Run by Students and Formation of Human Chain by the students on 31st October 2019.

ANNUAL FITNESS ASSESSMENT

Annual Fitness assessment of B.Tech First Year Students comprising of various fitness components such as Speed, Endurance, Strength, Flexibility and agility was conducted in December 2019 to assess the student's fitness level and to motivate them to lead a healthy life.

SPORTS PRACTICE

In order to allow students to develop and learn through their experience in various sports, specialized Coaches have been hired, which provide proper training and techniques to the students for their respective sports. For the same, regular practice sessions are held on weekdays from 5:30 PM to 7:30 PM for both boys and girls in the institute campus. The expert coaches train students in the specialized and scientific way to help them to improve their respective skills and techniques which will benefit them to perform better.

SELF DEFENSE CAMP

National Institute of Technology Delhi conducted Self Defense training for its female staff and students for 2 months (September and October) in which various skills and techniques were taught to the students to defend themselves from any mishappening.

ACHIEVEMENTS OF NIT DELHI AT INTER NIT & OTHER COMPETITIONS
ACHIEVEMENTS 2019-2020

- NIT Delhi participated in Inter Technology Sports Tournament (ITUSA) held at NIT Kurukshetra from 14th-16th September 2019, in which Yoga Boys & Girls secured Second position by winning Silver medal.

- NIT Delhi participated in All India Inter NIT Weightlifting, Powerlifting, Best Physique Tournament 2019-20 held at MNIT Jaipur from 17th-19th October 2019. The institute bagged total 11 medals as follows:-

S.No.	Name	Event	Medal
1.	Yogesh Tomar	Weightlifting	GOLD
2.	Vinay Chaudhary	Weightlifting	SILVER
3.	Lallan	Weightlifting	SILVER
4.	Maayank Saraswat	Weightlifting	BRONZE
5.	Lallan	Powerlifting	BRONZE
6.	Yogesh Tomar	Powerlifting	BRONZE
7.	Vinay Chaudhary	Body Building	BRONZE
8.	Vikas Dhurwey	Body Building	BRONZE
9.	Prashant Raghwanshi	Body Building	BRONZE
10.	Maayank Saraswat	Body Building	BRONZE
11.	Yogesh Tomar	Body Building	SILVER

- NIT Delhi participated in All India Inter NIT Kabaddi and Basketball Tournament 2019-20 held at NITK Surathkal from 17th-19th January 2020, in which our Kabaddi Girls team won Silver Medal.

- MS. Swathi Majji (B.Tech ECE Final Year) won Best Defender of the Tournament (Girls Kabaddi) in All India Inter NIT tournament at NIT Surathkal.

- NIT Delhi participated in All India Inter NIT Volleyball and Athletics tournament held at NIT Rourkela from 24th-26th January 2020. Following are the results:-

i. NIT Delhi Girls Volleyball team qualified in the Top 6 of the All India Inter NIT tournament at NIT Rourkela in which 25 NITs participated.
ii. Stanzin Daskong - 4th place in 3000 mtr
iii. Nitya - 4th place in Discus throw
iv. Yashvi Goyal - 4th place in Long Jump
v. Stanzin Daskong - 5th place in 5000 mtr
vi. Vikas Dhurwey - 7th place in Shot Put

- NIT Delhi participated in All India Inter NIT Cricket and Badminton tournament at NIT Surat from 20th-23rd February 2020 and Badminton Boys and Girls team reached till Quarter-final of the tournament.

NIT Delhi Boys Yoga Team

NIT Delhi Girls Yoga Team

NIT Delhi Gym Team

NIT Delhi Girls Kabaddi Team

International Day of Yoga:

As part of worldwide observation of International day of Yoga, National Institute of Technology Delhi celebrated 5th International day of Yoga on 21st June, 2019 in the Institute premises. The goal behind the organization of the event was to spread the message of peace, harmony, happiness and success to every soul in the world. It was a great opportunity to imbibe the value of Discipline.

The event was attended by Director (Professor Praveen Kumar), Registrar (Shri Sushil Kumar), Faculty and staff members (with families), and students. The event was supervised by Dr. Anidev Singh, Students Activity & Sports Officer of the institute. A Yoga/Meditation expert (Mr. P. K. Sharma) was also invited who taught the participants about different Yog asanas and pranayams. The Expert explained the different types of Yoga including Asanas, Meditation, Brahmari, Kapalbhati and knowledge attainment which can help individual in their holistic development and healthy lifestyle. The event's main emphasis was to encourage people to adopt yoga as a daily routine activity.

The session followed the protocol for International Yoga Day. It started with the prayer to enhance the benefits of practice followed by loosening practises or warming up exercises such as neck bending, neck rotation, trunk movement & twisting to name a few. The event proceeded with Yogasanas, which were divided into standing, sitting and lying (Prone/supine) postures.

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Honorable Director Sir firstly addressed the gathering and Pledge speech was given away by him which was repeated by the gathering. Director Sir also mentioned about the importance of Unity Day and its boom in a society in both of our personal and professional life.

Formation of human chain at NIT Delhi

Self defense session

6.0   TRAINING & PLACEMENT

While fostering young talents with its mission of research, innovation, and creativity, the Institute aims to pioneer higher level of intellectual professionalism in all fields of education. Therefore, we encourage our students to gain exposure to industrial activities through organizing visits to esteemed companies of their respective fields.

The Training and Placement Cell of the Institute is dedicated towards the campus placements for the graduating students of all departments. The placement office handles all the aspects of the campus placement. The T & P Cell is well equipped with excellent infrastructure for the conduction of the smooth placement. The office staff and the student coordinators handle various necessary tasks to support each and every stage of the placement process. As per the requirements of the organizations, the T&P Cell arranges Pre-Placement Talks, Written Tests, Group Discussions and Interviews etc. The team makes efforts to help the students enhance their personality through regular personality development classes, mock tests and mock personal interviews. In addition to this, the T & P Cell, along with the various departments in the Institute, provide opportunities to avail various industrial visits during the academic sessions in renowned organizations.

Our students have been placed in following organization(s) as full time employees or as trainees:

| S. No.	Company Name	CTC offered (in LPA)	No. of Offers
1.	Daily Hunt	19.22	3
2.	ION Trading India	12	1
3.	Samsung R&D	13	10
4.	OYO	10.5	3
5.	Deloitte	7.6	16
6.	Publicis Sapient	8.5	4
7.	Gemini Solutions Pvt Ltd	8.2	1
8.	People Strong	6.6	5
9.	MAQ Software (PPO)	9	5
10.	Optum	11.59	4
11.	LnT Infotech	6.5	8
12.	LnT Infotech	8	1
13.	Capgemini	6.8	3
14.	LnT Construction	6	3
15.	LnT Limited	6	1
16.	Jaro Education	12.2	0
17.	TCS Innovation	9	1
18.	Bitibe Technologies	8	1
19.	Samsung R&D Noida	12.2	4
20.	TPDDL	5.5	4
21.	Magic Bricks	9	4
22.	Invenio Business Solutions	5	4
23.	Truminds Software Systems	5.5	1
24.	CGI	7.11	1
25.	Fareportal	5.5	4
26.	Chargepoint Technologies	10	2
27.	American Express	13.27	1
28.	Essar Steel	5	1
29.	RAAM Group	4.8	1

Percentage of Placed Students (Programme Wise):

Programme	Placed	Eligible	% age placed	No. of Offers	Number of Offers in Percentage
B.Tech.	72	78	92.31%	86	119.44%
M.Tech.	9	38	23.68%	11	122.22%

Average CTC in Lakhs:

Programme	Branch	Average Package	Programme	Branch	Average Package
B.Tech	CSE	10.98	M.Tech	CSE (Analytics)	7.23
B.Tech	ECE	8.28	M.Tech	ECE	0
B.Tech	EEE	6.21	M.Tech	ECE-VLSI	0
B.Tech	Overall	9.78	M.Tech	EEE	0
			M.Tech	ME	5.5
			M.Tech	Overall	6.84
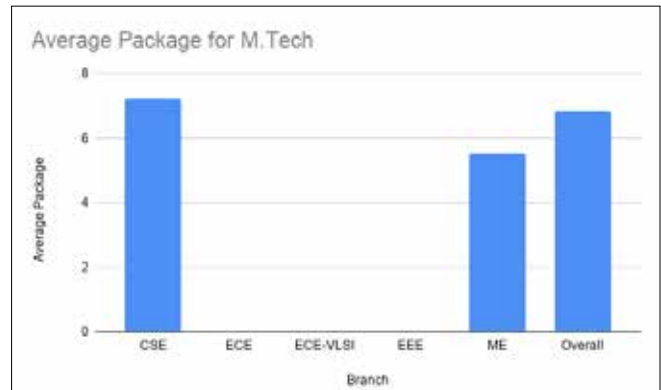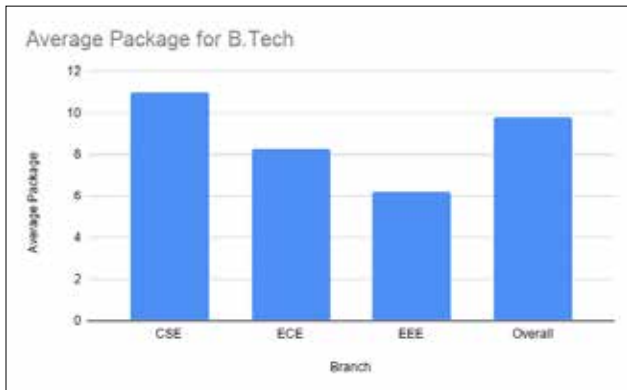
Year Wise Comparison:

Batch	2010-2014	2011-2015	2012-2016	2013-2017	2014-2018	2015-2019	2016-2020
Average Package	5.19	4.29	6.35	5.01	6.52	8.19	9.78
No. of offers	46	67	80	149	150	104	97
No. of offers above & equal 6 LPA	11	5	31	56	53	88	82
No. of companies visited	17	19	29	31	30	33	29
% placement	53.2	73.2	81.36	80.67	92	94.38	92.31
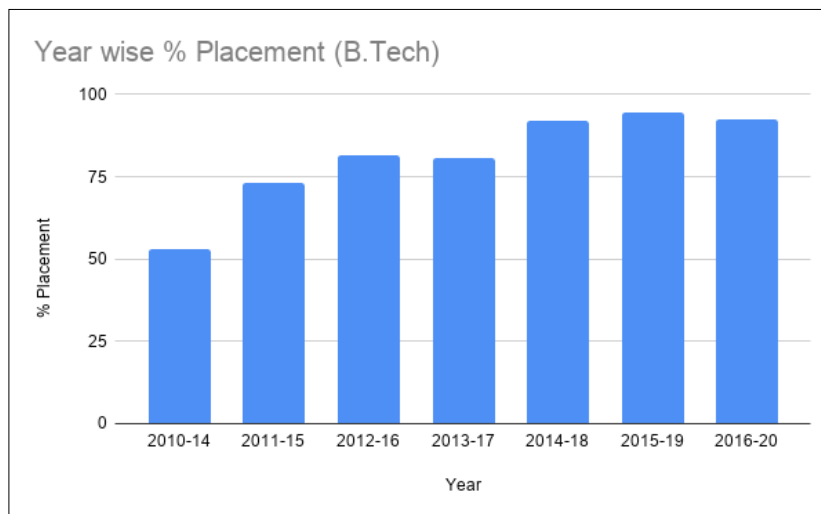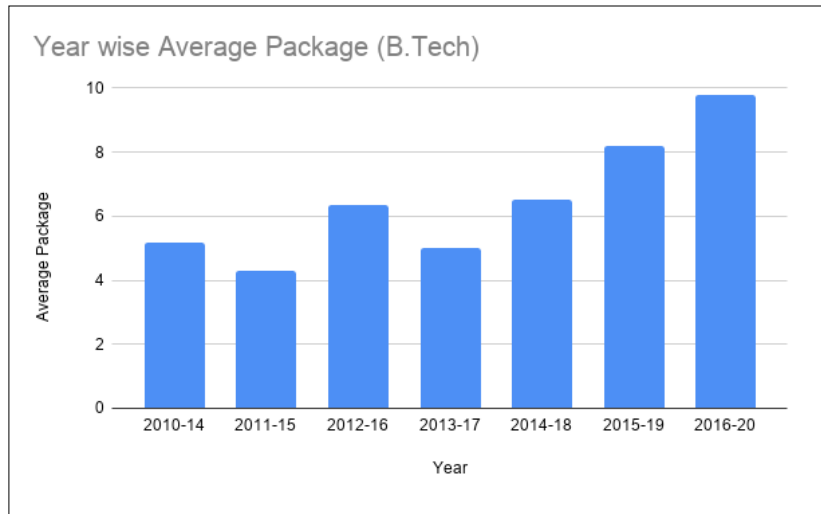
Motivational Talk of Mr. Anand Kumar at the Institute premises to the students

7.0   Arts and Cultural Activities

NIT Delhi offers a holistic lifestyle for the student community. Various clubs and committees are functional in the campus for students with varied interests in fields of literature, technology, culture and sports. It gives students an opportunity to get a taste of college life and interact with one another. The Institute also observed its Annual Cultural and literature fest 'Saptrang' where students participate in a variety of events every year.

Independence day was celebrated in Institute premises on 15th August 2019

Republic Day was celebrated in Institute premises on 26TH January 2020

Deepawali celebration at NIT Delhi

Lohri celebration at NIT Delhi

In the month of September, 2019, a memorable Swachhta Pakhwada to commemorate the birth anniversary of Gandhi ji was organized in National Institute of Technology Delhi. This event was held outside the campus (for cleanliness pakhwada) of our Institute. In this event many students from different clubs took part and made this event a grand one. The event commenced at 03:00 pm with the arrival of students, staff and all the faculty members in at the Institute's main gate.

NIT Delhi took initiative to make students and nearby people aware about swachhta. Swachchta Pakhwada took place in and outside the Institute premises, following are the glimpses:

Hon'ble Director of NIT Delhi along with the Staff and Students outside the campus during the campaign.

Students and Staff of NIT Delhi on the nearby road/area of the campus.

FRESHERS 2019-20

The purpose of Fresher's Party is to welcome new students in a friendly atmosphere and to encourage their creative impulses to boost their confidence. It is the day where seniors and juniors finally bond and unite to celebrate being part of the college. In NIT Delhi it was organised by the 2nd year students for the 1st year students. Senior students arranged many activities for freshers which include cultural events where everyone got chance to showcase their talent.

Mr. & Ms. Fresher 2019-20

Annual Fest Saptrang-2020

Held from 21st-23rd February, 2020, the Annual Cultural, Arts and Literature Festival of National Institute of Technology, Delhi, Saptrang witnessed grand reception with 1800+ participants from over 50+ colleges. A jamboree, a fiesta and a celebration of all three aforementioned prowesses, it had everything from dance to debate, paints to poetry, drama to drums. The pre-opening ceremony was the cynosure as Mr. Anand Kumar, founder of the famous 'Super-30' inaugurated the fiesta himself.

founder of the famous 'Super-30' inaugurated the fiesta

The lightning of the traditional lamp and words of wisdom by the Honourable Director Sir, Dr. Praveen Kumar marked the beginning of the 3-day journey through a kaleidoscope of talents.

The very first event of the fest, Spotlight provided a marvellous platform to the talented solo dancers who portrayed their skills and made everyone's feet tapping.

The Battle of Bands is a regular event

"One man's waste is another man's treasure". It had the enthusiasts bringing out all their artistic potential to the table.

From hair to makeup to dressing to confidence; everything mattered once the glam gods were up on the stage. It was a matter of pride that the fashion team from our own college participated for the first time.

The event grabbed the largest crowd with people getting carried away by the breathtaking performances by the famous dance societies of various colleges and our very own, Reboot.

8.0 RESEARCH AND DEVELOPMENT

8.1 Ph.D. Programs- Existing and Proposed

- Computer Science and Engineering
- Electronics and Communication Engineering
- Electrical and Electronics Engineering
- Mechanical Engineering
- Civil Engineering
- Management
- Environmental Sciences
- Chemistry
- Physics
- Mathematics

8.2 Plan of Research

Since its inception National Institute of Technology Delhi has been constantly putting effort, not only to establish itself as a pioneer institute of higher learning in India but also to mark a global presence as a leading research and development hub. Within in a short span of time NIT Delhi has acquired distinction and expertise in some of the fundamental and core research areas.

The major areas of research activity of NIT Delhi in various departments are:

Electronics and Communication Engineering:

- Digital VLSI circuit design using sub nano meter technology nodes
- Device-Circuit co-design
- Parameter variation aware delay models
- Importance of delay analysis in nano meter regimes
- Multimodal Bio-Metrics
- Image Analysis and Processing
- Error Control Coding
- Cognitive Radio
- Computer Architecture, VLSI Design and Embedded Systems
- Semiconductor Devices; Electronic Circuits & Devices; Optoelectronics & Optical Communication, Nanophotonics
- Wireless Sensor Networks, Image and Video Processing
- Digital VLSI Design, Standard cell library characterization, Delay Modeling
- Digital Signal Processing, Bio-medical Signal Processing, Real-time Signal Processing
- Low Power VLSI design, SRAM Cell and Architecture

Design, Digital Circuit Design. Semiconductor Devices, Electronic Circuits & Devices and Analog Electronics.

- Image Processing, Pattern Recognition
- Design and growth of semiconductor nano structures for optoelectronic devices
- Optical communication
- RF Energy Harvesting, Antenna design

Applied Sciences:

- Hydrodynamic Stability, Ferro hydrodynamics, Nano fluids, Non-Newtonian Fluids, Fluid Instabilities & Flow through Porous Media
- Fluid dynamics, MHD-fluid, MHD simulations, Nonlinear plasma theory, Non-uniform transmission lines (Microwave and Signal Processing), and CMOS- VLSI-DESIGN
- Design and synthesis of new porous materials with metal skeleton and their application in catalysis, chemical technology, and host-guest chemistry (molecular adsorption and molecular recognition), electrical, optical and magnetic properties.
- Development of Green methodology for bioactive heterocyclic synthesis, Organ metallic chemistry, Medicinal Chemistry, Green chemistry, Ylide and Carbine Chemistry, Total synthesis, Material Chemistry.
- Digital holography, Optical metrology, 3D imaging, Biomedical imaging and optical instrumentation
- Optical sensors, Plasmonics, Bio-photonics, Opto-electronics, Semiconductor Lithography, and Technology Management
- Modeling and Simulations of Linear and Nonlinear Waves, Computational Fluid Dynamics, Climate Modeling Analysis

Computer Science and Engineering:

- Optical Communication Systems: Performance Analysis and Dispersion Compensation for Broadband Optical Systems and Networks (Linear and Non-linear), Radio-over-Fiber, Soliton Transmission links.
- Complex Networks, Growing Networks, Dynamics of information in complex networks, Graph Spectra, Attacks on Complex Networks, Community structure in Social Networking, Link Analysis, Recommender Systems
- Image Processing, Computer Graphics
- Wireless Sensor Networks
- Natural Language Processing.
- Neural Network

- Cryptography, Algorithms, Discrete Mathematics and Process synchronization
- Data mining
- Algorithms, Data Structures, Operating Systems (moderate), DBMS (moderate)

Electrical and Electronics Engineering:

- Application of power electronics for renewable energy fed DC Micro-Nano grids.
- Power Electronics, Application of Power Electronics to Renewable Energy Systems, Smart DC Grids (Micro/Nano), Modeling, Design and Digital Control of DC-DC Conversion System, Embedded Systems and IoT.
- Power Electronics, Renewable Energy & FPGA Design
- Control Systems, Time-delay systems
- Pattern recognition, Bio-metrics, Medical image processing, Renewable Energy
- Speech recognition, speech enhancement, Digital Signal Processing, control systems.
- Power System Restructuring /Deregulation, Electricity Market, Distributed Generation, Renewable Energy, Security Analysis, Fault Detection, Operation and Control of Power Systems, Smart Energy Network
- Power System Reliability, Wide Area Measurement System, SCADA, Power system protection, PMU and Smart Grids
- Power systems, Dynamics and stability, Renewable energy sources

Mechanical Engineering:

- Numerical Modeling and Simulation
- Mechanical Behavior of Materials, Numerical Modeling and Simulation
- Grinding, Machining and Metal Forming
- Computational Fluid Dynamics and Heat Transfer, Combustion, Energy Systems and Fire Safety, Multiphase Flows, Experimental Fluid Dynamics and Heat Transfer

The institute is in a process of setting up an interdisciplinary / interdepartmental research and development centre to promote R&D activity amongst the student community and to facilitate the faculty members to bring in and work on more and more sponsored projects. Special schemes have been designed and are on the verge of implementation to attract more and more faculty community to join the R & D pool.

The institute carries a long term vision of taking up R&D activity catering to the real life challenges such as agricultural electronics (Wireless sensor based drip irrigation system, electronic sensors based crop monitoring), energy harvesting system and clean energy sources and ICT solutions for environmental monitoring. NIT Delhi has been doing and plans to carry on with arranging invited talks from eminent personalities from academia and industry to keep both the student and faculty community motivated.

8.3 Workshop & Expert Lectures Organized/ attended/delivered:

1. Dr. Amit Mahajan delivered an invited talk on "Hydrodynamic stability by energy method" in National Seminar on Analytical Aspects of Dynamics at Central University of Himachal Pradesh during 22-23 November 2019.

2. Dr. Anmol Ratna Saxena delivered expert talk on "Power Electronic Interfaces for Sustainable Energy Solutions" during one-week Faculty Development Programme on 'Sustainable Technologies for Energy & Environment' from 17th June 2019 to 22nd June 2019 sponsored by Dr. APJ Abdul Kalam Technical University Lucknow

3. Dr. Anshul delivered an Expert Talk on "Recent Advancements in Renewable Energy Systems" in "Sustainable Environmental Management & Renewable Energy Technologies for Future" from May 13-18, 2019 under TEQIP-III at Government Engineering College, Bharatpur.

4. Dr. Anshul delivered an Expert Talk on "Recent Enhancements in Power Electronics by Using FPGA" in Three Days Workshop on "FPGA based System Design" from April 29-May 01, 2019 at AMU Aligarh, UP.

5. Dr. Anuj K. Sharma delivered two expert lectures during 4thMalviya Research Conclave (MRC) – 2020 at MMMUT Gorakhpur (U.P.) during February 23-24, 2020.

6. Dr. Chandra Prakash- Expert Talk on Reinforcement Learning for text summarization, in SERB sponsored One Week Program on "Deep Learning Algorithms for Image Processing" from 21 Jan 2020, IGDTUW New Delhi.

7. Dr. Chandra Prakash- Expert Talk on " Introduction to Neural Networks with Python" in workshop on Machine Learning and Applications" in ITM Gwalior , 8-Feb 2020.

8. Dr. Chandra Prakash- Expert Talk on "Deep-Learning : introduction" in workshop on Machine Learning and Applications" in ITM Gwalior , 8-Feb 2020.

9. Dr. G. Sheoran published a book chapter "Anatomically Real Microwave Tissue Phantoms", Biomedical Engineering and its Applications in Healthcare. 2019 Springer Nature

10. Dr. Karan Verma, Organized FDP " ICT Tools & Techniques for Teaching, Learning Process & Institutes" (13 – 17 Jan. 2020), NIT Delhi.

11. Dr. Mahesh K. Singh attended Faculty development program on "ICT Tools for Teaching, Learning Process & Institutes" at NIT Delhiduring 13-17January 2020 organized by MNIT Jaipur, IIITDM Jabalpur, NIT Patna, IIT Guwahati.

12. Dr. Manoj Kumawat delivered Expert Lecture on "Modeling of The Distribution System with Renewable Energy Resources" in TEQIP III (MHRD, Government of India) sponsored One Week Student Development Programme (SDP) on "Modeling and simulation of power electronics Converters for Renewable Energy using MATLAB/SIMULINK" during 03 Feb, 2020 to 07 Feb, 2020 in University College of Engineering & Technology, Bikaner, Rajasthan.

13. Dr. Manoj Kumawat delivered Expert Lecture on "Performance Analysis of Distributed Energy Resources in Harmonics Polluted Distribution Systems" in TEQIP III (MHRD, Government of India) sponsored One Week Student Development Programme (SDP) on " Roles of Renewable Energy Resources in Enhancing Power Generation Capacity" during 03 Feb, 2020 to 07 Feb, 2020 in Rajkiya Engineering College Bijnor, Chandpur, Uttar Pradesh.

14. Dr. Manoj Kumawat delivered Expert Lecture on "Planning of Distributed Energy Resources" in TEQIP III (MHRD, Government of India) sponsored One Week Student Development Programme (SDP) on " Roles of Renewable Energy Resources in Enhancing Power Generation Capacity" during 03 Feb, 2020 to 07 Feb, 2020 in Rajkiya Engineering College Bijnor, Chandpur, Uttar Pradesh.

15. Dr. Pankaj Mukhija attended IEEE Region 10 Symposium TENSYMP 2019 at Kolkata held from 7-9 June 2019.

16. Dr. Prashant Kumar Presented a paper talk on 4th International Conference on Recent Advances in Mathematical Sciences and its Applications (RAMSA-2020), JIIT, Noida during 9-11 January 2020.

17. Dr. Rajiv K Tripathi, Presented paper on National Conference on "Innovations in Applied Science and Engineering" (NCIASE-2019), April, 27-28, 2019 organized by NIT Jalandhar,"QABC: No-Reference Image Quality Assessment under Different Illumination Conditions".

18. Dr. Rikmantra Basu (Expert Talk), "Group IV Material based Novel Opto-Electronic Devices", Department of Mechanical Engineering, National Chung-Cheng University, Taiwan, June 28, 2019.

19. Dr. Rishav Singh delivered a talk on "Agricultural Data Mining and knowledge extraction", Artificial Intelligence and Smart Agriculture for Prosperous Bundelkhand, Rani Lakshmi Bai Central Agricultural University, Jhansi (UP), 6th March 2020.

20. Dr. Rishav Singh delivered a talk on "Importance of Data Science in the field of Agriculture", Symposia DPR development workshop under UGC STRIDE Scheme. Institute of Management Studies (BHU), 16th January 2020

21. Dr. Sachin Singh attended IEEE ICSPC2T Conference at NIT Raipur during Jan. 03-05, 2020.

22. Dr. Sachin Singh attended IEEE NSC2019 Conference at IIT ROORKEE during Dec., 2019.

23. Dr. Sandeep Kumar attended one-week FDP on "VLSI chip design Hands-on using open source EDA"at NIT Delhi during Dec 16-20, 2019.

24. Dr. Sandeep Kumar attended one-week FDP on "VLSI chip design Hands-on using open source EDA"at NIT Delhi during July 8-12, 2019.

25. Dr. Shelly Sachdeva attended the 6th International Conference on Big Data Analytics (BDA) - 2019, Ahmedabad University during 17-20 Dec, 2019.

26. Dr. Shelly Sachdeva attended the International Conference on Computational Methods and Data Engineering (ICMDE 2020) on 30-31 January 2020 at SRM University, Sonipat.

27. Dr. Shelly Sachdeva delivered Expert Talk in Special Training Programme on 'Cryptology and Information Security (CIS 2019) at DRDO, Delhi

28. Dr. Shelly Sachdeva delivered invited Talk at International Conference on Computational Methods and Data Engineering (ICMDE 2020) on 30-31 January 2020 at SRM University, Sonipat.

29. Dr. Shelly Sachdeva organized a workshop on "Computing with Words via Fuzzy logic with Applications" from 06-May-2019 10-May-2019.

30. Dr. Shelly Sachdeva organized an FDP "Python Programming with Industry Perspective" from 02-Dec-2019 06-Dec-2019, sponsored by EICT Academy, MietY.

31. Dr. Shelly Sachdeva organized an FDP "VLSI Chip Design Hands-on using Open Source EDA" from 08-Jul-2019 12-Jul-2019 sponsored by EICT Academy, MietY.

8.4 Journal and Conference Papers Published:

1. A. Tanwar, Ajay K. Sharma, V. S. Pandey, Fractional-Grasshopper Optimization Algorithm for the Sensor Activation Control in Wireless Sensor Networks, Wireless Personal Communications, 113, 399-422, 2020.

2. Abhishek Verma, Suruchi Sharma, Sneha Bharti, Manisha Bharti , Baljit Kaur, Design of Tunnel Junction Engineered Dopingless TFET for Low power Applications in International Symposium on Devices, Circuits & Systems (ISDCS-2020) at IIEST Shibpur, Kolkat from 4th-6th March, 2020

3. Abhishek Verma, Suruchi Sharma, Sneha Bharti, Manisha Bharti, Baljit Kaur, Design and Investigation of tunnel junction engineered Dopingless TFET with improved DC and RF/analog parameters analysis in International Conference on Electroic Systems & Intelligent Computing (ESIC-2020), at NIT Arunachal Pradesh from 2nd-4th March, 2020.

4. Agrawal, Rimjhim, Md Arquam, Anurag Singh, Community detection in Networks using Graph Embedding, Procedia Computer Science, 173, 372-381, 2020.

5. Amit Mahajan, Hemant Parashar, Linear and weakly nonlinear stability analysis on a rotating anisotropic ferrofluid layer, Physics of Fluids, 32(2), 024101, 2020.

6. Amit Mahajan, Mahesh Kumar Sharma, Double-diffusive convection in a magnetic nanofluid layer with cross diffusion effects, Journal of Engineering Mathematics, 115, 67–87, 2019.

7. Amit Mahajan, Mahesh Kumar Sharma, Penetrative convection due to absorption of radiation in a magnetic nanofluid saturated porous layer, Studia Geotechnica et Mechanica, 41(3), 129-142, 2019.

8. Amit Mahajan, Mahesh Kumar Sharma, Thermomagnetic convection in a layer of magnetic nanofluid saturating porous medium with magnetic field dependent viscosity, International Journal of Nanoparticles, 11(3), 181-201, 2019.

9. Anjani, Ninad, Vijayant Pawar, Shelly Sachdeva, Artificially Intelligent Decentralized Autonomous Organization, 4th IEEE International Conference on Information Systems and Computer Networks, ISCON, 667-671, 22-23 Nov, 2019.

10. Ankit, Shelly Sachdeva, Breast Cancer Histopathology Image Classification using AlexNet, 4th IEEE International Conference on Information Systems and Computer Networks,ISCON, 708-712, 22-23 Nov, 2019.

11. Anuj K. Sharma, A. Dominic, B. Kaur, V. A. Popescu, Fluoride fiber sensor with huge performance enhancement via optimum radiative damping at Si-Ag-Al2O3-graphene heterojunction in NIR, IEEE-OSA Journal of Lightwave Technology, 37(22), 5641-5646, 2019.

12. Anuj K. Sharma, A. Dominic, SPR Sensing Enhancement with Dynamic Radiative Damping Stimulated by Graphene Conductivity Under Temperature Variation in NIR, Plasmonics, 14, 1839–1842, 2019.

13. Anuj K. Sharma, A. K. Pandey, Au Grating on SiC Substrate: Simulation of High Performance Plasmonic Schottky Barrier Photodetector in Visible and NIR Regions, Journal of Physics D: Applied Physics, 53, 175103, 2020.

14. Anuj K. Sharma, A. K. Pandey, B. Kaur, Fluoride Fiber-Based Plasmonic Biosensor with Two-Dimensional Material Heterostructures: Enhancement of Overall Figure-of-Merit via Optimization of Radiation Damping in Near Infrared Region, MDPI Materials, 12(9), 1542, 2019.

15. Anuj K. Sharma, A. K. Pandey, B. Kaur, Simulation study on comprehensive sensing enhancement of BlueP/MoS2 and BlueP/WS2 based fluoride fiber SPR sensors: Analysis founded on damping, field, and optical power, Applied Optics, 58(16), 4518-4525, 2019.

16. Anuj K. Sharma, A. K. Pandey, Design and analysis of plasmonic sensor in communication band with gold grating on nitride substrate, Superlattices and Microstructures, 130, 369-376, 2019.

17. Anuj K. Sharma, A. K. Pandey, Metal Oxide Grating based Plasmonic Refractive Index Sensor with Si layer in Optical Communication Band, IEEE Sensors Journal, 20(3), 1275-1282, 2020.

18. Anuj K. Sharma, A. K. Pandey, Self-referenced plasmonic sensor with TiO2 grating on thin Au layer: simulated performance analysis in optical communication band, J. Opt. Soc. Am. B, 36, 8, 2019.

19. Anuj K. Sharma, B. Kaur, Simulation of multilayered heterojunction-based chalcogenide fiber SPR sensor with ultrahigh figure of merit in near infrared, IEEE Sensors Journal, 19(11), 4074-78, 2019.

20. Anuj K. Sharma, C. Marques, Design and Performance Perspectives on Fiber Optic Sensors With Plasmonic Nanostructures and Gratings: A Review, IEEE Sensors journal, 19, 2019.

21. Anuj K. Sharma, I. Sharma, Evanescent absorption based fluoride fiber sensing enhancement led by doped graphene's thermo-optic dispersion in NIR, Optical and Quantum Electronics 51(5), 152, 2019.

22. Anuj K. Sharma, J. Gupta, Fluoride fiber plasmonic sensor with multilayer variants of tungsten disulfide (WS2): Seeking enhanced figure-of-merit via thermo-optic tuning of radiation damping, Optical Fiber Technology, 53, 2019.

23. Anuj K. Sharma, J. Gupta, I. Sharma, Fiber optic evanescent wave absorption-based sensors: A detailed review of advancements in the last decade (2007–18), Optik, 183, 1008-1025, 2019.

24. Anuj K. Sharma, J. Gupta, Simulation and Comprehensive Analysis of Fluoride Fiber SPR Sensor With Multilayer Variants of 2D Materials (Graphene and MoS2) Under Optimum Radiation Damping in NIR, IEEE Sensors journal, 19, 8775 – 8780, 2019.

25. Arquam, Md, Anurag Singh, Hocine Cherifi, Integrating Environmental Temperature Conditions into the SIR Model for Vector-Borne Diseases, International Conference on Complex Networks and Their Applications, Springer, Cham, 2019.

26. Arshpreet Kaur, Karan Verma, Amol P Bhondekar, Kumar Shashvat, Implementation of Bagged SVM Ensemble Model for Classification of Epileptic States using EEG, Current Pharmaceutical Biotechnology, 2019.

27. Arshpreet Kaur, Kumar Shashvat, Karan Verma, Amol Bhondekar, Identification of Inter-ictal activity from EEG Signal using Non-linear Features, In Proceedings of the International Conference on Recent Trends in Machine Learning, IOT, Smart Cities & Applications (ICMISC 2020), 2020.

28. Ayush Kumar, Manisha Bharti, A Step Towards Next Generation Mobile Communication: 5G Cellular Mobile Communication, Internatinal Conference on Advaced Production & Industrial Engineering, Delhi Technological University, from 4-5October, 2019.

29. Ayush Kumar, Pritam Pidge,Manisha Bharti, Prabhat Dev, Prashant, Innovations and Future of Robotics, Internatinal Conference on Advaced Production & Industrial Engineering, Delhi Technological University, from 4-5October, 2019.

30. C K Sirajuddeen, S Kansal, R K Tripathi, Adaptive histogram equalization based on modified probability density function and expected value of image intensity, in Signal, Image and Video Processing, 14(1), 9-17, 2020.

31. D.Vaithiyanathan, Manigandan Muniraj, Cloud based text extraction using Google cloud vision for visually impaired applications, Proc. 11th International Conference on Advanced Computing (ICoAC 2019), Chennai, India, Dec. 18-20, pp.90-96, 2019.

32. D.Vaithiyanthan, Vikrant Gupta, Santosh Kumar, Alok Mishra, J.Britto Pari, Performance Analysis of Implicit Pulsed and Low Glitch Power Efficient Double Edge Triggered Flip Flops using C-Elements, Lecture Notes in Electrical Engineering, International Conference on Communication, Computing and Electronics Systems, 637, 262-275, 2020.

33. Deepa Sivaram, Kala Bharathan, D.Vaithiyanathan, Energy Efficient Street Lighting System Based on Microcontroller, International Journal of Innovative Technology and Exploring Engineering, 9(1S), 27-29, 2019.

34. Dharmendra Kumar Jhariya, Akhilesh Mohan, Rahul Kaushik, Vishal Narain Saxena, Circular-shaped differential wideband band pass filter, International Journal of Microwave and Wireless Technologies, 12(3), 193-197, 2020.

35. Diptangshu, Manisha Bharti, Implementation of C-PolSK Modulation in FSO Network and Analysis of its Atmospheric Performance, in Journal of Telecommunication and Information Technology.

36. Eeti, Anurag Singh, Hocine Cherifi, Centrality-based Opinion Modeling on Temporal Networks, IEEE Access, 8, 1945-1961, 2019.

37. Eeti, Anurag Singh, Threshold Time Varying Opinion Convergence, Proc. ICEIT Conference on Advances in Mobile Communications, Networking and Computing, New Delhi, April 11-12, 2019.

38. Eeti, Singh, Anurag, Effect of Influential Nodes on Time Varying Opinion Formation Models, Procedia Computer Science, 173, 120-129, 2020.

39. G. Kumar, S Kumar, Investigation of the performance of optical amplifiers for a 96 x 12 Gbps DWDM system using ulta small channel spacing, Photonic Network Communications, 38(1), 108-114, 2019.

40. G. Kumar, S. Kumar, Performance analysis of compensation techniques for 80x20 Gbps DWDM systems using optical amplifiers, Photonic Network Communication 1-20, 2020.

41. G. Varshney, R. Singh , V. S. Pandey, R. S. Yaduvanshi, Circularly Polarized Two-Port MIMO Dielectric Resonator Antenna, Progress In Electromagnetics Research M, 91, 19–28, 2020.

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8.5 Research Project(s)

S.No.	Title	Funding Agency	PI Name and CoPI (if any)	Project Cost
1	Agile Modeling of SMART CITY – "a fusion of IoT and Big Data"	DST-INRIA-CNRS	Dr. Karan Verma, Dr. Abderrezak Rachhedi	35 Lakhs
2	Analysis and design of plasmon-based photonic devices utilizing enhanced light absorption in metallic nanostructure	CSIR	Dr. Anuj Kumar Sharma	15~Lacs
3	Big Data Management in VANET	DST -MOST	Dr. Karan Verma, Prof. Ronni Gamzu	28 Lakhs
4	Cross layer optimization with QOS for NGN	TEQIP-III	SANDIP VIJAY, SACHIN SINGH	300000
5	Design and Development of Detection and Extinguishing Systems for Forest Fire using Sensor Networks, Aerial and Ground Robots	DST	PI: Dr. Paramita Guha, CoPI: Pankaj Mukhija and Mr. Kailash Chand	2968000
6	Design of Electronic and Photonic Devices using Ge1-xSnx Alloy: An emerging Group IV Semiconductor Material and Investigation of Physical Processes of the Devices	DST – SERB under Early Carrier Research Award Scheme.	Dr. Rikmantra Basu	25 ~Lac
7	Development of Near Infrared Spectrometer for plant disease detection	DST	PI: Dr. Gyanendra Sheoran & CoPI no.: 01	9912855
8	Development of Non-contact type method for heart vibration parameters estimation for sleep disordered breathing analysis	DST DAAD	Dr. SACHIN SINGH	245000
9	Edge Learning for the Internet of VANET Applications	Hitachi Data Systems-Malaysia	Dr. Karan Verma	25 Lakhs
10	Higher-Order DC-DC Converters for Power Management of DC Nanogrid in Futuristic Smart Buildings	SERB	Dr. Anmol Ratna Saxena	4697100
11	In-situ Digital Holographic Tomography of Subsurface Microstructures of Artwork	DST	PI: Dr. Gyanendra Sheoran & CoPI no.: 02	8533905
12	Influence of Natural climate Variabilities over the extreme wave climate in Indian Ocean accessed by the re-analyses and CMIP5 model data	MoES/36/OOIS/Extra/69/2018, Ministry of Earth Sciences, Government of India.	PI: Dr. Prashant Kumar Co-PI: V. S. Pandey & V.K. Pandey	3126000
13	Investigation of extreme events in Indian summer monsoon rainfall and future projections of the Indian summer monsoon	Department of Science and Technology, Climate Change Programme-(Splice)	PI: V. K . Pandey Co_PI: V. S. Pandey & S. Mishra	5079040
14	Investigations on surface plasmon resonance (SPR) based optical sensing with an emphasis on the role of spin waves and magnonics in related materials	SERB	Dr. Anuj Kumar Sharma (Co-PI: Dr. Y. K. Prajapati, MNNIT Allahabad)	21~Lacs
15	Modeling and simulation of moored ship motion in Paradip port under the resonance conditions for multidirectional random waves	SERB-DST	Dr. Prashant Kumar	1802240
16	SMDP -C2SD	Ministry of Information and Communication Technology	Dr.Baljit Kaur (PI) Dr.Rajiv Kumar Tripathi (Co-PI)	3937260 Total Received Grant
17	Stability and Convection in Magnetic Nanofluids	CSIR	Dr. Amit Mahajan	16~Lakh

9.0   BOG AND OTHER COMMITTEES

Board of Governors

S. No.	Members	Designation
1	Prof. Sanjay Govind Dhande, Former Director, IIT Kanpur	Chairperson (Till 14 November 2019 AN)
2	Prof. Praveen Kumar, Director, NIT Delhi	Ex-Officio Member and Chairperson Board of Governors [w.e.f. 15.11.2019 to 31.03.2020 as per the **NITs Statutes clause no 17 (15)** under section **Director and his powers]**
3	Additional Secretary or Joint Secretary dealing with Technical Education, Dept. of Higher Education, MHRD	Member
4	Financial Advisor (MHRD) or his nominee	Member
5	Dr. Nagesh Thakur, Professor, Department of Physics, HP University, Shimla	Member
6	Ms. Lalita Nijhawan, Director, Nijhawan Group of Companies & President, CKRDT Foundation	Member
7	Prof. S.C. Dutta Roy INSA Emeritus Scientist	Member
8	Prof. M. Balakrishnan (Dy. Director, Strategy & Planning) Department of Computer Science & Engineering Indian Institute of Technology (IIT) Delhi	Member
9	Sh. Sushil Kumar, Registrar, NIT Delhi	Secretary

Finance Committee

S .No.	Members	Designation
1	Prof. Sanjay Govind Dhande, Former Director, IIT Kanpur	Ex-officio Chairman (Till 14 November 2019 AN)
2	Prof. Praveen Kumar, Director, NIT Delhi	Ex-Officio Member and Chairperson Finance Committee [w.e.f. 15.11.2019 to 31.03.2020 as per the **NITs Statutes clause no 17 (15)** under section **Director and his powers]**
3	Joint Secretary dealing with National Institute of Technology or his nominee	Member
4	Finance Advisor (Human Resource Development) or his nominee	Member
5	Dr. Nagesh Thakur, Professor, Department of Physics, HP University, Shimla	Member
6	Ms. Lalita Nijhawan, Director, Nijhawan Group of Companies & President, CKRDT Foundation	Member
7	Prof. S.C. Dutta Roy, INSA Emeritus Scientist	Member
8	Prof. M. Balakrishnan (Dy. Director, Strategy & Planning) Department of Computer Science & Engineering Indian Institute of Technology (IIT) Delhi	Member
9	Sh .Sushil Kumar ,Registrar ,NIT Delhi	Ex-officio Member -Secretary

Building & Works Committee

S .No.	Members Present	Designation
1	Prof .Praveen Kumar ,Director ,NIT Delhi	Ex Officio Chairman
2	One member nominated by the Central Government not below the rank of Director or Deputy Secretary	
3	One member nominated by the Board of Governors	Member
4	Sh .Sushil Kumar ,Registrar ,NIT Delhi	Member Secretary
5	Dean) Planning & Development ,(NIT Delhi	Member
6	One expert each from Civil and Electrical Engineering Wing of Central or State Government or any autonomous body of repute	Member

10.0 CENTRAL FACILITIES AND SERVICES

10.1 Computer Center

The Computer Centre at NITD was established on 18th February, 2014 to cater the computational requirements of the Institute and is equipped with latest state of the art technological resources. The Institute visualizes centralized computing facility, campus wide networking and information technology as a means to enrich the educational experience and invigorate emerging areas of scholarly research and development.

The Computer Centre maintains and manages Wi- Fi facility through rack mounted blade servers in the campus having High speed (single mode) fiber backbone, managed by Layer 4 Switches providing 275 Mbps (1:1) bandwidth Speed. These networking facilities are also extended to Boys Hostel, PG Girls and Residential areas with VoIP solution.

10.2 High Performance Computing Lab

NIT Delhi has established high computing Lab with workstations having INTEL XEON, SIX CORE processor to meet high and computation needs for faculty and research scholar.

10.3 Param Shavak - Super Computing Facility

NIT Delhi has collaborated with the Centre for Development of Advanced Computing (C-DAC) to provide super computing solutions through the product PARAM SHAVAK. This is a Supercomputer in a Box solution, aims to provide computational resource (Capacity building) with advanced technologies to perform the high-end computations on a larger scale for the scientific, engineering and academic programmes.

10.4 Wi-Fi Enabled Campus

The campus and all the hostels of the Institute are fully WiFi enabled along with LAN facility. It is Single mode fiber (Point to point).

10.5 CCTV Surveillance

NIT Delhi promises high in and around the campus with its 24 X 7 CCTV surveillance. It helps to have keen vigil on the activities in the Institute.

10.6 e-Office

NIT Delhi has implemented eOffice to automate the Office procedures and bring in transparency in office working. The eOffice Premium version consists of following applications:

- **File Management System (eFile) -** Automates the processing of files and receipts
- **Knowledge Management System (KMS)** - Acts as a centralized repository of various documents such as acts, policies and guidelines.
- **Leave Management System (eLeave) -** Automates the leave application and approval process.
- **Tour Management System (eTour) -** Automates employee tour programmes.
- **Personnel Information Management System (PIMS) -** Manages employee records. The output of PIMS is eService Book.
- **Collaboration and Messaging Services (CaMS) -** For internal collaboration and messaging.

10.7 Video Conference

NIT Delhi is equipped with solution to connect through Video Solution to Government entities and other institutions of nation and abroad.

10.8 Enterprise Resource Planning (ERP)

Institute Management System (IMS) is management software—typically a suite of integrated applications—that an organization can use to collect, store, manage and interpret data.

Features in IMS:
Student Information System

- Student master database
- Rooms and exam centres management
- Formation of programs/branches/sections /sub- sections
- Enrolment number generation
- Pre-registration/registration
- Core subject allocation
- Department wise elective/free elective offerings
- Elective/free elective choice collection from students
- Faculty subject choice with rooms, day & time preference
- Teaching load distribution
- Registration slip printing
- Add/drop regular/back paper subjects
- Integrated fee collection
- Student attendance
- Time table preparation

Web-Kiosk: Web based application containing all the information related to students and employees (teaching & non-teaching). It is a presentation layer of Campus Lynx. All the users will have a separate Login ID and password to access the kiosk. It has following information:

Student Web-Kiosk

- Personal information – view/edit
- Academic information
- Pre-registration/registration
- Record subject choice
- Class time table

- Class attendance
- Class tests/mid/end semester test marks detail
- Exam date sheet with seating plan
- Marks obtained / CGPA/SGPA details
- Disciplinary record
- Fee detail which includes:
- Fee payment, dues details

Employee Web-Kiosk

- Personal information
- Contact information
- view/edit
- Academic information
- Subject/room/day/time preference for time table
- Time table (entire/employee wise)
- Student attendance
- Day/time preference/no duty request for invigilation duty
- Employee wise date sheet/invigilation duty
- View seating plan
- Marks entry of class tests/mid semester test
- Grade calculation
- Booking/cancellation of room for special activities/extra class
- View result of student reaction survey (self)
- Administration user option
- Student information
- Employee information
- Security management

Examination Management

- Date sheet generation
- Seating plan
- Invigilation duty with faculty load distribution/no duty request/time preference
- Attendance/absentee list generation
- Event based dual marks entry system
- Secured online entry of marks by faculty members with HOD/CoE/Dean Academic/ Director approval
- Result processing
- Final marks
- Grade calculation
- CGPA/SGPA calculation
- Tabulation of grade list
- Printing of grade/mark sheet, transcript & various MIS reports
- Publishing of result on the web after approval

Student Fee Management

- Dynamic fee heads
- Multiple currency support
- Fee structure – Academic year, program wise fee with multiple quota handling – Individual fee structure
- Fee waiver/discount
- Special approval in case of delay in payment
- Fee collection
- Cash
- Bank
- DD/cheque/ECS
- Payment gateway
- Online payment (on demand)
- Fine collection
- Fee refund/settlement
- Payment list/dues list

Human Resource Management System:

- Archiving of all employee data
- On-line manpower indentation
- Employee Database
  - Personal information
  - Professional information
  - Dependent details
  - Journals/Publications/Conference/Seminar etc.
- On-line/off-line application collection with applicant database
  - Short listing
  - Call Letter generation
  - Formation of interview committee
  - Interview remarks
  - Selection and joining
- Employee Database
  - Personal information
  - Professional information
  - Dependent details
  - Journals/Publications/Conference/Seminar etc.
  - Salary/Perks/Reimbursement details

Promotion/Increment

- Visiting Professors/Guest Faculty details
- Dynamic Earning/ Reimbursement/ Deduction Management with formula builder
- Leave Management

- Salary computation and generation of pay bills and pay slips

Purchase/receiving/Inventory:

- Raising of purchase requisition
- Store indent generation
- Placing of enquiry to various parties
- Comparative statement generation
- Purchase order through approved quotation
- Amendment of approved purchase order
- Goods receipt and material inspection
- Purchase return
- Bill passing with FAS integration
- Material issue/receipt
- Material transfer in/out to other stores/locations
- Physical stock verification and adjustment voucher
- Item repair
- Store valuation on weighted average methodology

Activities Performed:

- Marks entry and grade calculation.
- Result publish online of Makeup and End semester Examination
- Attendance Entry on IMS
- View attendance online for students and faculty.
- Online No Dues clearance.

- Generation of Grade sheet with QR code.
- Online Hostel outgoing request and approval.
- Online semester course registration.
- Online faculty recruitment.
- Assist in implementation of various modules like PRI, FAS and HRMS.
- Provide demonstration to faculty, non faculty and students.

10.9   VoIP with PRI Line

NIT Delhi has a PRI- VoIP line that provides up to 23 separate 64 Kbps B lines and one data channel line with 64 Kbps. PRI system offers a business-style system with a multitude of lines that can be sent over the Internet and not over traditional landlines. Further, it allows Internet-based phone calls and other lines used for data transmission used for things like video conferencing.

10.10 Software & Hardware :

Following are available for use:

S .No.	Description	Quantity /users
1	Windows Server [WinSvrStd 2012R2 SNGL OLP NL Acdmc 2Proc (P73-06272),WinSvrCAL 2012 SNGL OLP NL AcdmcDvcCAL(R18-04271)]	03 Nos. (500 Users)
2	RedHat Enterprise Linux Server ES 6.x Premium (64 bit) (1-2 SoC/1G)	03 Nos.
3	Cadence Software Cadence University Research Bundle Complete Analog& Digital Front end & back end tools for Research, 3 years license	10 Users
4	QualNet for Five years with three base libraries (Multimedia and Enterprises, Wireless, Developer) Cellular,SensorUrban,UMTS, Wimax	01 Nos. (10 Users)
5	NetSim Standard Version 8.0 [Versatile tool to simulate &analyze computer networks with modeling facility. NetSim Standard version is specially designed for project work and research)	15 Users
6	RSoftOptisih V 2014.09 Software for 3 Year Term Network Academic License (Windows 7/8 or Higher Ver.) Optional Add-on Modules ModeSYS, OptSIM Circuit	10 Users
7	TCAD (Synopsys EDA Tool for TCAD Consisting of: 4458-0 Synopsys Asia Pac Advance (3D) TCAD (University Bundle-05 Licensees) 3 Year TSL, Network Floating)	01 Nos
8	MATLAB, Simulink Tools	25 Users
9	CYME Software	Users

Networking Equipment with Support 10 G

S .No.	Product description	Product Part Code	Total Qty
1	Wireless Controller with licenses	AIR-CT5508-25-K9	1
2	Indoor Access Points (Type-1)	AIR-CAP3702I-N-K9	24
3	Indoor Access Points (Type-2)	AIR-CAP2602I-N-K9	8
4	Outdoor Access Points	AIR-CAP1552E-N-K9	14
5	24 Port Core Switch	WS-C3750X-24S-S	1
6	48 Port non PoE Switches (Type-1)	WS-C2960X-48TS-L	2
7	8 Port PoE Switches (Type-2)	WS-C3560CG-8PC-S	2
8	24 Port PoE Switches (Type-3)	WS-C2960X-24PS-L	16
9	Small Secure Network Server	SNS-3415-K9	1
10	Core Switch (Type-3)	WS-C2960XR-24PS-I	1
11	Unified Threat Management (Fortinet)	FG-800C-BDL	1
12	Call Manager with licenses	BE6H-M4-K9=	12
13	Video Phone (Type-1)	CP-DX80-K9=	3
14	Video Phone (Type-1)	CP-DX70-K9=	2
15	Basic Video Phone (Type-2)	CP-8845-W-K9=	30
16	Basic IP Phone (Type-3)	CP-3905=	60
17	Voice Gateway Router	CISCO2911/K9	12

High End Servers

S .No.	Product description	Product	Total Qty
1	HP Blade Server (with 8 Blade Populated, Strogeupto 5 TB)	8th Generation (HP)	8
2	ISE Server	Cisco (Rack Mounted)	1
3	UCS Blade Server (CUCM server)	Cisco (Rack Mounted)	2
4	Unified Threat Management (Fortinet)	FG-800C-BDL	1
5	Unified storage combining NAS and SAN (Tyrone)	21 TB	1

11.0 Library

Total Library Collection

The Library has a total collection of 14747 (approx 2150 titles) inclusive of 4712 books in Book Bank category. The collection includes the text books, reference books and various competitive exams books etc. The total 63 books were added to the library collection during the year 2019-20. The Library also have multimedia collection like CD's/DVD's/NPTEL Videos etc. (approx 1192 CD's/DVD's). Also, Library has around 164 Thesis which are submitted by the B.Tech/M.Tech./PhD students of the Institute.

Brief Information about the Central Library

The Central Library acts as the primary information resource centre and the repository of various printed as well as electronic resources that supports teaching, research and all the academic activities of the Institute. The library was established in the year 2012 (June 2012) in Dwarka to facilitate the access to information resources to faculty and students of the Institute. It moved to its present location NILERD Campus, Narela on 18th February 2014. All the faculty members, students and staff of the Institute are entitled to access all the library facilities and services.

The Central Library have a rich collection of books on science & technology including Computer Science, Electrical & Electronics Engineering, Mechanical Engineering, Mathematics, Physics, Chemistry, Economics, and Management etc. Also, apart from this, the Library has reference collection including dictionaries, handbooks, and research related books. The Library also holds a good collection for general reading purpose including books on sports & yoga, novels, fictions, books for competitive exams like GATE/IES, magazines on general awareness, current affairs, and specialised subject magazines like AutoCar, Digit, and Electronics for you etc.

The Central Library follows 'Open Access System' along with Self Check-in and Self Check-out facility. The separate sections are arranged for the books under Text Books, Book Bank and Reference Category for easy access to the users.

Information Technology: Automated Library System

- The library is connected to the campus LAN and Wi-Fi facility. The library server works under Windows 8 environment.
- The Library uses LIBSYS 7 software package which is an integrated multi-user library automation management system that supports all in-house activities of the library.
- The Library have RFID (Radio Frequency Identifier) based Automation system and Circulation system (self Check-in/ Check-out).
- The database of the entire library acquisitions is being updated on regular basis along with details of recently acquired books.
- The library has WebOPAC facility under which all the bibliographic details of the library collection can be accessed from Internet 24x7 on all week days by the users.
- The EAS/RFID Security Gates are installed at the library entrance to prevent Library resources from theft activities.
- The RFID smart cards (i.e. Institute ID cum Library Card) are also provided to all the students & faculty/staff members for the Institute.

Library Facilities & Services

Library Membership Facility: All students, faculty and staff members of the Institute are eligible for the membership of the Institute library for using its facilities and services offered for the purpose of their academic, research and administrative work. Use of library facilities and services implies acceptance of its rules and procedures.

Circulation Facility: The Library provides circulation (Check-in/Check-out) service to all its members.

Book Bank Facility: The Library provides Book Bank facility to the B.Tech. and M.Tech. students. Under the Book Bank facility, the set of textbooks as per the prescribed syllabus are issued to the individual student for entire semester.

Reference and Information Service: The Library also has a collection of General reference books including Dictionaries, Handbooks, and Bibliographies, etc. and these are available for reference within the library premises and are not for lending.

Email Alert Service: Library provided 'Email Alert Facility' during the year 2019-20. Through this facility library send alerts for the Check-In/Check-Out, overdue and other alerts to its members.

Reading Facility: The library subscribed total 22 magazines (21 in English and 1 in Hindi) during the year on different subject areas like General awareness and Competitive, Science and Technology, Computer Sciences, Engineering, Sports and Health, Yearly GK magazines etc. The library also subscribes 11 (5 Hindi and 6 English) newspapers including daily and weekly papers.

WebOPAC Facility: The library has WebOPAC facility under which all the bibliographic details of the library collection can be accessed by the user from anywhere and anytime via Intranet/Internet.

Current Awareness Service: The library keeps it users updated about the current collection procured, resources subscribed or any other information/updates in the library on time to time basis.

Photocopy Facility: Users are asked to avail the photocopy service for a specific piece of information. Copyright issues and Plagiarism is always taken care of by not allowing the excessive photocopy of a document.

Newspaper Clipping Service: The Central Library has initiated the Weekly Newspaper Clipping Service since March 2019. The 'Newspaper Clipping Service' covers articles, editorial and reviews published in daily newspapers (both Hindi & English) and circulated to all library members via email.

Plagiarism Check facility: The Library provides plagiarism check facility through Turnitin Anti Plagiarism Software to the Students and faculty members of the Institute.

E-Library Resources & Facilities

- **E-Journals:** Library subscribes various Electronic Databases through eShodhSindhu Consortium which includes more than 6000 journals/articles/magazines/conference proceedings etc. in electronic format. The List of the Subscribed E-Databases during the year 2019-2020 are as below:
    1. Elsevier Science Direct
    2. ACM Digital Library
    3. IEL Online (IEEE+IET)
    4. Springer Link (1700+ Journals)
    5. Springer Nature Journals (complementary access)
    6. ASME (American Society of Mechanical Engineers)
- **Turnitin (Anti-Plagiarism Software):** Turnitin is the leading originality checking and plagiarism prevention service used by the faculty, students and research scholars at the Institute. Turnitin encourages best practices for using and citing other people's written material.
- **URKUND (Plagiarism Detection Software):-** The Central Library is getting access to Urkund Plagiarism Detection Software through eShodhSindhu under Centrally Funded Scheme of MHRD. The access of Urkund Software has been provided to all the faculty members of the Institute.
- **NPTEL Videos:** The Library provides access to NPTEL (National Programme on Technology Enhanced Learning) Video to the various users of Library which provides E-learning through online Web and Video courses in Engineering, Science and humanities streams. It aims to enhance the quality of engineering education in India by providing free online courseware. NPTEL is funded by the Ministry of Human Resource Development (MHRD).
- **Database of Previous Year Question Papers:** The Central Library has created a database for previous year question papers of NIT Delhi in LIBSYS Software (Library Management Software). Therefore, the Library Members can easily access the previous year question papers of NIT Delhi through the Library WebOPAC.

Other Important Activities of the Library

- **Library Advisory Committee:**

    There is library advisory committee which consists of Chairperson and faculty members from each department including Assistant Librarian as the Convener. The library committee meets from time to time to frame and upgrade the policies and to review the working conditions for smooth functioning of the library.

- SC/ST Book Bank Cell: A number of measures exist for helping students belonging to SC and ST categories. There is 'SC/ST Book Bank Cell' in the Institute that ensures the distribution of 'Book Bank' by the Library to SC/ST students (on preference basis) under which the textbooks/course books are issued to the students for the whole semester (i.e. 06 months) as per the prescribed schedule and time.

Orientation Programme to Users:

    The library conducts orientation programme for the users from time to time whenever any new software/technology is introduced in the library for all the students, faculty and other staff members of the Institute for the maximum utilization of the varied library resources and services.

12.0   Hostels

Hostel should be a comfortable place to stay where the students can have the feeling of home. NIT Delhi has separate hostel facilities for around 316 boys and 90 girls. NIT Delhi has two boys' hostels and two girls' hostel with all the facilities for boarding and other recreational activities. The hostels have their own well- equipped mess along with night canteen to provide good and hygienic food to the students. Quality purified water is provided to the students using RO systems. A separate TV room, indoor games room and reading room are provided in the Girls' and Boys' Hostel. Full time resident Wardens, and caretakers separately are available to take care of hostellers and to maintain the discipline under the supervision of a Chief Warden. 24 hours security service with guards and CCTV and power backup is provided for the hostel.

Boys Hostel (2 Nos.)

- BH1- Satyawadi Raja Harish Chandra Hostel
- BH2- My Floor 2, Kundli

Girls Hostel (2 Nos.)

- GH1- U.G Girls Hostel, NIT Delhi
- GH2- P.G Girls Hostel, NIT Delhi

Following are the other facilities provided in the hostels -

- Fully furnished and spacious rooms
- Free Wi-Fi and a computer room
- Visiting room
- Geezers and water coolers
- Play ground for outdoor games
- First aid facility
- Institute vehicle is available 24 hours for medical emergency
- Washing machine facilities and also Paid laundry service
- Cafeteria in the academic area as well as in the hostel premises
- Bus facilities from hostels to the Institute
- Availability of Electricians and Plumber

Part – II
Audit Report and
Annual Account
(2019 – 2020)