

17th ANNUAL REPORT

2018 – 2019

Audit Report and
Audited Statement of Accounts
(April 01, 2018 – March 31, 2019)

Photograph



NATIONAL INSTITUTE OF TECHNOLOGY KURUKSHETRA
Kurukshetra – 136119, Haryana, India.

*An Institution of National Importance
under
Ministry of Human Resource Development, Government of India*

www.nitkkr.ac.in

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From Director's Desk

I am indeed very happy to present the 17th Annual Report 2018-19 of the Institute highlighting the progress in the last financial year. The performance of the Institute during the year 2018-19 has been elucidated in this report along with the progress made in various

directions. As one scans through the pages of this report, one can easily be convinced that NIT Kurukshetra has done commendable work during the said year.

National Institute of Technology Kurukshetra is an Institution of National Importance that is fully funded by the MHRD, Government of India. Its major focus is to provide quality technical education with equal emphasis on research and skill development. In order to achieve the stated objectives, the curricular structure has been thoroughly revised, incorporating more options and interdisciplinary electives and skill development through industry internships and collaborations. Further, the Institute has established and in process of establishment of Centre of Excellences (CoEs) in collaboration with industry and government agency. As an output indicator NIT Kurukshetra has found its place as the 41st position (overall) and 7th position (among NITs) in NIRF ranking.

The students are actively involved in various extracurricular activities including technical, sports, NCC, cognitive, social and cultural activities through clubs and societies. Faculty members are actively involved in academic, research and consultancy. Faculty members also participated in various conferences/ seminars/ FDPs and also organized many such events. Forty-five research projects, valued at about Rs. 700 lacs are in progress in the Institute. Further, the Institute provided consultancy services to various government and industrial organizations, valued at Rs. 706.66 lacs.

New infrastructure is being prepared for establishing centres of excellence in emerging areas such as Internet of Things, Advanced Manufacturing, Robotics & Automation, Energy Savings & Studies, Mechatronics, among others, and for enhanced academic and hostel facilities. Some of these infrastructural facilities have already been completed. Alumni of the Institute have also come forward to participate in the development of the Institute.

Government of India, Ministry of Human Resource Development, released Rs. 116.44 crores and Rs. 15.42 crores under non-plan and plan scheme respectively during the financial year, 2018-19. A sum of Rs. 115.69 crores and Rs. 46.48 crores has been spent under various heads of recurring and non-recurring expenditure during the financial year under report.

I am convinced that the accomplishments of the Institute during the year have been quite commendable. The faculty, staff and students are working in synergy to achieve greater academic milestones.

Dr. Satish Kumar
Director

PROGRESS AT A GLANCE (2018-19)

- The Institute is placed at 41st position in NIRF ranking, 7th among NITs.
- Academic Audit for M.Tech. programs was got done by eminent experts from premier institutions of the country like IITs and IISc. Based on the suggestions and critical input, the curricula for M.Tech. programs, to be effective from academic year 2019-20, were thoroughly revised with a focus on skill development and to incorporate more choices and flexibility and interdisciplinary approach.
- AEON Centre of Excellence has been started in collaboration with AEON Learning Pvt. Ltd., Bangalore for training of industry professionals, faculty, and students on emerging technologies.
- The establishment of Siemens Centre of Excellence, Atal Incubation Centre, Internet of Things, and other collaborative activities with premier industries, government agencies and alumni support are in progress.
- The faculty members of the Institute have published 375 research papers in peer-reviewed journals, and also published 450 papers in proceedings of national and international conferences in 2018-19.
- Fifty sponsored research projects are being executed by the faculty members during the year under report.
- Sixty-three PhD degrees were awarded by the Institute in 2018-19.
- 843 (UG & PG) students were placed through in-campus interviews in the session 2018-19.
- More than thirty expert lectures from eminent persons from reputed national and international institutes and organisations have been organized in various departments of the Institute.
- More than thirty workshops/short-term courses/ GIAN courses/ conferences were organized by various departments of the Institute.
- The construction of a 300-seated Boy's Hostel was completed.
- NIT Kurukshetra has been an active member of Unnat Bharat Abhiyan, Swachh Bharat Abhiyaan, Ek Bharat Shrestha Bharat, Vittiya Shakshrata Abhiyaan and Digital India Abhiyaan of Government of India.
- The 16th Convocation of the Institute was successfully organized on November 16, 2018. 755 B.Tech., 332 M.Tech., 53 M.B.A., 83 M.C.A. and 63 Ph.D. degrees were awarded.

The Sixteenth Convocation

The sixteenth convocation of the Institute was held on November 16, 2018. Shri Pawan Munjal, Chairman, Managing Director & CEO of Hero Motocorp, graced the 16th Convocation 2018 as the Chief Guest and delivered the Convocation Address. Sh. Jagdish Khattar, Chairperson, Board of Governors and former Managing Director of Maruti Udyog Limited, India presided over the function. The Welcome Address and the Annual Report were presented by Dr. Satish Kumar, Director of the Institute.

1.0 INTRODUCTION

1.1 VISION

To be a role-model in technical education and research, responsive to global challenges

1.2 MISSION

To impart quality technical education that develops innovative professionals and entrepreneurs

To undertake research that generates cutting-edge technologies and futuristic knowledge, focusing on the socio-economic needs

1.3 OBJECTIVES

- To offer academic programs in different areas of engineering at Under-graduate, Post-graduate and Doctoral levels
- To impart instructions and training to empower students to meet the technological needs and socio-economic challenges and create facility and environment for the overall personality development of students
- To promote quality research and undertake research projects keeping in view of the present day to day needs of technology
- To interact with industry and other relevant sectors with a view to promote mutual interaction
- To provide consultancy and testing facilities to various government, semi-government and private organizations with a view to generate additional resources and keep in touch with latest demands of the profession
- To interact with, and provide necessary help to other engineering institutions from the state in particular
- To act as a source for fostering national integration, the student's intake being from all over the country providing this opportunity.
- To inculcate moral values

1.4 EDUCATION SYSTEM

The Education System of the Institute is divided into academic sessions comprising two semesters – Even and Odd semester. The Institute offers courses of study leading to B.Tech., M.Tech., MCA, MBA and Doctor of Philosophy degrees. The medium of instructions and examination is English. The Institute is of national importance and governed by National Institute of Technology Act of Govt. of India. The Institute is independent in every respect relating to academic work such as examinations, evaluation of the answer sheets, declaration of results and conferring of degrees. The courses include study at the Institute, visits to work sites and practical training at Institute Workshop and approved Engineering works. There is a

semester examination at the end of each semester. The Institute follows Credit Based System of evaluation.

1.5 NEW INITIATIVES

1. Academic Audit for M.Tech. programs was got done by eminent experts from premier institutions of the country like IITs and IISc. Based on the suggestions and critical input, the curricula for M.Tech. programs, to be effective from academic year 2019-20, were thoroughly revised with a focus on skill development and to incorporate more choices and flexibility and interdisciplinary approach. Now the process for the accreditation exercise of fourteen M.Tech. programs is in process.
2. The Institute has been actively participating in the TEQIP-III program, after successful completion of TEQIP-II, a World Bank assisted programme for improvement in quality of technical education and research.
3. Research projects worth rupees 1.79 crores under R&D activities and industry connect programmes have been sanctioned. About fifty sponsored research projects are being executed by the faculty members during the year under report. The Institute is also partner in the IMPRINT-II SERB-DST Project.
4. Institute has filed 27 patents in 2018, out of which 13 have been granted.
5. AEoN Centre of Excellence has been started in collaboration with AEoN Learning Pvt. Ltd., Bangalore for training of industry professionals, faculty, and students on emerging technologies. The establishment of Siemens Centre of Excellence, Atal Incubation Centre, Internet of Things, and other collaborative activities with premier industries, government agencies and alumni support are in progress. The process has been initiated to establish the Centre of Cyber Security under Atal Innovation Mission.
6. More than thirty seminars, conferences, workshops, faculty development programmes, GIAN courses were organized and the faculty members were encouraged to visit premier institutions in India and abroad for participation in conferences, training programmes etc.
7. The Institute has taken initiative to switch to energy efficient electric appliances and LED driven lighting systems resulting in significant savings in electric power consumption.

8. The various posts for the recruitment of non-teaching staff were filled up.
9. Air-conditioning of class rooms, examination halls have been completed. The process of air-conditioning of presentation halls, library reading rooms and faculty offices is in progress.
10. Sewage Treatment Plant has been operationalized and the construction of 300-seated Boy's Hostel was completed.
11. The non-academic staff members were encouraged to visit premier institutions in India for participation in training programmes.
12. The existing academic building and laboratories are being renovated.
13. Paid internship was arranged for the post-graduate students in reputed industries.
14. The CCTV camera and biometric attendance facilities in hostels are to operationalized from the academic session 2019-20.
15. Foreign research interns from Germany are received under DAAD RISE Scheme in some of the departments of the Institute.

2.0 AN OVERVIEW

2.1 HISTORICAL BACKGROUND

The Central Government in consultation with the Planning Commission had sanctioned a scheme of establishment of Regional Engineering Colleges under Third Five Year Plan in order to expand the facilities for technical education in the country during the plan period. The Regional Engineering College (REC), Kurukshetra was one of the seventeen colleges in the country.

Vide letter No. 16-4/60-T.5, dated 26th February, 1962 from Secretary to the Government of India, Ministry of Scientific Research and Cultural Affairs, New Delhi, it was established in the year 1963 as a joint and cooperative enterprise of Govt. of India and State Government of Haryana to serve the State of Haryana and rest of the country for imparting technical training to youth and for fostering national integration. Its objective was to provide instructions and research facilities in various disciplines of engineering and technology and the advancement of learning and dissemination of knowledge in each such discipline.

The first admission to five year B.Sc. (Engg.) degree course was made by the Institute in July, 1963 at Punjab Engineering College, Chandigarh and Thapar Institute of Engineering & Technology, Patiala, with an intake of 60 students at each place. This was repeated in July, 1964 also. The Institute started functioning on its present campus at Kurukshetra from year 1965-66. The REC Kurukshetra was registered under Societies Registration Act XXI of 1860 on 25th April, 1964. The students were admitted to the first year of five year integrated B.Sc.(Engg.) degree courses in Civil, Electrical and Mechanical Engineering. In 1967-68, M.Sc. (Engg.) degree courses in Civil, Electrical and Mechanical Engineering were introduced. In 1971-72, a degree course in Electronics & Communication Engineering and a Post-graduate Diploma Course in Scientific Instrumentation were started. In 1976-77, part time M.Sc. (Engg.) degree courses in Electronics & Communication Engineering and Instrumentation Engineering were also started. The first registration for the degree of Doctor of Philosophy in the Faculty of Engineering and Technology was done in July, 1967.

The Institute switched over to four-year B.Tech. Degree course with effect from 1985-86. The Course has since been designated as Bachelor of Technology (B.Tech.). The M. Sc. (Engg.) degree in various disciplines has since been renamed as M.Tech. degree with effect from the session 1983-84. In 1987-88, B.Tech. degree course in Computer Engineering and M.Tech. degree Course in Electronics Engineering were started. In 1989-90, M.Tech. degree course in Water Resources Engineering was started in the Department of Civil Engineering. A special two semesters M.Tech. degree course in Instrumentation for candidates holding P.G. Diploma in Scientific Instrumentation was introduced from January, 1988.

Three-year Special Degree Course, 'Bachelor of Engineering' for in-service diploma holders was introduced from the session 1982-83 in Civil, Electrical and Mechanical Engineering. This course was fully funded by Govt. of Haryana. The Govt. of Haryana has discontinued the course w.e.f. 2001-02.

During the period 1963 to 2001, there have been considerable achievements in the academic as well as development areas. The Govt. of India, Ministry of Human Resource Development, New Delhi has upgraded REC Kurukshetra to National Institute of Technology, Kurukshetra with the status of "Deemed to be University" w.e.f. 26.6.2002 vide letter No. F.9-10/2002-U.3 dated 26.6.2002. The NIT Kurukshetra was also registered under the Societies Registration Act XXI of 1860 on 9th April, 2003. The new Memorandum of Association (MOA) was formulated under the guidance of the Ministry of Human Resource Development (MHRD).

As per establishment of REC, Kurukshetra, the entire Non-plan expenditure on Undergraduate Courses was borne by the Central and State Government on 50:50 basis. This practice remained intact upto 31.3.2003. Consequent upon conversion of REC to NIT, the Government of India had taken over full administrative and financial control and the Central Government started bearing the expenditure on Undergraduate Courses on 100% basis. However, it is also mentioned here that since the inception of the Institute the expenditure on PG Courses was borne by the Central Government.

Further, in pursuance to the Notification published in Gazette of India Extraordinary Part-II, Section-3, Sub-Section(ii), dated 10th August 2007 and the MHRD letter No. F-20-22/2004-TS-III, dated 24/27 August 2007, the National Institute of Technology Act, 2007 (29 of 2007) has been enforced with effect from 15th August 2007 and the NIT Kurukshetra has become the Central Institution under this Act and declared as an "Institution of National Importance"

The Director, Government of India, Ministry of Human Resource Development, Deptt. of Higher Education vide letter no. F.22-5/2006-TS.III (Pt.) dated 11.5.2009 forwarded a copy of notification published in Gazette of India Extraordinary Part-, Section-3, Sub-Section- (i) dated 23rd April, 2009 regarding the first Statutes under NIT Act, 2007 for information and necessary action.

2.2 LOCATION

Kurukshetra, steeped in history and mythology, is a place of great spiritual significance where Lord Krishna delivered the divine message of "Shrimad Bhagwad Gita". The place from where knowledge spread far and wide was chosen as his capital by King Harshwardhana. It is one of the premier centres of pilgrimage attracting devotees in a steady stream all-round the year. Kurukshetra is a railway junction on Delhi-Karnal-Ambala section of Northern Railway. It is about 160 Km from Delhi. The Institute campus is about 10 Km from Pipli, a well-known road junction on NH-44. The nearest international airport is at Mohali / Chandigarh, about 100 km from the Institute via NH-44. The City has quite a few tourist spots nearby. The climate is a local steppe.

2.3 CAMPUS

The Institute campus, spreading over an area of 300 acres, is imaginatively laid down on a picturesque landscape. It presents a spectacle of harmony in architecture and natural beauty. The campus has been organised into three functional sectors:

- (i) Hostels for the students
- (ii) Academic Area
- (iii) Residential sector for the staff

Hostels for students are located towards Eastern side of the campus in the form of cluster. Multi-storey buildings of hostels provide comfortable accommodation and pleasing environment to students. Residential sector for staff is located towards Western side. Academic area is located between the two residential sectors in order to reduce walking distance. A full-fledged health centre manned by qualified doctors, a Post Office and a branch of the State Bank of India are located at convenient points on the Campus.

2.4 ADMINISTRATION

NIT Kurukshetra is an autonomous institution under the Government of India since July 2003. As per MOA, the Institute is headed by a Director and administered by a Board of Governors. It also has Finance Committee, Building Works Committee and Senate. In the Board, there are representatives from the Government of India, the Government of Haryana, industries, other institutions and the faculty. Director is the Principal Academic and Executive Officer of the Institute. He is assisted in his day-to-day work by Deans, Registrar, Heads of the different Departments, Professor-in-Charges and other Officers and various committees of the Institute.

2.5 ACADEMIC PROGRAMMES

The National Institute of Technology Kurukshetra is an Institute of National Importance with a reputation of cutting across international boundaries. The following academic programme was observed during the academic session 2018-19:-

ODD SEMESTER

1.	Registration (on prescribed proforma in person only) Except for 1 st semester of UG/PG/Ph.D.	24.7.2018 to 6.8.2018 (without late fee) 7.8.2018 to 10.8.2018 (with late fee of Rs. 500/-) No Registration after 10.8.2018. Unregistered students will not be allowed to attend the classes.
2.	Commencement of classes	26.7.2018
3.	Mid-Semester Exam-I	10.9.2018 to 12.9.2018
4.	Mid-Semester Break	8.10.2018 to 12.10.2018
5.	Techspardha	26.10.2018 to 28.10.2018
6.	Mid-Semester Exam-II	31.10.2018 to 2.11.2018
7.	Annual Convocation	In first fortnight of November, 2018. 13.11.2018 (Tentative)
8.	Teaching Closes	16.11.2018
9.	Practical Examination begins	20.11.2018
10.	End semester exam. begins	29.11.2018
11.	End semester exam. concludes	Upto 17.12.2018
12.	Winter Vacation	10.12.2018 to 21.12.2018
13.	Registration (Even Semester 2018-19)	26.12.2018 to 8.1.2019 (without late fee) 9.1.2019 to 12.1.2019 (with late fee of Rs. 500/-) No Registration after 12.1.2019. Unregistered students will not be allowed to attend the classes.
14.	Commencement of classes (Even semester 2018-19)	27.12.2018

EVEN SEMESTER

1.	Registration (on prescribed proforma in person only)	26.12.2018 to 8.1.2019 (without late fee) 9.1.2019 to 12.1.2019 (with late fee of Rs. 500/-) No Registration after 12.1.2019. Unregistered students will not be allowed to attend the classes.
2.	Commencement of classes	27.12.2018
3.	Annual Athletic Meet	18.1.2019 to 20.1.2019
4.	Mid-Class Exam-I	6.2.2019 to 8.2.2019
5.	Confluence 18	14.2.2019 to 16.2.2019
6.	Mid-Semester Break	18.2.2019 to 22.2.2019
7.	Mid-Semester Exam-II	1.4.2019 to 3.4.2019
8.	Teaching Closes	19.4.2019
9.	Practical Examination begins	23.4.2019
10.	End semester exam. begins	3.5.2019
11.	End semester exam. concludes	Upto 24.5.2019
12.	Thesis submission (M.Tech.4 th sem.)	Upto 1.7.2019 (due to Sunday on 30.6.2019)
13.	Summer Vacation	3.6.2019 to 19.7.2019
14.	Registration (Odd Semester 2019-20) Except for 1 st semester of UG/PG/Ph.D.	23.7.2019 to 5.8.2019 (without late fee) 6.8.2019 to 9.8.2019 (with late fee of Rs. 500/-) No Registration after 9.8.2019. Unregistered students will not be allowed to attend the classes.
15.	Commencement of classes (Odd)	25.7.2019 (for 2019 batch, from date of admission if

Semester 2019-20)	admissions are after 25.7.2019).
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2.6 COURSES OFFERED

The Institute offers following Graduate and Post Graduate Degree Courses of study: -

Sr. No.	Course	Numbers of Programmes	Graduate/ Post Graduate	Duration of the Course	Total Intake
1.	M.Tech.	22	Post Graduate	2 years	568
2.	MBA	01	-do-	2 years	60
3.	MCA	01	-do-	3 years	90
4.	B.Tech.	07	Graduate	4 years	862

Facilities are also available in the Institute for research leading to Degree of Doctor of Philosophy in various disciplines of Engineering and Technology of NIT, Kurukshetra.

2.7 ADMISSION PROCEDURE

In the Undergraduate courses – B.Tech. Degree Courses, admissions are made on the basis of JEE (Main) conducted by Central Board of Secondary Education (CBSE) on behalf of the Govt. of India.

Admission to M. Tech. degree courses are made on the basis of candidate's score in the GATE examination. Seats are first filled by admitting GATE qualified candidates and then by industry sponsored candidates. GATE candidates are eligible for a scholarship of Rs. 12400/- per month.

Admission for the course of MBA is done through stringent screening process using CAT, GMAT, JMAT and MAT scores followed by group discussion and personal interview. Admission for MCA course is done on the basis of written test through NIMCET.

2.8 STUDENTS

There were 4,809 students in all Undergraduate, Postgraduate & Ph.D. courses in the Institute as on 31.3.2019.

2.9 EXAMINATION & EVALUATION

2.9.1 Examination

As per scheme of the examination, Institute is organizing examination in two parts – Theory and Practical. The medium of examination is English. The

students are required to fill up their Examination Forms along with examination fees. Examinations are held at the end of every semester.

2.9.2 Evaluation

The Evaluation System for 4-year (8 semesters) B.Tech. Degree Course at this Institute for the batches prior to 2003 is being followed in terms of marks as it was followed by Kurukshetra University, Kurukshetra to which this Institute was affiliated before switching over from REC to NIT (Deemed University) status. In all 8 semesters, marks were awarded out of 5600 scaled marks. The same is as under:-

Marks Obtained	Division/Result
60% and above	1 st Division
50% and above but less than 60%	2 nd Division
40% and above but less than 50%	Pass Class

Further, from the batch admitted in year 2003, Institute has switched over to Credit Based System of evaluation for all degree programmes which is as under:-

A letter grade in each course taken during the semester is being awarded on the basis of performance of a student in class work, sessionals and end semester exams held at the end of each Semester. Letter grade has a grade point for the purpose of computing the Cumulative Grade Point Average (CGPA) i.e. $CGPA = C1 \times G1 / Ce$ (C1 indicates credits assigned to the course, G1 indicates grade point equivalent to the letter grade obtained and Ce indicates total number of credits). The letter grades and their grade point value are given below:-

Letter Grade	Performance	Grade Point
A+	Excellent	10
A	Very Good	09
B	Good	08
C	Average	06
D	Pass	04
F	Repeat	00

The Percentage of marks of a student can be calculated by multiplying the CGPA of a student by 9.00. The above system is also being used for other Graduate and Post Graduate Courses.

2.10 PLACEMENT

During academic year 2018-19, various reputed organizations including Microsoft, Goldman Sachs, Amazon, fidelity Investments, Adobe, Royal Bank of Scotland, IOCL, GAIL, EIL, C-Dot, IRCON, SAP Labs, Lowes and many more visited NIT Kurukshetra for the placement drive. A total number of 271 companies have expressed their interest for conducting placement drive in NIT Kurukshetra. Out of the 610 eligible UG students, 649 got offers in various organisations with an average compensation of Rs. 8.24 LPA. Pertinent to mention that the highest CTC offered was Rs. 40.62 LPA in this academic year. Out of the 327 eligible PG students, 144 got offers in various organisations with an average compensation of Rs. 4.75 LPA. The highest CTC offered to our PG students was Rs. 15 LPA in this academic year.

The status of recruitment/campus placement for the year in considerations is as under:

Recruitment Visits

Discipline	No. of Offers	No. of students who got jobs
UG		
Computer Engg.	112	91
Information Technology	103	81
Electronics & Comm. Engg.	132	100
Mechanical Engg.	111	89
Electrical Engg.	91	85
Civil Engg.	57	55
Production & Industrial Engg.	43	31
PG		
M.Tech.	86	81
MCA	47	47
MBA	11	11

2.11 GAMES AND SPORTS

The Engineering Curriculum demands dedicated and sustained efforts from every student. As a result, students remain busy with studies throughout the year. Nevertheless, realizing the importance of sports and games in the overall development of the students, sport facilities are provided to students to the maximum possible extent. The Institute lays adequate emphasis on students' participation in various outdoor and indoor games and track and field Sports. All sports and games activities are directed by a Sports Committee comprising students, faculty members and Sports personnel. The Committee is responsible for laying down the policies and programmes for sports and games.

A senior faculty member designated as Professor Incharge (Physical Education) co-ordinates the activities. Students who distinguish themselves by their outstanding performance in sports are eligible for a number of awards like Best Athlete Trophy, Best Sports Man of the Year Trophy and Best Debutant Performer etc.

2.12 STAFF POSITION AS ON 31.3.2019

The Staff position (both teaching and non-teaching) as on 31st march, 2019 of the Institute is tabulated as under:

Sr. No.	Cadre	Sanctioned	In Position	Vacant
Teaching				
1.	Professor	298	166	132
2.	Associate Professor			
3.	Assistant Professor			
Sub Total (A)		298	166	132
Non-Teaching				
1	Registrar	01	-	01
2	Dy. Registrar	03	03	-
3	Asstt. Registrar	04	03	01
4	Librarian	01	-	01
5	Asstt. Librarian	01	01	-
6	Sr. SAS Officer	01	-	01
7	SAS Officer	02	02	-
8	Sr. Medical Officer	01	01	-
9	Medical Officer	03	02	01
10	Security Officer	01	01	-
11	Pr. Technical Officer	01	01	-
12	Sr. Technical Officer	04	02	02
13	Technical Officer	06	03	03
14	Executive Engineer	01	-	01
Sub Total (B)		30	19	11
1	Technician	33	10 (01 Lab. Asstt.)	23
2	Sr. Technician	24	07	17
3	Technician SG-II	15	01	14
4	Work Assistant SG II	-	06	(-)06
5	Technician SG-I	09	10	(-)01
6	Lib. Assistant	03	02	01
7	Sr. Lib. Assistant	03	-	03
8	Lib. Assistant SG II	02	01	01
9	Lib. Assistant SG I	-	02	(-)02
Total		89	39	50

1	Tech. Assistant	29	-	29
2	Sr. Tech. Asstt.	22	10 (01 Lab. Tech.)	12
3	Tech. Asstt. SG-II	14	06 (01 Pharmacist, 01 Staff Nurse)	08
4	Tech. Asstt. SG-I	07	03 (01 Pharmacist)	04
5	Lib & Info. Assistant	02	-	02
6	Sr. Lib & Info. Asstt.	02	-	02
7	Lib & Info. Asstt. SGII	01	-	01
8	Lib & Info. Asstt SGI	01	-	01
9	Junior Engineer	04	02	02
10	Asstt. Engineer	02	-	02
11	Asstt. Engr. SG II (Civil)	01	01	-
12	SAS Assistant	01	-	01
13	Sr. SAS Assistant	01	-	01
14	SAS Assistant SG II	01	-	01
15	SAS Assistant SG I	01	-	01
Total		89	22	67
Sub Total (C) (Lower + Higher)		178	61	117
1	Junior Assistant	16	07	09
2	Steno	04	-	04
3	Sr. Assistant	12	03	09
4	Sr. Steno	03	-	03
5	Assistant SG II	08	03	05
6	Steno SG II	02	02	-
7	Assistant SG I	05	07	(-)02
8	Steno SG I	01	-	01
Total		51	22	29
1	Superintendent	03	-	03
2	Accountant	04	-	04
3	Secretary	03	-	03
4	Sr. Superintendent	03	05	(-)02
5	Sr. Accountant	02	01	01
6	Sr. Secretary	02	01	01
7	Superintendent SG II	02	01	01
8	Accountant SG II	01	01	-
9	Secretary SG II	01	03	(-)02
10	Superintendent SG I	01	-	01
11	Accountant SG I	01	-	01
12	Secretary SG I	01	-	01
Total		24	12	12
Sub Total (D) (Lower + Higher)		75	34	41

1	Attendant/ Security Guard/Mali/Caretaker	18	21	(-)03
2	Sr. Attendant/ Security Guard/Mali/ Caretaker	14	15	(-)01
3	Attendant/ Security Guard/Mali/ Caretaker SG-II	09	08	01
4	Attendant/ Security Guard/Mali/ Caretaker SG-I	04	02	(-)02
Sub Total (E)		45	46	(-)01
Grand Total (A+B+C+D+E)		626	326	300

Brief Summary of Faculty & Non-Faculty Position as on 31.03.2019

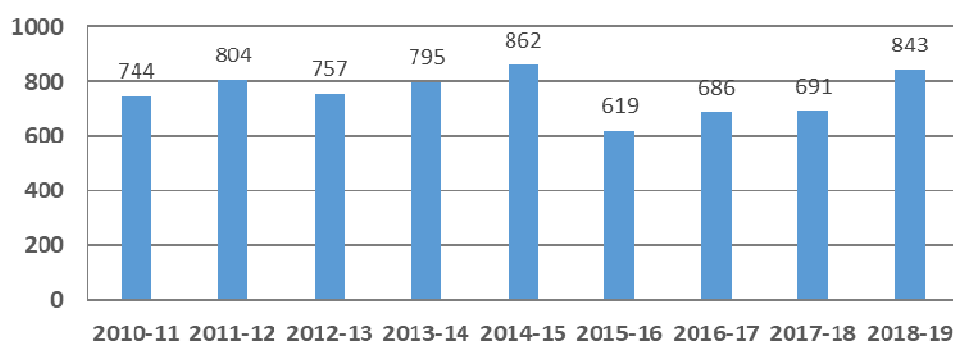
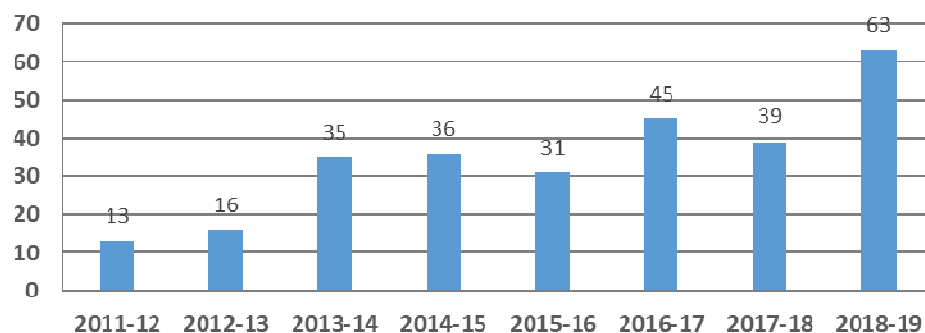
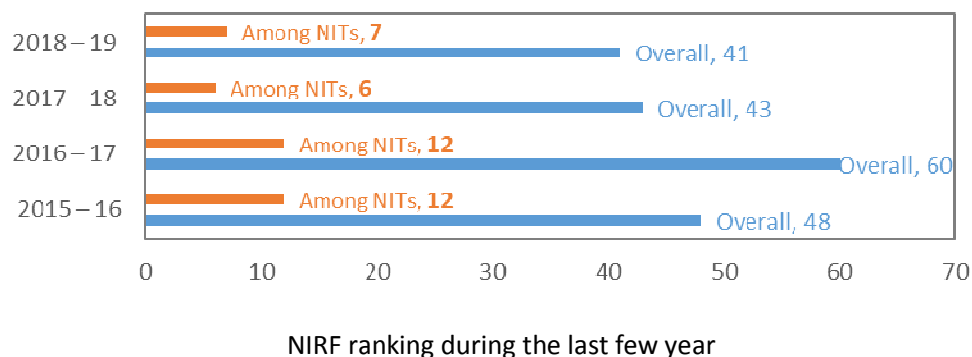
Sr. No.	Cadre	Sanctioned	In Position	Vacant
1.	Professor	298	166	132
2.	Associate Professor			
3.	Assistant Professor			
Sub Total (A)		298	166	132
1.	Officer	30	19	11
2.	Technical Staff	178	61	117
3.	Administrative Staff	75	34	41
4.	Supporting Staff	45	46	(-)01
Sub Total (B)		328	160	168
Grand Total (A+B)		626	326	300

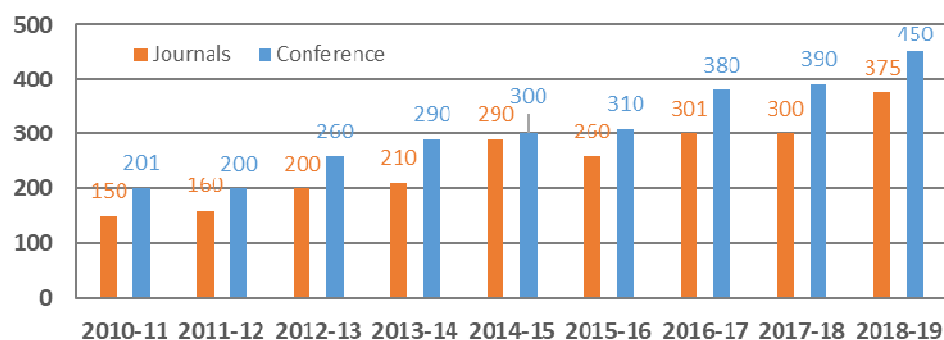
2.13 NOTABLE ACHIEVEMENTS

1. The Institute has been conferred the status of Deemed University by the Government of India w.e.f. 26.6.2002. Consequent upon upgradation of REC Kurukshetra to National Institute of Technology, Kurukshetra with Deemed University status w.e.f. 26.6.2002, the Institute is independent in every respect relating to academic work such as Exams, Evaluation of Answer-sheets, declaration of results and other allied matters.
2. The Central Government has taken over full Administrative and Financial control of this Institute w.e.f. 14.5.2003. The Plan and Non-Plan expenditures of this Institute are being borne entirely by the Central Government from financial year 2003-04.
3. National Institute of Technology Act, 2007 was enacted by the Parliament of India on 5th June, 2007 and became effective on 15th August, 2007 i.e.

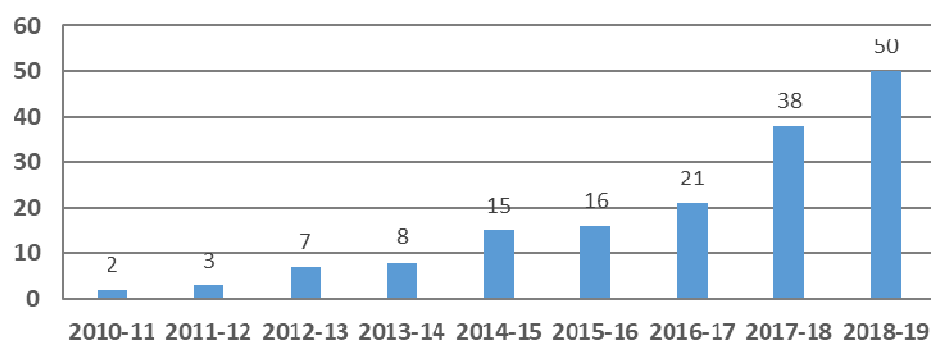
- Independence Day. This Act declares NIT, Kurukshetra Institution of National Importance.
4. The Technical Education Quality Improvement Programme (TEQIP), funded by World Bank, aims to upscale the on going initiatives of GOI to enhance efficiency and dynamism in technical education. It was launched by MHRD as a Rs. 1550 crore programme during the 10th Plan. Haryana is one of the six states which was selected to participate in the first cycle of the first phase of the programme, based on their commitment and preparedness for the project. The agreements were signed in February 2003 between GOI, six participating states and the World Bank.
 5. The Institute has been selected under TEQIP-III with focus on twinning system, involving Govt. Engineering College, Bikaner as the mentee institute.
 6. Following are the Objectives of Technical Education Quality Improvement Programme:
 - Improving undergraduate teaching learning process
 - Increasing facilities for undergraduate education
 - Increasing efficiency and effectiveness of the education process through better academic discipline and improved governance
 - Improving post-graduate and research programmes
 - Improving Sponsored Research and Consultancy activities
 - Starting new PG programmes
 7. New Ph.D. Viswadeshvarya Scheme was launched.
 8. The visit of NBA team for the accreditation exercise of 06 B.Tech. programs has concluded during December 15-17, 2018.
 9. The faculty members of the Institute have published 375 research papers in peer-reviewed journals, and also published 450 papers in proceedings of national and international conferences in 2018-19.
 10. Fifty sponsored research projects are being executed by the faculty members during the year under report.
 11. Sixty-three PhD degrees were awarded by the Institute in 2018-19.
 12. The Institute participated in NIRF ranking. NIT Kurukshetra improved to 7th position from 12th position among 31 NITs in the country.
 13. A one week GIAN course on “Electrochemical Energy Conversion and Storage” was organized in the Institute.
 14. The following Construction works were finished during the year 2018-19:
 - Construction of 300 Seaters Multi-purpose boys hostel including 100 suits for foreign students, research scholars and married PG Students. (Multi-storeyed framed structure). (Ground Floor +5).
 - Providing Kitchen equipment in 600 seater Girls Hostel (multi- storeyed) RCC framed structure (Ground +5) at NIT, Kurukshetra
 15. AEoN Centre of Excellence has been started in collaboration with AEoN Learning Pvt. Ltd., Bangalore for training of industry professionals, faculty, and students on emerging technologies. The establishment of Siemens Centre of Excellence, Atal Incubation Centre, Internet of Things, and other collaborative activities with premier industries, government agencies and alumni support are

in progress. The process has been initiated to establish the Centre of Cyber Security under Atal Innovation Mission.

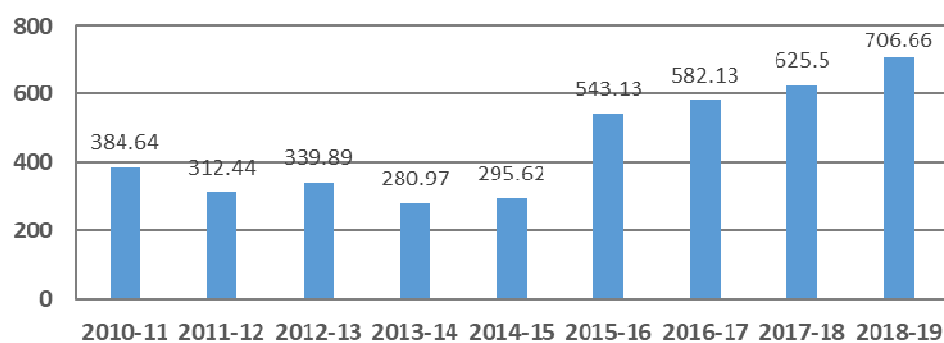




Publications in peer-reviewed journals during the last few years



Number of sponsored research projects during the last few years



Receipts (in lacs) from consultancy assignments during the last few years



Lamp lighting: 16th Convocation



Conferment of Doctorate (Honoris Causa) to Sh. Pawan Munjhal, a distinguished alumnus of NIT Kurukshetra



72nd Independence Day celebrations



Inauguration of 1 MW Roof-top solar power plant



Confluence'19: The annual cultural festival



Celebrations of National Unity Day



Inauguration of 1 MLD Sewerage Treatment Plant



Inauguration of one week GIAN Course



Celebrations of International Day of Yoga



Cleanliness drive under Unnat Bharat Abhiyan



Annual Sports meet



Visit of TEQIP-III Mentor Dr. KBVN Phanindra, Professor, IIT Hyderabad



NIT Alumni meet

3.0 STAFF

3.1 ACADEMIC STAFF (TEACHING)

The Institute has highly qualified, dedicated and well trained faculty of National and International repute of proven capabilities. More than 85% of faculty possesses Ph.D degree in various disciplines.

Director (Head of the Institution)

Dr. Satish Kumar

Dean (Planning & Development)

Dr. A. Swarup

Dean (Academic)

Dr. K. S. Sandhu

Dean (Faculty Welfare)

Dr. Arun Goel

Dean (Students' Welfare)

Dr. Rajinder Kumar

Dean (Research & Consultancy)

Dr. Brahamjit Singh

Dean (Industry & International Relations)

Dr. Pankaj Chandna

Prof.-in-Charge (Estate & Construction)

Dr. S. M. Gupta

ADMINISTRATIVE OFFICERS

Registrar Incharge

Dr. Surinder Deswal

Deputy Registrar (GA & Legal)

Sh. Gyana Ranjan Samantaray

Deputy Registrar (Accounts)

Sh. S.K. Sharma

Deputy Registrar (Academic)

Sh. Pankaj Kumar Bayati

Principal Technical Officer

Sh. Lalit Mehra

Senior Medical Officer

Dr. (Ms.) Minati Raut

Medical Officers

Dr. Sumit Kumar Guin

Dr. Rishab Saxena

Assistant Registrars

Sh. Rajeev Saini

Sh. Mohd. Afroz

Sh. Ramesh

Assistant Librarian

Sh. Manish Garg

OTHERS

Chief Warden (Boys)

Sh. R. P. Chauhan

Chief Warden (Girls)

Dr. (Mrs.) Lillie Dewan

Deputy Chief Warden

Dr. J. K. Kapoor

Dr. Arvind Kumar

Prof. Incharge (Academic)

Dr. Gian Bhushan

Prof. Incharge (Exam.)

Dr. A.S.V. Ravi Kanth

Chief Vigilance Officer

Dr. A.K. Singh

Prof.-in-Charge (Physical Education)

Dr. D.P. Singh

Prof.-in-Charge (Students Club)

Dr. Jyoti Ohri

Prof.-in-Charge (Public Relations)

Dr. P. C. Tewari

Students Activities & Sports Officer

Sh. Shahabuddin

Ms. Pallavi Rai

Public Information Officer Under RTI Act-2005

Sh. Gyana Ranjan Samantaray, DR (GA & Legal)

DEPARTMENTS**DEPARTMENT OF CIVIL ENGINEERING****Head of Department**

Dr. S.N. Sachdeva

Professors

Dr. V.K. Arora	Ph.D. (IIT, Delhi)
Dr. D.K. Soni	Ph.D. (Kurukshetra University)
Dr. Baldev Setia	Ph.D. (IIT, Kanpur)
Dr. S.K. Madan	Ph.D. (Kurukshetra University)
Dr. H.K. Sharma	Ph.D. (NIT, Kurukshetra)
Dr. S.N. Sachdeva	Ph.D. (Kurukshetra University)
Dr. K.K. Singh	Ph.D. (Kurukshetra University)
Dr. Subodh Ranjan	Ph.D. (Kurukshetra University)
Dr. Anupam Mittal	Ph.D. (Kurukshetra University)
Dr. S.M. Gupta	Ph.D. (Kurukshetra University)
Dr. Arun Goel	Ph.D. (Kurukshetra University)
Dr. S.K. Patidar	Ph.D. (IIT, Kanpur)
Dr. Ashwani Jain	Ph.D. (Kurukshetra University)
Dr. Mahesh Pal	Ph.D. (University Nohingham)
Dr. Surinder Deswal	Ph.D. (Kurukshetra University)
Dr. V.P. Singh	Ph.D. (Kurukshetra University)
Dr. Saraswati Setia	Ph.D. (NIT, Kurukshetra)
Dr. Paratibha Aggarwal	Ph.D. (NIT, Kurukshetra)
Dr. Parveen Aggarwal	Ph.D. (IIT, Delhi)

Associate Professors

Dr. N.K. Tiwari	Ph.D. (Kurukshetra University)
Dr. Babita Saini	Ph.D. (Kurukshetra University)

Assistant Professors

Dr. Yogesh Aggarwal	Ph.D. (NIT, Kurukshetra)
Dr. Chalak Hanuman Devidas	Ph.D. (IIT, Roorkee)
Sh. Ajay Krishan Prabhakar	M.Tech.

**DEPARTMENT OF COMPUTER ENGINEERING
& INFORMATION TECHNOLOGY****Head of Department**

Dr. Mayank Dave

Professors

Dr. A.K. Singh	Ph.D. (Jadavpur University, Kolkata)
Dr. Mayank Dave	Ph.D. (IIT, Roorkee)
Dr. J.K. Chhabra	Ph.D. (GGSIPU, Delhi)
Dr. S.K. Jain	Ph.D. (MNIT, Allahabad)

Associate Professors

Dr. R.K. Aggarwal	Ph.D. (NIT, Kurukshetra)
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Assistant Professors

Ms. Priyanka Ahlawat	M.Tech. (GJU, Hisar)
Sh. Mohit Dua	M.Tech. (NIT, Kurukshetra)
Dr. (Ms.) Ritu Garg	Ph.D (NIT, Kurukshetra)
Dr. Virender Ranga	Ph.D (NIT, Kurukshetra)
Dr. Brij Bhooshan Gupta	Ph.D. (IIT, Roorkee)
Dr. Mantosh Biswas	Ph.D. (ISM, Dhanbad)
Sh. Vikram Singh	M.Tech. (JNU, Delhi)
Dr. Gyanendra Kumar Verma	Ph.D (IIT, Allahabad)
Sh. Mahendra Kumar Murmu	M.Tech. (ISM, Dhanbad)
Sh. Santosh Kumar	M.Tech. (NIT, Jalandhar)
Ms. Bharti Sinha	M.Tech. (NIT, Rourkela)
Sh. Anoop Kumar Patel	M.Tech. (NIT, Allahabad)
Sh. Kriti Bhushan	M.Tech. (NIT, Rourkela)
Sh. Ankit Kumar Jain	M.Tech. (IIIT Allahabad)
Sh. Chandra Bhim Bhan Singh	M.Tech. (IIIT Allahabad)
Sh. Vijay Verma	M.Tech. (IIT Roorkee)

DEPARTMENT OF ELECTRICAL ENGINEERING**Head of Department**

Dr.(Ms.) Ratna Dahiya

Professors

Dr. A. Swarup	Ph.D. (IIT, Delhi)
Dr. K.S.Sandhu	Ph.D. (Kurukshetra University)
Dr. (Ms.) Lillie Dewan	Ph.D. (Kurukshetra University)
Dr. R.S. Bhatia	Ph.D. (Kurukshetra University)
Dr. G.L. Pahuja	Ph.D. (Kurukshetra University)
Dr.(Ms.) Ratna Dahiya	Ph.D. (Kurukshetra University)
Dr. L.M. Saini	Ph.D. (Kurukshetra University)
Dr. Ashwani Kumar	Ph.D. (IIT, Kanpur)
Dr. (Ms.) Jyoti Ohri	Ph.D. (NIT, Kurukshetra)
Dr. J.S. Lather	Ph.D. (Kurukshetra University)
Dr. Sathans	Ph.D. (NIT, Kurukshetra)
Dr. Yash Pal	Ph.D. (NIT, Kurukshetra)

Associate Professors

Ms. Sunita Chauhan	M.Tech. (Kurukshetra University)
Ms. Rupanshi Batra	M.Tech. (Kurukshetra University)
Dr. (Ms) Monika Mittal	Ph.D. (NIT, Kurukshetra)
Sh. K.K. Sharma	M.Tech. (IIT, BHU)
Dr. Saurabh Chanana	Ph.D. (NIT, Kurukshetra)
Dr. (Ms) Shelly Vadhera	Ph.D. (NIT, Kurukshetra)

Assistant Professors

Dr. A.K. Dahiya	Ph.D. (NIT, Kurukshetra)
Dr. Bhanu Pratap	Ph.D. (MNNIT, Allahabad)
Dr. Atma Ram Gupta	Ph.D.
Dr. Modi Pandu Ranga Prasad	Ph.D.
Dr. Aeidapu Mahesh	Ph.D.
Dr. Sandeep Kakran	Ph.D.
Dr. Rahul Sharma	Ph.D.
Dr. Shashi Bhushan Singh	Ph.D.
Dr. Pradeep Kumar	Ph.D.
Sh. Kiran Kumar Jaladi	M.Tech. (College of Engg., Pune)
Dr. Shivam	Ph.D.
Dr. Amit Kumar	Ph.D.

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGG.

Head of Department

Dr. Vikas Mittal

Professors

Dr. Brahmjit Singh	Ph.D. (GGSIPU, Delhi)
Dr. R.K. Sharma	Ph.D. (Kurukshetra University)
Dr. O.P. Sahu	Ph.D. (Kurukshetra University)
Dr. Umesh Ghanekar	Ph.D. (NIT, Kurukshetra)
Dr. Rajoo Pandey	Ph.D. (IIT, Roorkee)

Associate Professors

Dr. Mohd. Arif	Ph.D. (IIT, Roorkee)
Dr. Neeraj Pratap Singh	Ph.D. (NIT, Kurukshetra)
Dr. (Ms.) Vrinda Gupta	Ph.D. (NIT, Kurukshetra)
Dr. Vikas Mittal	Ph.D. (NIT, Kurukshetra)

Assistant Professors

Sh. Karan Sharma	B.E. (TIET, Patiala)
Sh. Sandeep Santosh	M.Tech. (NIT, Kurukshetra)
Dr. Arvind Sharma	Ph.D.
Dr. Rajender Kumar	Ph.D (NIT, Kurukshetra)
Dr. (Ms.) Poonam Jindal	Ph.D (NIT, Kurukshetra)
Dr. Sudhanshu Choudhary	Ph.D. (IIT, Kanpur)
Dr. Gaurav Verma	Ph.D.
Dr. Pankaj Verma	Ph.D.
Dr. Gaurav Saini	Ph.D (NIT, Kurukshetra)
Dr. Trailokya Nath Sasamal	Ph.D.
Ms. Shweta Meena	M.Tech. (JNTU, Hyderabad)
Sh. Chhagan	M.Tech. (DTU, Delhi)
Dr. Ashutosh Nandi	Ph.D
Dr. Sudakar Singh Chauhan	Ph.D

DEPARTMENT OF MECHANICAL ENGINEERING & PRODUCTION & INDUSTRIAL ENGINEERING

Head of Department

Dr. Dinesh Khanduja

Professors

Dr. Dixit Garg	Ph.D. (Kurukshetra University)
Dr. Surjit Angra	Ph.D. (Kurukshetra University)
Dr. Dinesh Khanduja	Ph.D. (Kurukshetra University)

Dr. P.C. Tiwari	Ph.D. (Kurukshetra University)
Dr. Hari Singh	Ph.D. (Kurukshetra University)
Dr. Pankaj Chandna	Ph.D. (Kurukshetra University)
Dr. V.K. Bajpai	Ph.D. (Kurukshetra University)
Dr. Gian Bhushan	Ph.D. (Kurukshetra University)
Dr. Ajai Jain	Ph.D. (Kurukshetra University)

Associate Professors

Dr. Vinod Kumar	Ph.D. (Kurukshetra University)
Dr.(Ms.) Meenu	Ph.D. (Kurukshetra University)
Dr. Sandeep Singhal	Ph.D. (NIT, Kurukshetra)
Sh. Jaideep Gupta	M.Tech. (Kurukshetra University)
Dr. P.K. Saini	Ph.D. (NIT, Kurukshetra)
Dr. Punit Kumar	Ph.D. (IIT, Roorkee)
Sh. Rajiv Verma	M.Tech. (University of Roorkee)
Dr. N.K. Singh	Ph.D. (IIT, Kanpur)
Sh. M.K. Gupta	M.Tech. (University of Roorkee)

Assistant Professors

Dr. Avadesh Yadav	Ph.D. (NIT, Kurukshetra)
Dr. Jatinder Kumar	Ph.D. (Punjabi Univ., Patiala)
Dr. Gulshan Sachdeva	Ph.D. (NIT, Kurukshetra)
Dr. Rajneesh	Ph.D.
Dr. Satnam Singh	Ph.D.
Sh. Mukesh	M.Tech. (NIT, Jamshedpur)
Dr. Joy Parkash Mishra	Ph.D. (IIT, Roorkee)
Dr. Lalit Thakur	Ph.D.
Dr. Vikas Kumar	Ph.D.
Dr. Rajesh Kumar	Ph.D.
Sh. VS Nagendra Reddy B	M.Tech. (IIT, Kanpur)
Dr. Chandrashekara M	Ph.D.

DEPARTMENT OF PHYSICS

Head of the Department

Dr. R.P. Chauhan

Professors

Dr. Ashavani Kumar	Ph.D. (Aligarh Muslim University)
Dr. (Ms) Neena Jaggi	Ph.D. (Kurukshetra University)

Associate Professor

Dr. R.P. Chauhan	Ph.D. (Kurukshetra University)
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Assistant Professor

Dr. Anurag Gaur	Ph.D. (IIT, Roorkee)
Dr. Ashok Kumar	Ph.D. (IIT, Kanpur)
Dr. C.R. Mariappan	Ph.D. (Pondicherry University)
Dr. Y. Dwivedi	Ph.D. (Banaras Hindu University)
Dr. Awnish Kumar Tripathi	Ph.D. (IIT, Kanpur)
Dr. Parkash Chand	Ph.D. (NIT Kurukshetra)

DEPARTMENT OF CHEMISTRY**Head of Department**

Dr. (Ms.) Minati Baral

Professor

Dr. (Ms.) Minati Baral	Ph.D. (Sambalpur University)
Dr. Dinesh Kumar	Ph.D. (Kurukshetra University)
Dr. D.P. Singh	Ph.D. (Meerut University)

Associate Professor

Dr. J.K. Kapoor	Ph.D. (Kurukshetra University)
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Assistant Professor

Dr. Chetti Prabhakar	Ph.D. (IICT, Hyderabad)
Dr. Ram Kumar Tittal	Ph.D. (IIT, Delhi)
Dr. Amilan Jose Devadoss	Ph.D. (Bhavnagar University)
Dr. Ghule Vikas Dasharath	Ph.D. (University of Hyderabad)
Dr. M. Senthil Kumar	Ph.D. (IIT, Delhi)
Dr. Avijit Kumar Paul	Ph.D. (IISc, Bangalore)

DEPARTMENT OF HUMANITIES & SOCIAL SCIENCE**Head of Department**

Dr. Vikas Chaudhary

Professor

Dr. Vikas Chaudhary
Dr.(Ms.) Kiran Mor

Ph.D. (CCS University, Meerut)
Ph.D. (Kurukshetra University)

Assistant Professors

Dr. Ashwani
Dr. Geeta Sachdeva
Dr. Shabnam
Dr. Shahida

Ph.D. (GJU of Sci. & Tech. Hisar)
Ph.D. (Kurukshetra University)
Ph.D. (GND Univ. Punjab)
Ph.D. (NIT, Rourkela)

DEPARTMENT OF MATHEMATICS

Head of Department

Dr. Paras Ram

Professor

Dr. Paras Ram

Ph.D. (Kurukshetra University)

Associate Professor

Dr. A S V Ravi Kanth

Ph.D. (NIT, Warangal)

Assistant Professor

Dr.(Ms.) Saraswati Yadav
Dr. Amit Prakash
Dr. Naveen Kumar
Dr. Smita Sonker

Ph.D. (Univ. of Lucknow, Lucknow)
Ph.D. (Gorakhpur Univ., Gorakhpur)
Ph.D. (IIT, Roorkee)
Ph.D. (IIT, Roorkee)

DEPARTMENT OF BUSINESS ADMINISTRATION

Head of Department

Dr. Neeraj Kaushik

Professor

Dr. Rajender Kumar

Ph.D. (IIT, Roorkee)

Associate Professor

Dr. Neeraj Kaushik

Ph.D. (MDU, Rohtak)

Assistant Professor

Dr. Mohammad Firoz
Dr. Manish Kumar Jha

Ph.D. (JMIU, New Delhi)
Ph.D. (ISM, Dhanbad)

DEPARTMENT OF COMPUTER APPLICATIONS

Head of Department

Dr. Ashutosh Kumar Singh

Professor

Dr. Ashutosh Kumar Singh

Ph.D. (Banaras Hindu University)

Assistant Professor

Dr. Sarika Jain

Ph.D. (CCSU, Meerut)

Dr. Kapil

Ph.D. (JNU, New Delhi)

3.2 NON ACADEMIC STAFF (NON-TEACHING)**Officers**

Registrar	01
Dy. Registrar	03
Asstt. Registrar	04
Librarian	01
Asstt. Librarian	01
Sr. SAS Officer	01
SAS Officer	02
Sr. Medical Officer	01
Medical Officer	03
Security Officer	01
Pr. Technical Officer	01
Sr. Technical Officer	04
Technical Officer	06
Executive Engineer	01

	30

Technical Staff**Lower**

Technician	33
Sr. Technician	24
Technician SG-II	15
Technician SG-I	09
Lib. Assistant	03
Sr. Lib. Assistant	03
Lib. Assistant SG-II	02

Higher

Tech. Assistant	29
Sr. Tech. Asstt.	22
Tech. Asstt. SG-II	14

Tech. Asstt. SG-I	07
Lib. & Info. Assistant	02
Sr. Lib. & Info. Assistant	02
Lib. & Info. Assistant SG-II	01
Lib. & Info. Assistant SG-I	01
Jr. Engineer	04
Asstt. Engineer	02
Asstt. Engineer SG II (Civil)	01
SAS Assistant	01
Sr. SAS Assistant	01
SAS Assistant SG II	01
SAS Assistant SG I	01

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Administrative & Ministerial Staff

Lower

Junior Assistant	16
Stenographer	04
Sr. Assistant	12
Sr. Stenographer	03
Assistant SG-II	08
Assistant SG-I	05
Stenographer SG-II	02
Stenographer SG-I	01

Higher

Superintendent	03
Accountant	04
Secretary	03
Sr. Superintendent	03
Sr. Accountant	02
Sr. Secretary	02
Superintendent SG-II	02
Accountant SG-II	01
Secretary SG-II	01
Superintendent SG-I	01
Accountant SG-I	01
Secretary SG-I	01

75

Supporting Staff

Attendant/Security Guard/ Mali/Caretaker	18
Sr. Attendant/Security Guard/	14

Mali/Caretaker	
Attendant/Security Guard/	09
Mali/Caretaker SG-II	
Attendant/Security Guard/	04
Mali/Caretaker SG-I	

	45

3.3 TRAINING STATUS

The Ministry of Human Resource and Development, Govt. of India has formulated training policy under Technical Education Quality Improvement Programme (TEQIP) for the faculty in which teachers of the technical institutions are trained. The Technical Teachers' Training Institutes of the region organize training programme on the different areas of Engineering and Technology. The Govt. of India is meeting expenditure for training of the teachers and bears the training cost, salary, TA/DA and stay expenses.

The Institute has training facilities for the faculty and other staff under Technical Education Quality Improvement Programme within the country which are arranged from Govt. organizations/ institutions as per the proposal. A number of staff members have been benefited by this scheme.

3.4 PLACEMENT OF STAFF FOR ACADEMIC EXCELLENCE

The Academic staff (faculty) of the Institute is placed for Academic excellence for the following subjects:-

- a) To conduct research or advance studies in India or abroad;
- b) To write text books, standard works and other literature;
- c) To visit/work in International concerns and Technical Departments of Government to gain practical experience in their respective fields;
- d) To visit or work in a University, Institute or Government Research Laboratories in India or abroad; and
- e) Any other purpose for the academic development of the staff.
- f) For undergoing a special course of higher studies or specialized training in a professional or technical subject having a direct and close connection with the sphere of duties.

For this purpose, study leave and sabbatical leave are granted to the academic staff for the development of academic excellence.

4.0 TEACHING PROGRAMMES

4.1 COURSES OFFERED

UNDERGRADUATE COURSES - B.TECH. DEGREE COURSES

Courses of study were offered in the following disciplines:

<u>Discipline</u>	<u>No. of seats</u>
Civil Engineering	146
Electrical Engineering	141
Mechanical Engineering	156
Electronics & Communication Engineering	138
Computer Engineering	93
Production & Industrial Engg.	94
Information Technology	94
Total	862

Note: DASA/NRI students can be admitted upto 15% over and above of the sanction strength of B.Tech. (i.e. 15% of 862)

The duration of each course is four academic years. Teaching in each academic year (1st July to 30th June) is divided into two semesters of about sixteen weeks each.

The courses include study at the Institute, visits to work-sites and practical training in the Institute workshops and in approved engineering works.

POSTGRADUATE COURSES - M.TECH. DEGREE COURSES

Courses of study were offered in the following disciplines and specializations:

The seats available for admission through CCMT-2018 are given below:

Deptt./ School	M.Tech. Programme	OP	OBC	SC	ST	OP PWD	OBC PWD	SC PWD	ST PWD	Total
Civil Engineering	Soil Mechanics & Foundation Engg.	9	5	3	1	-	-	-	-	18
	Structural Engg.	9	5	4	1	-	-	-	-	19
	Water Resources Engg.	9	4	3	1	-	-	-	-	17
	Transportation Engg.	9	4	4	1	-	-	-	-	18
	Environmental Engg.	9	6	2	1	1	1	1	-	21
Electrical	Power System	10	5	3	2	-	-	-	-	20

Engineering	Control System	10	5	4	1	-	-	-	-	20
	Power Electronics & Drives	10	5	3	1	1	-	-	-	20
Electronics & Comm. Engg.	Electronics & Comm. Engg.	12	6	4	2	-	-	-	-	24
Physics	Instrumentation	10	5	3	2	-	-	-	-	20
	Nanotechnology	9	6	2	2	1	-	-	-	20
Mechanical Engg.	Industrial & Production Engg.	10	5	4	1	-	-	-	-	20
	Machine Design	10	5	4	1	-	-	-	-	20
	Thermal Engineering	11	6	2	3	-	1	-	1	24
Computer Engg.	Computer Engg.	13	7	3	1	-	1	-	-	25
	Cyber Security	9	5	3	2	1	-	-	-	20
Chemistry	Molecular Engg. & Advanced Chemical Analysis	9	5	3	2	1	-	-	-	20
School of VLSI Design & Embedded System	VLSI Design	14	8	3	4	2	1	-	-	32
	Embedded System Design	9	5	3	2	-	-	1	-	20
School of Renewable Energy & Efficiency	Renewable Energy Systems	9	5	3	2	1	-	-	-	20
School of Biomedical Engg.	Biomedical Engg.	9	5	3	2	1	-	-	-	20
School of Material Science & technology	Material Science & technology	9	5	3	2	1	-	-	-	20
	GRAND TOTAL	218	117	69	37	10	4	2	1	458

The Institute made admissions directly through Institute level counseling in the academic session 2018-19 on sponsored seats for all branches and specializations. The number of seats available in each category for admission through this mode are given below:

(i) Sponsored seats:

Deptt./ School	M.Tech. Programme	OP	OBC	SC	ST	OP PWD	OBC PWD	SC PWD	ST PWD	Total
Civil Engineering	Soil Mechanics & Foundation Engg.	3	1	1	-	-	-	-	-	5
	Structural Engg.	3	1	1	-	-	-	-	-	5
	Water Resources Engg.	2	2	-	1	-	-	-	-	5
	Transportation Engg.	2	1	1	-	-	1	-	-	5
	Environmental Engg.	2	1	1	1	-	-	-	-	5
Electrical	Power System	2	2	0	1	-	-	-	-	5

Engineering	Control System	2	2	1	-	-	-	-	-	5
	Power Electronics & Drives	3	1	1	-	-	-	-	-	5
Electronics & Comm. Engg.	Electronics & Comm. Engg.	3	1	1	-	-	-	-	-	5
Physics	Instrumentation	2	2	1	-	-	-	-	-	5
	Nanotechnology	2	2	-	-	1	-	-	-	5
Mechanical Engg.	Industrial & Production Engg.	2	2	0	1	-	-	-	-	5
	Machine Design	2	1	1	-	1	-	-	-	5
	Thermal Engineering	3	1	1	-	-	-	-	-	5
Computer Engg.	Computer Engg.	3	1	1	-	-	-	-	-	5
	Cyber Security	2	1	1	1	-	-	-	-	5
Chemistry	Molecular Engg. & Advanced Chemical Analysis	2	1	1	1	-	-	-	-	5
School of VLSI Design & Embedded System	VLSI Design	3	1	1	-	-	-	-	-	5
	Embedded System Design	3	1	1	-	-	-	-	-	5
School of Renewable Energy & Efficiency	Renewable Energy Systems	2	1	1	1	-	-	-	-	5
School of Biomedical Engg.	Biomedical Engg.	2	1	1	1	-	-	-	-	5
School of Material Sc. & Technology	Material Science & technology	2	2	1	-	-	-	-	-	5
	GRAND TOTAL	52	29	17	9	2	1	-	-	110

MBA DEGREE COURSE

Responding to an increasing demand for management professionals in the country and keeping in line with its stated goal of regularly adding new courses as a part of its 20-years growth plan, NIT Kurukshetra has started 2-years MBA programme, effective 2006-07 with an intake of 60 Students. With the introduction of the programme, Institute extends its long years of expertise into the field of Business Administration, thus fulfilling its commitment to the business world and the society at large of developing professional managers with varied competencies and ethical values.

In a short span, MBA program has made a mark for itself. It has all the ingredients of a successful program: a strong curriculum, comparable with the very best; well qualified and dedicated faculty, a batch of talented and enthusiastic students; emphasis on case-based interactive study, supported by all modern teaching aids; liaison with industry; active participation in inter & intra-institution competitions etc.

The first batch enjoyed the unique opportunity of receiving Summer Training from reputed Universities/B-Schools and industries in three European countries- Switzerland, Germany & Holland. This exceptional experience helped the students widen their horizon and provide them much valued international exposure.

MCA DEGREE COURSE

Responding to an increasing demand for computer professionals in the country and keeping in line with its stated goal of regularly adding new courses as a part of its 20-years growth plan, NIT Kurukshetra has started 3-years MCA programme with effect from session 2007-08 with an intake of 60 Students (presently 90 seats). With the introduction of the programme, Institute extends its long years of expertise into the field of Computer Applications thus fulfilling its commitment to the IT industry worldwide and the society at large of developing computer professionals with varied competencies and ethical values. The programme derives strength from:

- Expert faculty, and well established administrative, consultancy,
- Training and placement infrastructure of NIT Kurukshetra
- Latest IT Industry oriented flexible curriculum
- Specialized training at leading IT Industry
- Placement assistance from Training and Placement Cell

Ph.D. DEGREE COURSES

Facilities are available in Institute for research leading to the degree of Doctor of Philosophy in the various disciplines of Engineering and Technology.

4.2 COURSE-WISE ENROLMENT BREAK-UP

B.TECH. DEGREE COURSES

Year	Boys	Girls	Total
I	735	127	862
II	734	83	817
III	658	118	776
IV	716	136	852

M.TECH. DEGREE COURSES

	Year	Boys	Girls	Total
Civil	I	86	08	94
	II	85	14	99
Electrical	I	49	09	58
	II	46	11	57

Electronics	I	05	08	13
	II	10	11	21
Mechanical	I	58	02	60
	II	58	04	62
Physics	I	18	07	25
	II	17	06	23
Computer	I	20	03	23
	II	14	11	25
Cyber Security	I	09	05	14
	II	15	04	19
Molecular Engg. & Advanced Chemical Analysis	I	01	01	02
	II	02	0	02
School of VLSI Design & Embedded system	I	36	09	45
	II	26	06	32
School of Renewal Energy & Efficiency	I	15	01	16
	II	15	01	16
School of Biomedical Engg.	I	01	03	04
	II	03	01	04
School of Material Science & Technology	I	06	02	08
	II	03	03	06

MBA and MCA DEGREE COURSES

	Year	Boys	Girls	Total
MBA	I	25	22	47
	II	16	10	26
MCA	I	58	23	81
	II	45	33	48
	III	58	21	79

Ph.D DEGREE COURSE

	Boys	Girls	Total
Ph.D.	331	132	463

4.3 ADMISSION STATISTICS-UG/PG PROGRAMMES FOR ACADEMIC YEAR 2018-19

Undergraduate Courses

Details of candidates admitted to B.Tech. courses in 2018-2019:-

B.Tech	Female											Total	Male											Male Total	Grand Total
Category	DASA	ICCR	MEA	OP	PH	OBC	PH	SC	PH	ST	PH		DASA	ICCR	MEA	OP	PH	OBC	PH	SC	PH	ST	PH		
Civil Engg.	0	0	0	8	1	5	0	3	0	2	0	19	0	4	0	54	1	34	2	19	1	9	0	124	143
Computer Engg.	0	0	0	7	0	4	2	2	0	1	0	16	5	0	1	37	2	20	0	12	0	6	0	83	99
Electrical Engg.	0	0	0	12	1	6	1	3	0	2	0	25	1	0	0	55	0	30	2	18	0	9	0	115	140
Electronics & Comm. Engg.	0	0	0	8	1	5	0	3	0	2	0	19	2	0	1	54	3	30	1	18	0	9	0	118	137
Information Technology	0	0	0	5	1	4	0	2	0	1	0	13	3	0	1	39	2	21	1	12	0	6	0	85	98
Mechanical Engg.	1	0	0	11	0	6	0	3	0	2	0	23	2	0	0	55	3	39	1	20	0	10	0	130	153
Production & Industrial Engg.	0	0	0	6	0	3	0	2	0	1	0	12	0	0	0	39	0	23	0	12	0	6	0	80	92
Grand Total	1	0	0	57	4	33	3	18	0	11	0	127	13	4	3	333	11	197	7	111	1	55	0	735	862

Postgraduate Courses

Details of candidates admitted to M.Tech., MBA & MCA courses in 2018-2019:-

M.Tech 2018-19 Admitted Branch wise Category wise & Male/Female Chart																		
Deptt.	Specialization	Female							Female Total	MALE							Male Total	Grand Total
		Gen	Gen PH	OBC	SC	Sponsored	ST	ICCR		Gen	Gen PH	OBC	SC	Sponsored	ST	ICCR		
Chemistry	Molecular Engg. & Advanced Chemical Analysis	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	1	2
Civil	Environmental	1	0	0	1	0	0	0	2	6	0	10	2	0	1	0	19	21
	Soil Mech. & Foundation	3	0	0	0	0	0	0	3	5	0	6	3	1	1	0	16	19
	Structural	0	0	0	0	0	0	0	0	10	0	5	3	1	1	0	20	20
	Water Resources	1	0	1	0	0	0	0	2	5	0	5	4	0	0	0	14	16
	Transportation	1	0	0	0	0	0	0	1	8	0	5	3	0	1	0	17	18
Computer	Computer	3	0	0	0	0	0	0	3	7	0	8	4	0	1	0	20	23
	Cyber Security	3	0	1	1	0	0	0	5	4	0	3	2	0	0	0	9	14
ECE	ECE	4	0	2	2	0	0	0	8	1	0	3	1	0	0	0	5	13
Electrical	Control System	3	0	1	0	0	0	0	4	7	0	4	3	0	1	0	15	19
	Power Electronics & Drives	3	0	1	0	0	0	0	4	5	1	5	3	0	2	0	16	20
	Power System	1	0	0	0	0	0	0	1	10	0	4	4	0	0	0	18	19
Mechanical	Industrial & Production	1	0	0	0	0	0	0	1	7	0	7	2	1	0	0	17	18
	Machine Design	1	0	0	0	0	0	0	1	7	0	7	3	0	1	0	18	19
	Thermal	0	0	0	0	0	0	0	0	7	0	12	4	0	0	0	23	23
Physics	Instrumentation	3	0	0	1	0	0	0	4	4	0	6	0	0	0	0	10	14
	Nanotechnology	1	0	1	1	0	0	0	3	6	0	1	1	0	0	0	8	11
School of VLSI Design & Embedded System	Embedded System Design	1	0	2	0	0	0	0	3	8	0	3	3	0	0	0	14	17
	VLSI Design	4	0	2	0	0	0	0	6	11	0	9	2	0	0	0	22	28
School of Renewable Energy & Systems	Renewable Energy & Efficiency	0	0	1	0	0	0	0	1	6	0	3	4	0	2	0	15	16
School of Biomedical Engg.	Biomedical Engg.	2	0	0	1	0	0	0	3	1	0	0	0	0	0	0	1	4
School of Materials Sc. & Tech.	Materials Sc. & Technology	1	0	0	1	0	0	0	2	4	0	2	0	0	0	0	6	8
Total (M.Tech.)		37	0	12	9	0	0	0	58	130	1	108	51	3	11	0	304	362
MBA		17	0	4	1	0	0	0	22	24	0	1	0	0	0	0	25	47
MCA		14	0	7	2	0	0	0	23	29	1	18	8	-	2	0	58	81
Grand Total (PG)		68	0	11	3	0	0	0	103	183	2	127	59	3	13	0	387	490

4.4 STUDENTS' TOTAL STRENGTH

B.Tech. Degree Course

Ist Semester	=	862
IIIrd Semester	=	817
Vth Semester	=	776
VIIth Semester	=	852

M.Tech. Degree Course

Ist Semester	=	362
IIIrd Semester	=	366

MBA Degree Course

Ist Semester	=	47
IIIrd Semester	=	26

MCA Degree Course

Ist Semester	=	81
IIIrd Semester	=	78
Vth Semester	=	79

Ph.D Degree Course	=	463
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Total	=	4809
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Table 1 shows yearwise breakup of students' statistics for B.Tech. programme.

Table 1: Students Statistics Yearwise for B.Tech. Programme													
Class/Course		Total Enrolment			Scheduled Castes Enrolment			Scheduled Tribes Enrolment			Backward Class Enrolment (OBC)		
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
	1	2	3	4	5	6	7	8	9	10	11	12	13
B.Tech													
2015	Comp	72	17	89	13	1	14	5	1	6	22	4	26
	EC	86	50	136	15	5	20	9	3	12	24	13	37
	M	135	3	138	19	1	20	12	-	12	40	1	41
	E	117	19	136	18	3	21	9	1	10	37	6	43
	C	128	12	140	18	3	21	8	2	10	40	2	42
	IT	72	19	91	10	4	14	5	1	6	22	2	24
	P & I.	73	12	85	10	4	14	5	-	5	20	3	23
2016	Comp	32	11	43	13	01	14	05	01	06	20	04	24
	EC	36	26	62	14	05	19	09	02	11	22	13	35
	M	63	01	64	19	01	20	12	-	12	35	01	36
	E	53	11	64	18	03	21	09	01	10	34	03	37
	C	32	05	37	18	03	21	08	02	10	35	02	37
	IT	33	10	43	10	04	14	05	01	06	22	02	24
	PIE	34	05	39	10	04	14	04	-	04	18	03	21
2017	Comp	78	15	93	12	2	14	5	1	6	22	1	23
	EC	118	15	133	17	3	20	11	1	12	35	2	37
	M	134	3	137	20	0	20	12	-	12	35	-	35
	E	118	23	141	15	6	21	8	2	10	39	3	42
	C	126	10	136	21	1	22	10	-	10	31	5	36
	IT	81	9	90	13	1	14	5	1	6	20	-	24
	PIE	79	8	87	13	0	13	6	-	6	27	1	28
2018	Comp	83	16	99	12	2	14	6	1	7	20	6	26
	EC	118	19	137	18	3	21	9	2	11	31	5	36
	M	130	23	153	20	3	23	10	2	12	40	6	46
	E	115	25	140	18	3	21	9	2	11	32	7	39
	C	124	19	143	20	3	23	9	2	11	36	5	41
	IT	85	13	98	12	2	14	6	1	7	22	4	26
	PIE	80	12	92	12	2	14	6	1	7	23	3	26

4.5 THE HOSTELS

4.5.1 Management of Hostels

The Institute has 11 Boys and 4 Girls hostels with a capacity of 3700 nos. and 1200 no. of students, respectively having mostly single seater rooms for UG, PG, and Ph.D. students. The hostels also have double and three seater rooms.

All rooms in the hostels have been provided with furniture, ceiling fans and LAN connection/R.O., first aid facility (Wired/Wireless). Each hostel is a self

contained unit with its own mess/common room and outdoor games facilities. Common room facilities include newspapers, magazines, indoor games and a LED. Common gymnasium is there in one of the hostel (Boys and Girls) of Boys and Girls, respectively. From the session 2019-20, each hostel (Boys & Girls) have been provided with the CCTV camera and biometric attendance.

4.5.2 Administration

Each boys' and Girls' hostel are looked after by two members of the teaching faculty who act as Wardens. Every girl hostel has a full time Attendant. The overall coordination of working is done by Deputy Chief Warden and Chief Warden under the administrative control of Dean (Student Welfare).

4.6 SCHOLARSHIPS/ASSISTANCE-SHIP

4.6.1 Merit-cum-means and other Scholarship for B.Tech.

Eighty-four Merit Scholarships are awarded by the Institute (as per conditions laid down) for each year of B.Tech. Degree courses. In addition to these, National Scholarships, Post-metric Scholarship and many other stipends are awarded by various Government institutions and other agencies.

Students receiving a Merit Scholarship or Merit-cum-Means Scholarship or stipend are not permitted to receive any other scholarship/stipend. In case he/ she is in receipt of any other Scholarship or stipend it must be surrendered and amounts received refunded before a Merit Scholarship or Merit-cum-Means Scholarship can be claimed. Loans or a single cash Prize however does not debar a student from eligibility for the Merit Scholarship or Merit-cum-means Scholarship. A Scholarship which falls vacant due to any reason is awarded to the next eligible candidate in order of merit.

Subject to availability, a small number of Merit-cum-Means Scholarship may be awarded to students in higher classes also on the aggregate of two semester examination in the previous year provided the students have secured 60% or more marks in one attempt in each of the two semester examinations in the previous year and they fulfill the eligibility conditions for the Merit-cum-Means Scholarship

4.6.2 Alumni Association Scholarship

The NITK Alumni Association awards scholarships and financial assistance to the needy students.

4.6.3 Scholarships for M.Tech. students

A scholarship of Rs. 12400/- p.m. per student, as per the MHRD guidelines, is awarded to all eligible students pursuing a regular course of study of M.Tech. Only those candidates who have qualified the GATE examination are eligible for the award of scholarships.

4.7 GAMES AND SPORTS

The Engineering Curriculum demands dedicated and sustained efforts from every student. As a result, students remain busy with their studies throughout the year.

Nevertheless, realizing the importance of sports and games in the overall development of the students, Institute has provided several sports facilities to the students.

NIT Kurukshetra is the only institution which introduces the physical education as a compulsory subject (practical only) for all the B.Tech. Ist year students. Almost all students of institute come to sports grounds daily for their physical fitness. This is the only Engg. Institution which conducts inter year tournaments in all games and sports every year. Almost all Inter-Class Tournaments in various games and sports were organized this year too.

4.8 AWARDS AND MEDALS

Undergraduate students of B.Tech. Degree Course are eligible for a number of Honours, Awards, Scholarships and other financial assistance based on their academic performance, means, requirements etc.. Chief among these are Medals awarded to the toppers in the various disciplines, citation of names in the Institute Roll of Honour and the Award for the Best All-rounder. While the Medals and Certificates of merit awarded by the Institute are for purely academic achievements, the Best All Rounder Award is for Students who achieve scholarship with sportsmanship and excellence in other extra-mural activities.

Gold Medals along with a cash award of Rs. 5,000/- are awarded to the students who secure 1st position in the final examination in all disciplines of NIT Kurukshetra.

4.9 EXAMINATION DETAILS

Undergraduate Courses

Discipline	No. of Students Appeared	No. of Students Passed	Students Securing Highest Marks		CGPA
			Name	Roll No.	
Computer	111	110	Ujwal Gupta	1140486	9.5992
Civil	125	119	Prajwal Singh Rahar	1140015	9.7809
Electronics & Comm. Engg.	130	108	R C Sai Charan,	1140663	9.3660
Electrical	130	128	Vaishali	1140107	9.3926
Mechanical	151	135	Pankaj Mittal	1140489	9.7544
PIE	68	60	Manoj Anand	1140474	9.2641
IT	96	95	Ankit Joshi	1140805	9.5022
Total		755			

Postgraduate Courses

M.Tech.	No. of Students Passed
Computer Engg.	16
Cyber Security	14
Electronics & Comm. Engg.	16
Mechanical Engg. (Thermal)	21
Mechanical Engg. (I & P)	14
Mechanical Engg. (Machine Design)	14
Electrical Engg. (Power System)	12
Electrical Engg. (Control System)	17
Electrical Engg. (PED)	14
Civil Engineering (Environmental)	20
Civil Engineering (Soil Mechanics & Foundation)	15
Civil Engineering (Structural)	20
Civil Engineering (Transportation)	13
Civil Engineering (Water Resources)	16
Instrumentation	13
Nanotechnology	10
Molecular Engg. & Advanced Chemical Anylsis	06
School of VLSI Design & Embedded Systems (VLSI)	24
School of VLSI Design & Embedded Systems (Embedded System Design)	16
School of Renewal Energy and Efficiency (Renewable Energy Systems)	19
School of Matrial Science & Nano-Technology	11
School of Biomedical Engg.	11
Total	332
MBA	53
MCA	83

4.10 TRAINING AND PLACEMENT

4.10.1 Training

It is mandatory for all B.Tech. students to undergo practical training twice during their four-year stay in the Institute. The students undergo first practical training after 4th semester and the second after 6th semester. This training takes place during the summer vacations in establishments approved by the Institute. All expenses are to be borne by the students. After completion of the training period, students are required to submit a report which is evaluated in the Institute. While undergoing practical training, the students are expected to conform to the rules of the organization in which they are taking training. They are subjected to the orders and disciplinary control of the concerned organizations.

4.10.2 Survey Camp

Second year B.Tech. degree students of Civil Engineering are required to attend a survey camp during summer vacations. The Institute bears only limited expenses for this camp.

4.10.3 Project Tours

All students of final and pre-final years of B.Tech. are required to go on short project tours as and when arranged by the Institute.

4.10.4 Educational Tours

B.Tech. students of third and final years are required to go on short educational and/or industrial tours as arranged by the Institute.

4.10.5 Placement

The number of companies visited and jobs offered disciplinewise are as given below:

Discipline	No. of Offers	No. of students who got jobs
UG		
Computer Engg.	112	91
Information Technology	103	81
Electronics & Comm. Engg.	132	100
Mechanical Engg.	111	89
Electrical Engg.	91	85
Civil Engg.	57	55
Production & Industrial Engg.	43	31
PG		
M.Tech.	86	81
MCA	47	47
MBA	11	11

5.0 RESEARCH AND DEVELOPMENT ACTIVITIES

5.1 Ph.D. PROGRAMMES

Facilities are available in the Institute for research leading to the Degree of Doctor of Philosophy in the following areas of Engineering and Technology:-

Civil Engineering Department

1. Structural Engineering and Concrete Technology
2. Hydraulics and Water Resources
3. Soil Mechanics and Foundation Engineering
4. Geotechnique/Rock Mechanics
5. Highway/Transportation Engineering
6. Environment/Public Health Engineering
7. Remote Sensing/Advanced Surveying

Electrical Engineering Department

1. Reliability Engineering
2. Digital Signal Processing
3. Control Systems Theory and Applications
4. Electrical Machines
5. Wind Energy Conversion
6. Power Systems Dynamics and Stability
7. FACTS
8. Power Electronics
9. Power System Restructuring
10. Genetic Algorithms Applications
11. Robust Control
12. Robotics
13. Electric Drives
14. Digital Instrumentation and Control
15. Linear Control Systems
16. Microprocessor Based Systems
17. Power Quality Control in Power Systems
18. Control Applications in Power Drives
19. Artificial Intelligence
20. High Voltage Engineering
21. DSP Applications

Mechanical Engineering Department

1. Thermal Sciences
2. Energy Management Design

3. Production and Industrial Engg.
4. CAD/CAM
5. Mechanical Design

Electronics & Communication Engineering Department

1. Mobile Communication
2. Digital Signal Processing
3. Digital Communications
4. Microelectronics & Modeling of semi conductor devices
5. VLSI Design
6. Image Processing
7. CDMA Systems
8. Reconfigurable Systems
9. Low Power VLSI Design
10. Wireless Broadband Access Technologies
11. Mobile Computing
12. Wireless Sensor Networks

Computer Engineering Department

1. Distributed Computing
2. Software Engineering
3. Cyber Security
4. Cloud Computing
5. Internet of Things
6. Natural Language Processing
7. Image Processing
8. Operating System
9. Wireless Sensor and Ad-hoc Network
10. Data Base System

Physics Department

1. High Energy and Radiation Physics
2. Nano Technology
3. Solid State Nuclear Track Detectors
4. Polymer Physics
5. Condensed matter Physics
6. Molecular Spectroscopy

Chemistry Department

1. Organic Chemistry
2. Coordination Chemistry

3. Macrocyclic Chemistry
4. Physical Chemistry
5. Computational Chemistry
6. Functional Organic Materials
7. Supramolecular Chemistry
8. High Energy Materials
9. Organometallic Chemistry
10. Metal organic Frameworks

Mathematics Department

1. Fluid Mechanics (Nano-Ferofluids, Heat and Mass Transfer, Boundary Layer Theory)
2. Numerical Analysis
3. Algebra (Two Parameter Quantum Algebras and Special functions)
4. Fractional Calculus
5. Control Theory (Mathematical Modeling and Reliability Analysis of Robot Manipulators)
6. Functional Analysis (Fourier Approximation, Summability Theory, Wavelet)

Humanities & Social Sciences Department

1. English Language and Literature, Culture Studies, New Historicism, Kashmiri and South Asian Studies, Anglo Saxon and Medieval English (Pre Chaucerian) Poetry
2. Agricultural Economics, Industrial Economics, Indian Economy
3. Human Resources Management, Marketing Management and Financial Management
4. Intellectual Property Rights

MCA Department

1. Semantic Web Services
2. Synchronisation in Mobile Computing
3. Software Engineering
4. Web based Instructional System
5. Adhoc Network
6. Mobile Computing Techniques & Algorithms in Wireless and Computer Systems
7. Fault Tolerance in Distributed Computing
8. Secure Wireless Sensor Network
9. Semantic Web & Services

5.2 PhDs AWARDED AND IN-PROGRESS

No.	Department	Awarded	In-Progress
1.	Civil	04	66
2.	Electrical	15	62
3.	Mechanical	20	123
4.	Electronics & Comm.	05	41
5.	Physics	05	24
6.	Chemistry	04	21
7.	Mathematics	-	14
8.	Humanities	01	09
9.	Computer	06	39
10.	IT	-	02
11.	MCA	01	22
12.	MBA	01	09
13.	School of Renewable Energy and Efficiency	-	20
14.	School of Material Science and Technology	-	06
15.	School of VLSI Design and Embedded System	01	04
16.	School of Biomedical Engg.	-	01
	Total	63	463

5.3 INSTITUTE-INDUSTRY COLLABORATION

Industry-Institute interaction is enhanced by arranging visits of adjunct faculty from industries and deputing of Institute faculty to the industries. Joint research projects are also undertaken. An industry Institute Partnership Cell has also been established. The cell encourages development of rural energy and alternative technologies by undertaking R & D projects in energy conservation and management; and alternative energy sources are also undertaken as IRED programmes.

5.4 INNOVATIONS AND TECHNOLOGY TRANSFER

Aqua Rail Distribution

"AQUA RAIL DISTRIBUTION" being developed as a Start-up by the students of the Institute aims to provide RO purified and cold water 24 hours to the rail passengers at a rate of Rs. 3 per liter. Twenty-three million passengers travel by trains and around 80% of them use plastic bottles for drinking water. The plastic bottles discarded as waste may generate 860 tons of plastic bottles waste daily. It is envisaged to reduce plastic usage within 40% to 70% per day by serving water into passenger's brought thermos water bottles, which will promote green environment aligned with "Digital India" and "Swachh Bhaart" programs of the Government of India. It is expected to generate employment in the order of 10,000 jobs with the salary range of Rs. 17,000 to 100,000 per month.

2. Innovative Project

A team of four students- Abhishek Bhargav, Rajiv Kuamr, Saloni Tapan, and Lav Kush Gupta designed a very energy efficient and cost effective solution for monitoring the condition of the transformer entitled, "Detection of oil level and temperature of Transformer with Arduino" under the supervision of Dr. Atma Ram Gupta, Asstt. Professor, Electrical Engineering Dept.

3. Development of S/W Application for students' feedback

A transparent and user-friendly mobile app has been developed for collecting and analyzing the feedback of students about teaching and learning process in the Institute.

Once a user has given feedback for a faculty, a numeric rating is generated which is displayed on the app and can be seen by all logged-in users.

This rating is the main highlight of the app as being dynamic, it not only lets the students know how good a teacher is but also motivates a teacher to strive for better teaching. Thus the app provides a rugged platform for students to furnish the feedback about the class room teaching and laboratory classes. The data is - available for further analysis towards further improvement.

4. Solar Thermal Chulha for Day and Night Indoor Cooking

The solar system is based on a rotary gear pump to take cold back to receiver. "Night Chulha" stores heat during day in non-cooking hours and use it during night time. Oil temperature up to 220°C can be achieved in Day Chulha, which meets the boiling, steaming and frying requirements of a household. On the other hand, Night Chulha can provide the temperature up to 120°C with heat storage. This technology is ready for commercialized product and has been installed for cooking in the villages of the state of Chhattisgarh.

5.5 TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME-III (TEQIP-III)

The Institute is participating in TEQIP-III, under subcomponent 1.3, as the Mentor Institute with Government Engineering College, Bikaner, Rajasthan, as the Mentee Institute. The project duration is up to September 2020. Under the project, an estimated total budget of Rs. 7 Crore, has been allocated to the Institute by National Project Implementation Unit, MHRD.

The TEQIP-III activities are focused on all the Departments / Schools of Engineering and Applied Sciences. Further, the Institute is conducting many activities under twinning arrangement towards helping the Mentee Institute in strengthening the academics and research activities by sharing the knowledge and experience through mutual interactions, in streamlining various procedures & processes leading to overall improvement and capacity building and developing long-term relationship.

Some of the activities being carried out under the scope of the project are under the following categories:

A. Procurement of Goods

- Equipment
- Learning resources
- Furniture (for TEQIP Cell)

B. Academic Processes

- Improvement in Teaching, Learning and Research competence
- Improve student learning
- Student employability
- Increasing faculty productivity and motivation
- Establishing a twinning system
- Twinning arrangements with institutions under Sub-component 1.1 to build capacity and improved performance

C. Operating Cost:

- Consumables
- Operation and maintenance of equipments
- Office expenses (The activities include: stationery; printing, etc.)
- Meetings (only project related meetings)
- Hiring of Vehicles (only for project activities)
- Travel Cost (only for project activities)
- Salary (for TEQIP office staff)

The students, faculty, and staff of the Institute and that of GEC, Bikaner are getting benefited through TEQIP-III. Under TEQIP-III, the Institute has carried out various activities for overall improvement in UG/PG education, Research and Innovation, faculty and staff development, and Twinning Activities with GEC, Bikaner etc. as per the mandate of TEQIP-III. TEQIP-III funds are being effectively utilized for the above activities.

6.0 THE COUNCIL, BOG AND OTHER COMMITTEES

6.1 INSTITUTE'S (NIT) COUNCIL

The composition of the Members of the Council shall be as under:-

1.	Minister of Human Resource Development, Government of India	Chairman
2.	Secretary, Department of Secondary and Higher Education, Ministry of HRD, Government of India	Member
3.	Principal Adviser (Education Planning Commission)	Member
4.	Secretary, Deptt. of Science & Technology, GOI	Member
5.	Director General, Council of Scientific & Industrial Research, Government of India	Member
6.	Secretary, Deptt. Of Biotechnology, Government of India.	Member
7.	Secretary, Atomic Energy, Government of India	Member
8.	Secretary, Deptt. of Information Technology, GOI	Member
9.	Secretary, Deptt. of Space, Govt. of India.	Member
10.	Special Secretary/Addl. Secretary/ Educational Adviser(T), Department of Secondary & Higher Education, Ministry	Member
11.	Chairman, University Grants Commission	Member
12.	Chairman, All India Council of Technical Education	Member
13-14	Two Chairmen, Board of Governors of National Institute of Technology (by rotation)	Members
15-18	4 Directors of the National Institutes of technology (by rotation)	Members
19.	One Director of Indian Institute of Technology (by rotation)	Member
20.	One Director of Indian Institute of Management (by rotation)	Member
21-22	Two Secretaries of Higher/Technical Education from states where NITs are located (by rotation)	Members
23-24	Two persons from Industry nominated by the Central Government	Members
25.	Financial Adviser, MHRD, GOI	Member
26.	Joint Secretary,(Technical Education) Joint Educational Adviser (Technical Education),MHRD,GOI	Member-Secretary

6.2 BOARD OF GOVERNORS

The Board of Governors consists of the following persons, namely:-

- (a) the Chairperson, nominated by the Visitor;
- (b) the Director, ex officio;

- (c) two persons not below the rank of the Joint Secretary to the Government of India to be nominated by the Central Government from amongst persons dealing with technical education and finance;
- (d) two persons to be nominated by the Government of the State in which the Institute is situated, from amongst persons, who, in the opinion of that Government, are technologists or industrialists of repute;
- (e) two persons, at least one of whom shall be a woman, having special knowledge or practical experience in respect of education, engineering or science to be nominated by the Council;
- (f) Director of the IIT in whose zone the NIT is located
- (g) one Professor and one Assistant Professor or a lecturer of the Institute to be nominated by the Senate.
- (h) the Registrar, Secretary.

6.3 FINANCE COMMITTEE

The Finance Committee consists of following persons, namely:-

- (a) the Chairperson, ex officio, who is the Chairman of the Committee;
- (b) two persons nominated by the Central Government;
- (c) two persons nominated by the Board; and
- (d) the Director, Ex-officio.
- (e) the Registrar, ex-officio Member Secretary.
- (f) the nominee of the Govt. of Haryana.

6.4 BUILDING AND WORKS COMMITTEE

The Building and Works Committee consists of the following persons, namely:-

- (a) the Director, ex-officio, who is the Chairman of the Committee;
- (b) one person nominated by the Central Government not below the rank of Director or Deputy Secretary;
- (c) one person nominated by the Board from amongst its members;
- (d) the Registrar, ex-officio Member Secretary
- (e) Dean, Planning & Development.
- (f) One expert each from Civil, Electrical Engineering Wing of the Central or State Government or any autonomous body of the repute.

OTHER COMMITTEES

SENATE

The Senate consists of the following persons, namely:-

- (a) the Director, ex-officio, who is the Chairman of the Senate.
- (b) the Deputy Director, ex officio.

- (c) the Professors appointed or recognized as such by the Institute for the purpose of imparting instructions in the Institute.
- (d) three persons, one of whom shall be a woman, not being employees of the Institute, to be nominated by the Chairperson in consultation with the Director, from amongst educationists of repute, one each from the field of science, engineering and humanities.
- (e) such other members of the staff as may be laid down in the Statutes.
- (f) the Registrar, Secretary.

7.0 CONCESSIONS FOR SCs, STs, OBCs AND HANDICAPPED STUDENTS

7.1 CONCESSIONS PROVIDED FOR STUDENTS

15% seats for SC category, 7½% seats for ST category and 27% seats for OBC category are reserved for admission to the Under-graduate and Post-graduate courses. Moreover, 5% seats are reserved for Physically Handicapped students for admission to Under-graduate courses. These students can receive extra books from library as compared to General Category students. Concessional admission brochures are provided to SC/ST candidates for appearing in JEE examination conducted by CBSE. The Government also provides scholarships to SC/ST students. All SC/ST students of B.Tech. and M.Tech. courses have been granted tuition fee waiver.

7.2 CONCESSIONS PROVIDED FOR STAFF

Teaching Staff

15% reservation for SC category, 7½% reservation for ST category, 27% seats for OBC category and 5% reservation for physically handicapped candidates is provided at Assistant Professor level teaching posts as per reservation policy of Central Govt. However, there is no reservation for SC/ST/PH in teaching posts at Professor and Associate Professor levels.

Non-Teaching Staff

15% reservation for SC category, 7½% reservations for ST category, 27% seats for OBC category and 5% reservation for physically handicapped candidates is provided to all non-teaching posts as per reservation policy of Central Govt. The promotion and direct recruitment is being made according to the Post-Based-Roster Point.

8.0 FINANCIAL STATUS

8.1 ANALYSIS OF PLAN AND NON-PLAN GRANTS

Since inception of Institute, Government of India has been providing Plan Grant for development of Institute. Plan Grant is mainly released for construction of residences in the campus, hostel buildings construction/renovation of instructional building and other buildings, purchase of new equipments as well as for purchase of furniture for the Institute as well as hostels. On a perusal of the grant released by the Government of India for the last 10 years, Plan Grant to the tune of ₹ 3944.00 lacs for 2009-10, ₹ 2200.00 lacs for 2010-11, ₹ 4100.00 lacs for the year 2011-12, ₹ 3300.00 lacs for the year 2012-13, ₹ 1500.00 lacs for the year 2013-14, ₹ 3800.00 lacs for the year 2014-15, ₹ 5300.00 lacs for the year 2015-16, ₹ 4400.00 lacs for the year 2016-17, ₹ 7564 lacs for the year 2017-18 and ₹ 1542 lacs for the year 2018-19 are released.

8.2 SOURCES OF FUNDS

As per establishment of REC now known as NIT, Kurukshetra, the entire Non-plan expenditure on Undergraduate Courses was borne by Central and State Government on 50:50 bases. This practice remained intact up to 31.3.2003. Consequent upon conversion of REC to NIT, Government of India has taken over full administrative and financial control and the Central Government started bearing the expenditure on Undergraduate Courses on 100% basis. However, since the inception of the Institute, the expenditure on PG Courses is borne by the Central Government.

During the year 2018-19 funds to the tune of ₹ 1542.00 lacs and ₹ 11644.00 lacs under Plan (35) and Non-Plan (31&36) grant respectively has been released by the Department of Higher Education, Ministry of Human Resource Development, Govt. of India.

8.3 EXPENDITURE POSITION FOR LAST THREE YEARS

The position of expenditure from the year 2016-17 to 2018-19 is as under: -

Items	2016-17 (₹ in lacs)	2017-18 (₹ In Lacs)	2018-19 (₹ In Lacs)
Salary	3611.72	3740.91	5193.97
Other Salary Component	805.14	1708.33	548.62
Pension & Pensionary Benefits	2375.11	2777.62	3900.82
Scholarship/Fellowship	954.43	927.77	1095.39
Other Recurring Expenditure	516.46	620.70	830.47
Capital Expenditure	3247.50	5259.14	4648.35
Gross Expenditure (Rs.)	11510.36	15034.47	16217.62

In addition to above, Institute is timely depositing their statutory dues with State and Central Government. Details of the taxes collected & deposited during the financial year 2018-19 are as under:

Tax deducted at Source on Salary	₹ 1060.48 Lacs
Tax deducted at Source on Non-Salary	₹ 41.15 Lacs
Goods & Services Tax on Rental Income	₹ 2.20 Lacs
Goods & Services Tax on Consultancy Work	₹ 96.09 Lacs

9.0 CENTRAL FACILITIES AND SERVICES

9.1 COMPUTER SERVICES CENTRE

Centre of Computing and Networking (CCN) is the central computing and networking facility of the Institute entrusted with the following responsibilities:

1. Development of the computing and networking infrastructure
2. Maintaining and updating the Institute's website
3. E-mail services for the students, faculty and staff
4. Extending IT infrastructure for online tests for placement of the students
5. Development and operation of online applications
6. CCN has equipped with super computer Param Shavak from CDAC. The students and faculty are utilizing this facility for high end computing.
7. Printing and scanning facilities.

ADMINISTRATIVE AND TECHNICAL KEY PERSONS

Sr. No.	Name	Designation	Qualification
1	Prof Ashwani Kumar	Prof. in-Charge, CCN	Ph.D
2	Er. Jagan Nath	Officer in-Charge & Technical Officer	M.Tech
3	Er. Yogveer Singh Lamba	Technical Officer	MCA
4	Er. Himanshu Reddu	Technical Assistant	B.Tech

TIMING OF THE CENTRE

24x7 except exam and vacation period

NETWORKING FACILITIES

- Campus wide LAN on OFC backbone supported by two leased lines for internet access
 1. 1 Gbps NKN Leased line
 2. 500 Mbps
- Structured networking supporting 6000 nodes covering all hostels and residences of the employees.
- Wi-Fi Networking with the support of 2500 concurrent users
- Bio-Metric Attendance System (BAS) is being looking after by CCN.
- Installed Honey Pot Sensor (Raspberry Pi) under the project "Scalable Attack Data Capture and Analysis framework for CTI Generation " by C-DAC, Mohali

COMPUTING FACILITIES: HARDWARE RESOURCES

(a) Servers: 05

- (b) Desktop PCs (i7): 160
- (c) Video Conferencing device(s):05
- (d) Outdoor LED Panels installed at four prime locations in the campus.

Access Control/Security: UTM in HA mode

SOFTWARE PACKAGES

1. Matlab R2017a & R2017b
2. Antivirus solutions (Seqrite Endpoint Security by Quick Heal)
3. Word-processing: MS office Professional 2016

Power Back-Up:

UPS 24*7

9.2 CENTRAL WORKSHOP

The central Workshop comprises of the following fully equipped shops:-

- Machine Shop
- Fitting Shop
- Welding Shop
- Pattern Making Shop
- Foundry Shop
- Production Technology Lab.
- Advance Manufacturing System Lab.

The Central Workshop imparts training to all First & Second semester students and Third and Fourth semester students of Mechanical Engineering and Production & Industrial Engineering discipline. The third year students are given projects involving work in the shops and the Fourth year students undergo specialized training in manufacturing processes. The Final year and Postgraduate students in the discipline utilize the facilities of Workshop in connection with their project and dissertations. Facilities exist for manufacture of components, parts and repair jobs. It helps the students to understand the actual behavior and hardship of the industrial work culture and helps in building the confidence of the students in the various manufacturing processes.

9.3 LIBRARY

Institute has a very spacious Library with good collection of documents. It includes text and reference books, video cassettes, CD-ROMs and large number of Print & On-Line Journals. The Library has reading facilities for 500 readers at a time and sufficient space for stacking of documents, digital Library and Audio-Visual Centre. The total area of library is 36711Sq. ft.

Library Collection:

Stock	Total as on 31.03.2018	Added during 01.04.2018 to 31.03.2019	Total as on 31.03.2019	Withdrawn Books as on 31.03.2019	Total as on 31.03.2019
Books					
Library	62165	1738	63903	10714	53189
Book Bank	110575	3650	114225	36756	77469
Total	172740	5388	178128	47470	130658
Other Documents					
Back Sets	7097	-	7097	-	7097
Standards	10097	-	10097	-	10097
CDs/Video Cassettes	832	-	832	-	832
e-Books	9792	1136	10928	-	10928
Thesis	4784	643	5427	-	5427
Grand Total	205342	7167	212509	47470	165039

Library Hours

Reading Facility	:	24x7
Stack & Circulation, working days	:	08:30 AM to 08:00 PM
Saturday, Sunday & Holidays	:	10: AM to 05:00 PM

Print Journals

International	:	02
National	:	66
Gratis	:	13
Total	:	81

Library Automation System and Web-OPAC

Library is providing automated services in all sections of the Library using KOHA Software. Database of the Library is updated regularly and Readers can search the documents using Web-OPAC (Online Public Access Catalogue) at:
<http://172.16.101.63>

e-Shodh Sindhu (eSS)

The NITK Library is a core member of **e-Shodh Sindhu Consortium** set up by MHRD. Approximately 4200+ e-resources are subscribed/provided through the Consortium. To access online resources in the Institute premises, the library is

providing services through internally maintained web server. All these resources/e-journals can be accessed through library Intranet site **http://172.16.0.52**.

E-resources

The e-resources subscribed by the library are as under:

Sr. No.	Electronic Resources	URL
E-resources provided by e-Shodh Sindhu		
1.	ACM Digital Library	https://dl.acm.org/dl.cfm
2.	ASCE Journals Online	http://ascelibrary.org/
3.	ASME Journals Online	http://asmedigitalcollection.asme.org/
4.	Economic & Political Weekly	http://epw.in/
5.	ISID Database	http://isid.org.in/home.html
6.	JGate Plus (JCCC)	http://jgateplus.com/search
7.	JSTOR	http://www.jstor.org/
8.	Oxford University Press	http://www.oxfordjournals.org/
9.	Springer + Nature	https://link.springer.com/
10.	Web of Science	http://www.webofknowledge.com/
11.	South Asia Archive (NDL)	http://www.southasiaarchive.com/
12.	World Library(NDL)	http://community.worldlibrary.org/?affiliatekey=NDL-AF1230
Directly Subscribed by the Institute		
13.	ACI MCP+ Journal	http://standards.bsbedge.com/home.aspx
14.	AIP(2015-2016)	http://scitation.aip.org/
15.	ASCE Proceedings	http://www.asce.org/
16.	American Physical Society(APS)	https://journals.aps.org/browse.html
17.	Capitaline	http://www.capitaline.com
18.	CUP: Science & Technology	http://journals.cambridge.org/
19.	EzProxy	https://nitkelibrary.informaticsglobal.com/login
20.	Emerald	https://www.emeraldinsight.com/

21	IEEE/IEL	https://ieeexplore.ieee.org/Xplore/home.jsp
22	Proquest Database: Thesis	http://search.proquest.com/
23	Sage Publication: IMeche	http://online.sagepub.com/browse/by/title/
24	Science Direct Journals with Back Files (Vol. 1 Issue 1)	www.sciencedirect.com/
25	SciFinder	https://scifinder.cas.org
26	Springer Journals with (Back Files Engg. & computer Sci)	http://link.springer.com/
27	T&F: 351 Journals	http://www.tandfonline.com/
28	Turnitin (for Plagiarism)	http://turnitin.com/
29	Wiley: 117 Journals (2018)	http://onlinelibrary.wiley.com/
30	SIAM (2008-2009)	Intranet Version (http://172.16.0.52)
31	NPTEL Web & Video Courses	Library Server (http://172.16.0.50/localguru) User Name: library Password: library)
Standards		
32	ASTM Digital library + Standards	https://compass.astm.org
33	ASME Standards	http://asmedigitalcollection.asme.org/index.aspx
34	Indian Standards	https://standards.bsb.co.in
35	BS Civil Engg Standards (2016)	Intranet Version (http://172.16.0.52)
36	IEC Standards (upto 2018)	http://standards.bsbedge.com/home.aspx
E-Books		
37	Cambridge University Press	http://ebooks.cambridge.org
38	CRC/Taylor & Francis	http://www.tandfonline.com/
39	EBSCO	http://web.ebscohost.com
40	Elsevier/ Science Direct	http://www.sciencedirect.com
41	MGH: Access Engineering	http://accessengineeringlibrary.com
42	Springer: Engineering + LNCS	http://www.ebooks.springerlink.com

43	Wiley	http://onlinelibrary.wiley.com
44	World Scientific	http://www.worldscientific.com/

Expenditure (2018-19)

Books	63,73,153.00
Journals, e-resources	2,28,18,860.43
Library Expenses	3,44,449.00

User can also visit the sites for search of Journals, Proceedings of Conferences, Standards, articles etc. covered under respective e-resources.

NPTEL Web & Video Courses

The Library has procured NPTEL Web & Video Courses designed & developed by IITs, in various discipline of Engineering & Sciences for the use of Faculty Members, Research Scholars & Students. Users can access these video courses through Library intranet site <http://172.16.0.50/localguru/>

JGate Plus

J-Gate Custom Content for Consortium (JCCC) is a virtual library of journal literature created as a customized e-journals access gateway and database solution. It acts as a one-point access to 7900+ journals subscribed currently under UGC INFONET Digital library consortium as well as university libraries designated as Inter Library Loan (ILL) Centers besides index to open access journals.

EzProxy

The Library has procured EzProxy software, through which the users can access to the e-resources of the library, when they are outside the campus.

The procedure to access the subscribed e-resources outside the campus is as under:

Visit the URL: <https://nitklibrary.informaticsglobal.com/login>

User Name: < Enter your official email id without domain name>

For example: if your email id is test@nitkkr.ac.in, then please enter test only.

Password: < Enter your official email password>

If you do not have official email of NITK, please contact the Technical officer, CCN NITK.

Anti-Plagiarism Software (Turnitin)

The library has subscribed to anti plagiarism software Turnitin for all the Faculty Members, Research Scholars and Students. The users can check the plagiarism of their research papers, articles, thesis, dissertation etc. using this facility.

Library Membership & Loan privileges

Students, Teachers, Research Scholars and staff of the Institute are admitted as members of the library on the recommendation of the Head of the department/section concerned. Library membership forms can be obtained and submitted at the circulation counter in the library. The number of books that may be borrowed by each category of members and the period of loan is as under:

Category of Members	No. of Books on Loan	Period of Loan
Faculty	20	One Month
Research Scholars	5	One Month
PG	5	One Month
UG	3	14 days
Non-Teaching	5	One Month
Book Bank (All Students)	6-8	Full Semester

UTILIZATION (USE OF LIBRARY)

Number of books issued during 2018-2019	1,66,444
Number of Visitors during 2018-2019	4,91,528
Total No. of Membership during 2018-2019	1,500

Book Bank Facilities

The Library Book Bank is one of the richest Book Banks in the country. All B.Tech, M.Tech, MBA and MCA students are given 6-8 books for full semester from Book Bank.

Reprographic Facilities

A contractor is appointed to provide the Reprographic Services to the readers. Reproduction from books, periodicals & other material is provided @ 50 paisa per copy.

Binding

The library has its own bindery. It is equipped with cutting, stitching, spiral binding and lamination machines. During the period under report, it bound and repaired 7555 Books, Institute reports and other binding works.

9.4 LABORATORIES

Civil Engineering Department

- Soil Mechanics
- Foundation Engineering
- Rock Mechanics
- Structural Engineering
- Concrete Technology
- Fluid Mechanics
- Irrigation Engineering
- Surveying
- Highway Engineering
- Environmental Engineering
- Geology
- Departmental Computer Centre

Computer Engineering Department

- Application & Systems Software Lab.
- Computer Networks Lab.
- Software Engineering & Web Engineering Lab.
- Computer Hardware & Trouble Shooting Lab.
- Thin Client Lab.
- Mobile Computing Lab.
- Wireless & Sensor Network Lab.
- Project Lab.

Electrical Engineering Department

- Machines and Drives Lab.
- Power Systems Lab.
- Basic Electrical Engg. & Measurements Lab.
- High Voltage Engg. Lab.
- Control Systems & Reliability Engg. Lab.
- Power Electronics Lab.
- Computer Systems Lab.
- Microprocessor Lab.
- Instrumentation Lab.
- Signal and DSP Lab.

- Analog & Digital Electronics Lab.
- CAD Lab.
- Electrical Workshop

Electronics & Communication Engineering Department

- Computer Centre
- Basic Electronics Laboratory
- Advanced Electronics Laboratory
- VLSI Design (PG) Laboratory
- VLSI Design (UG) Laboratory
- DSP Laboratory
- Computing and Simulation Laboratory
- Communication Laboratory
- Microwave Laboratory
- Wireless Communication (PG) Lab.
- Microprocessor Laboratory
- Internet Application Laboratory
- Audio-Visual Laboratory

Mechanical Engineering Department

- Applied Mechanics Lab.
- Strength of Materials Lab
- Dynamics of Machines Laboratory
- Vibration Lab.
- IC Engine Lab.
- Boilers & Steam Engine Lab.
- Refrigeration & Air Conditioning Lab.
- Energy Engineering Lab.
- Computer and Automation Centre
- Mechanical Measurements Lab.
- Heat Transfer Lab.
- Industrial Engineering Lab.
- Machine Tool Technology Lab.
- Metrology Lab.
- Advanced Welding Lab.
- CAD/CAM Lab.
- Fluid Mechanics and Hydraulic Machines Lab.
- Machine Vision Lab.
- Mechatronics Lab.
- Advance Manufacturing Technology Lab.
- Computational Fluid Dynamics Lab.
- Tribology Lab.

- Stress Analysis Lab.
- Design and Manufacturing Integration Lab.
- PRIDE Lab.
- Production Technology Lab.
- Entrepreneurship Development Lab.
- Mechanics of Machines Lab.

Physics Department

- Undergraduate laboratory for experiments in Heat, Light, Sound, electricity and magnetism. Atomic Physics and Solid-state Physics
- Postgraduate laboratory in instrumentation.
- Postgraduate laboratory in Nanotechnology.
- Research laboratory.
- Highly sophisticated Instrumentation Lab (AFM, SEM, XRD, XRF, NaI, Env. Chamber, DC resistivity)
- Probe Station
- Potentiostat- Electrostat
- Spin coater
- Laminar Air flow

Chemistry Department

- Undergraduate Laboratory for qualitative and quantitative analyses of the sample salts, quantitative etc.
- Inorganic and Organic Research Lab.
- Spectral Lab for light scattering, Polarography, IR Spectra, FTIR, Spectrophotometer Experiments and Research Work

Humanities And Social Sciences Department

- Computer Lab.
- Language Lab.

Computer Application Department

- Computer Hardware & Microprocessor Lab
- Computer Network & Programming Lab
- Software Engineering & Project Lab
- Research Lab
- Projects Lab

9.5 HOSPITAL, BANK, POST OFFICE, SHOPPING CENTRE

Hospital

Institute has a Health Centre and all students are provided medical aid at this center within the available resources. The Health Centre has Senior Medical Officer (SMO), Medical Officer, Dental Surgeon (Part-time) and supporting staff. Health Centre is equipped with Digital X-ray machine, Computerised E.C.G. machine, dental facilities and good laboratory for routine tests. Serious medical cases are sent to the LNJP (Civil) Hospital in Kurukshetra.

Whenever a student falls ill, he/she reports and seeks advice/medical aid from SMO without delay. Students are advised not to seek treatment from unauthorized medical practitioners.

Students are advised to approach LNJP (Govt. Civil Hospital) in case of Emergency. They are advised to bring Mosquito Net and the Mosquito repellent to prevent themselves from malaria fever. Further, they are advised to maintain cleanliness and proper hygienic atmosphere in their surroundings.

Bank and Post office

To facilitate all financial transactions, a fully computerized branch of the State Bank of India functions in the Institute premises.

For the convenience of the students a Post-Office is operating in shopping complex. It provides Saving Bank facility plus provisions for Money Orders, Postal Orders, Postage, etc.

Shopping Centre

The Institute has a Shopping Centre equipped with all the basic commodities of the human beings for the residents of the Campus as well as for the hostel students.

9.6 PHYSICAL FACILITIES

Gymnasium Centre has been provided for health upkeep of students and staff members. It is fitted with the latest and state of the art equipments for different physical exercises.

9.7 GAMES & SPORTS FACILITIES

Extensive and well laid out fields for sports and games are available on the campus for the students. Badminton courts, Tennis courts with Chain Link Iron mesh around the courts, Cricket Pitch, Volleyball courts with Light and with Chain Link Iron mesh encloser and basketball and a stadium facility are available to the students. Trained sports personnel help the students to develop their interest in games and coach them to acceptable standards.

9.8 OTHER FACILITIES LIKE HOSTELS, STAFF QUARTERS, ADMINISTRATION ETC.

a) Management of Hostels

The Institute has 11 Boys and 4 Girls hostels with a capacity of 3700 nos. and 1200 no. of students, respectively having mostly single seater rooms for UG, PG, and Ph.D. students. The hostels also have double and three-seater rooms.

All rooms in the hostels have been provided with furniture, ceiling fans and LAN connection/R.O., first aid facility (Wired/Wireless). Each hostel is a self-contained unit with its own mess/common room and outdoor games facilities. Common room facilities include newspapers, magazines, indoor games and a LED. Common gymnasium is there in one of the hostels (Boys and Girls) of Boys and Girls, respectively. From the session 2019-20, each hostel (Boys & Girls) have been provided with the CCTV camera and biometric attendance.

b) Staff Quarters

Category	Type of House	No. of Houses
A	Director's	01
B	BT type houses	20
	BA type houses	06
	BB type houses	16
	BC type houses	06
C	CT type houses	20
	CA type houses	13
	CB type houses	09
	AD-type (AD-1,2,3,4)	04
	CC type houses	12
	AD-type (AD-5,6)	02
	DA type houses	15
D	DB type houses	68
	Teacher's Flats (Faculty House)	24
E	E type houses	24
F	F type houses	78
G	G type houses	92

Allotment

The quarters are allotted to the employees on the basis of seniority. Two House Allotment Committees, for teaching and non-teaching separately, have been constituted for the allotment of House as per the availability of the quarters on the request of employees.

c) Conference Facility

NITK has a state-of-the-art Senate Hall. It is an aesthetically designed and conveniently located conference facility. It is constructed on a raft foundation and RCC frame structure, incorporating earthquake resistant features. The unique architecture of the building depicts a combination of round and linear structure with a polycarbonate dome on the top. The Senate Hall makes the Institute well-equipped to hold conferences, seminars, workshops etc. All Lectures given by the Guest Faculty and Corporate Managers are arranged here. In addition to this, every department has its own well-equipped state-of-art conference room for meetings, seminars, video conferencing, viva-voce examination and other academic purposes. Video conference facility is also available in CCN, central library, Board Room, Interview Room and Director's Office.

d) Student Activity Centre

Student Activity Centre provides facilities and the right environment to develop extra curricular skills among the students in addition to the academic knowledge rendered by the Institute. SAC has all the resources to help the students, pursue interests in various cultural activities. The following clubs are functioning under the SAC:

1. Music & Dance
2. Dramatics
3. Fine arts
4. Modeling
5. Literary & Debating
6. Photography
7. AVA
8. SPIC-MACAY
9. Hiking & Trekking

Inter hostels and inter Institute competitions are organized to inculcate the spirit of healthy competitions. In addition to this, National level cultural festival is organized every year. Students are also encouraged to compete in cultural activities with other technical Institutes. A talent show is organized every year to identify talent lying hidden among the first-year students.

All these activities are organized by a committee of Secretaries of the Club and Faculty Incharge of various clubs under the overall guidance and supervision of President (Clubs).

e) National Cadet Corps

National Cadet Corps is a vibrant youth organization which has made a commendable contribution in producing responsible and patriotic citizens of India. From a small beginning, today it has grown to the largest youth movement motivating

and training the upcoming generations to render their meaningful contribution towards national integration and development.

The Institute has NCC Army Wing unit which has a sanctioned strength of 54 cadets. Enrolment to NCC is voluntary and is done on “First Come First Served” basis. NCC credo-unity and discipline is truly symbolic of the organization and NCC cadets of the Institute, dedicated to this motto, participate in the various activities of NCC which are Basic Training, Adventurous Activities, Social Service Activities, NCC Camps etc.

f) Institute Magazine

The students bring out an annual Magazine, “THE HELIOS”, in which technical and literary articles contributed by students are published in both English and Hindi. The Editorial Board also organizes various competitive activities like creative writing, cartooning, photography etc. so as to nurture creative talents among students of Institute.

g) NITK Alumni Association

There is an Alumni Association to which all those who have passed an approved course of study from this Institute and members of teaching staff who have three years stay in the Institute are eligible to become members on payment of subscription.

The Association strives to develop and promote a feeling of fraternity amongst the old students, the present students and members of the teaching staff of the Institute.

It maintains a record of all its members and keeps them informed of the activities and progress of this Institute through a newsletter and arranging get-togethers from time to time.

The Alumni Association also awards a scholarship of the value of Rs. 2400/- per annum to deserving candidates.

10.0 NOTABLE ACHIEVEMENTS

10.1 PAST ACHIEVEMENTS

1. Institute was awarded International Standard Organization (ISO) 9002 Certificate in February, 2001. This certificate was awarded by the Govt. of India, Ministry of Information Technology, for the departments of Electronics & Communication as well as Computer Engineering.
2. Technical Education Quality Improvement Programme (TEQIP), funded by World Bank, aims to upscale the on-going initiatives of GOI to enhance efficiency and dynamism in technical education. It was launched by MHRD as a Rs. 1550 crore programme during 10th Plan. Haryana is one of the six states which was selected to participate in the first cycle of the first phase of the programme, based on their commitment and preparedness for the project. The agreements were signed in February 2003 between GOI, the six participating states and World Bank.
3. Central Government has taken over full administrative and financial control of this Institute w.e.f. 14.5.2003. The plan and non-plan expenditure of the Institute are being borne entirely by the Central Government from the financial year 2003-04 onwards.
4. As per directions of the MHRD and the initiative of the Director, a 20-year roadmap for the Institute was prepared. A committee was constituted to set the goals and draw up the roadmap. It was felt that Institute needs to be prepared to face the challenges of the future. Rapid advances in the field of engineering and technology necessitated commencement of new courses in emerging areas and initiatives to facilitate enhanced research. This, in turn, called for upgradation of facilities and strengthening of faculty and staff.
5. A special initiation has been taken by the Institute for the development of research activities in the Institute to boost the status of the Institute equivalent to IIT.
6. Institute was actively engaged in providing the consultancy services to various Govts., Semi-Govts. and Private organizations. During the period from 1.4.18 to 31.3.19, one thousand nine hundred five (1905) consultancy jobs were finalized by the Institute and earned around Rs. 706.66 lacs as consultancy fees.
7. The 20-year Road Map- 2006 was a bold initiative by way of increased intake and new courses. The Ministry of Human Resources Development approved

the following new courses for PG and UG Programme with an intake mentioned against each in addition to enhancing the existing intake of some courses:-

UNDERGRADUATE COURSES - B.TECH. DEGREE COURSES

Courses of study were offered in the following disciplines:

<u>Discipline</u>	<u>No. of seats</u>
Civil Engineering	146
Electrical Engineering	141
Mechanical Engineering	156
Electronics & Communication Engineering	138
Computer Engineering	93
Production & Industrial Engg.	94
Information Technology	94
Total	862

Note: Dasa/NRI students can be admitted upto 15% over and above of the sanction strength of B.Tech. (i.e. 15% of 832)

POSTGRADUATE COURSES - M.TECH. DEGREE COURSES

The seats available for admission though CCMT-2018 are given below:

Deptt./ School	M.Tech. Programme	OP	OBC	SC	ST	OP PWD	OBC PWD	SC PWD	ST PWD	Total
Civil Engineering	Soil Mechanics & Foundation Engg.	9	5	3	1	-	-	-	-	18
	Structural Engg.	9	5	4	1	-	-	-	-	19
	Water Resources Engg.	9	4	3	1	-	-	-	-	17
	Transportation Engg.	9	4	4	1	-	-	-	-	18
	Environmental Engg.	9	6	2	1	1	1	1	-	21
Electrical Engineering	Power System	10	5	3	2	-	-	-	-	20
	Control System	10	5	4	1	-	-	-	-	20
	Power Electronics & Drives	10	5	3	1	1	-	-	-	20
Electronics & Comm. Engg.	Electronics & Comm. Engg.	12	6	4	2	-	-	-	-	24
Physics	Instrumentation	10	5	3	2	-	-	-	-	20
	Nanotechnology	9	6	2	2	1	-	-	-	20
Mechanical Engg.	Industrial & Production Engg.	10	5	4	1	-	-	-	-	20
	Machine Design	10	5	4	1	-	-	-	-	20
	Thermal Engineering	11	6	2	3	-	1	-	1	24
Computer	Computer Engg.	13	7	3	1	-	1	-	-	25

Engg.	Cyber Security	9	5	3	2	1	-	-	-	20
Chemistry	Molecular Engg. & Advanced Chemical Analysis	9	5	3	2	1	-	-	-	20
School of VLSI Design & Embedded System	VLSI Design	14	8	3	4	2	1	-	-	32
	Embedded System Design	9	5	3	2	-	-	1	-	20
School of Renewable Energy & Efficiency	Renewable Energy Systems	9	5	3	2	1	-	-	-	20
School of Biomedical Engg.	Biomedical Engg.	9	5	3	2	1	-	-	-	20
School of Material Science & technology	Material Science & technology	9	5	3	2	1	-	-	-	20
GRAND TOTAL		218	117	69	37	10	4	2	1	458

The Institute made admissions directly through Institute level counseling in the academic session 2018-18 on sponsored seats for all branches and specializations. The number of seats available in each category for admission through this mode are given below:

(ii) Sponsored seats:

Deptt./ School	M.Tech. Programme	OP	OBC	SC	ST	OP PWD	OBC PWD	SC PWD	ST PWD	Total
Civil Engineering	Soil Mechanics & Foundation Engg.	3	1	1	-	-	-	-	-	5
	Structural Engg.	3	1	1	-	-	-	-	-	5
	Water Resources Engg.	2	2	-	1	-	-	-	-	5
	Transportation Engg.	2	1	1	-	-	1	-	-	5
	Environmental Engg.	2	1	1	1	-	-	-	-	5
Electrical Engineering	Power System	2	2	0	1	-	-	-	-	5
	Control System	2	2	1	-	-	-	-	-	5
	Power Electronics & Drives	3	1	1	-	-	-	-	-	5
Electronics & Comm. Engg.	Electronics & Comm. Engg.	3	1	1	-	-	-	-	-	5
Physics	Instrumentation	2	2	1	-	-	-	-	-	5
	Nanotechnology	2	2	-	-	1	-	-	-	5
Mechanical Engg.	Industrial & Production Engg.	2	2	0	1	-	-	-	-	5
	Machine Design	2	1	1	-	1	-	-	-	5
	Thermal Engineering	3	1	1	-	-	-	-	-	5
Computer Engg.	Computer Engg.	3	1	1	-	-	-	-	-	5
	Cyber Security	2	1	1	1	-	-	-	-	5

Chemistry	Molecular Engg. & Advanced Chemical Analysis	2	1	1	1	-	-	-	-	5
School of VLSI Design & Embedded System	VLSI Design	3	1	1	-	-	-	-	-	5
	Embedded System Design	3	1	1	-	-	-	-	-	5
School of Renewable Energy & Efficiency	Renewable Energy Systems	2	1	1	1	-	-	-	-	5
School of Biomedical Engg.	Biomedical Engg.	2	1	1	1	-	-	-	-	5
School of Material Science & technology	Material Science & technology	2	2	1	-	-	-	-	-	5
	GRAND TOTAL	52	29	17	9	2	1	-	-	110

8. The Institute received the Enertia award for excellent initiatives in the area of renewable energy and energy efficiency.
9. The Ph.D. scholarships for Research Scholars have been increased from 10 to 64 per year.
10. B.Tech. curriculum has been revised from the academic year 2017-18. Entirely new curriculum was designed in sync with recent developments in the engineering streams and need of the industry.

10.2 ACHIEVEMENTS DURING THE YEAR 2018-19

1. The Institute participated in NIRF ranking. NIT Kurukshetra improved to 7th position from 12th position among 31 NITs in the country.
2. The Institute has been selected under TEQIP-III with focus on twining system involving Govt. Engineering College, Bikaner as the mentee Institute.
3. The Institute has been designated as one of 40 Regional Coordinating Institutes (RCI) all over India under Unnat Bharat Abhiyan (UBA) with IIT Delhi.
4. More than 85% of UG students have been placed through campus with highest package of 40 lakhs.
5. More than 60 industry professionals/faculty/students were trained on emerging technologies resulting in IRG of Rs. 17 lakhs.

6. A one day workshop on “DRDO Academic Meet: Research opportunities in Defence Sector” was organized by Armament Research Board (ARMREB), DRDO, Delhi and hosted by NIT Kurukshetra on November 30, 2018.
7. A one week GIAN course on “Electrochemical Energy Conversion and Storage” was organized in the Institute.
8. The following Construction works were finished during the year 2018-19:
 - a. Construction of 300 Seaters Multi-purpose boys hostel including 100 suits for foreign students, research scholars and married PG Students. (Multi-storeyed framed structure). (Ground Floor +5).
 - b. Providing Kitchen equipment in 600 seater Girls Hostel (multi- storeyed) RCC framed structure (Ground +5) at NIT, Kurukshetra
9. The following works are under progress:
 - a. Preparation of Institute Master Plan of NITK.
 - b. Providing & Installation of Electrical Sub-station HT/LT Distribution and feeder pillars in residential area at NIT, Kurukshetra.
 - c. Construction of Indoor Badminton Hall at NIT, Kurukshetra
 - d. Provision of additional floor by providing Pre-fab construction with the provision of Central Air-conditioning, lifts & staircase etc. over the Old MBA/New Workshop Building and renovation of existing workshop building for heavy machinery at NIT, Kurukshetra.
10. AEoN Centre of Excellence has been started in collaboration with AEoN Learning Pvt. Ltd., Bangalore for training of industry professionals, faculty, and students on emerging technologies. The establishment of Siemens Centre of Excellence, Atal Incubation Centre, Internet of Things, and other collaborative activities with premier industries, government agencies and alumni support are in progress. The process has been initiated to establish the Centre of Cyber Security under Atal Innovation Mission.

11.0 ANNEXURES

11.1 INSTITUTE'S (NIT) COUNCIL

The composition of the Members of the Council is as under:-

1.	Minister of Human Resource Development, Government of India	Chairman
2.	Secretary, Department of Secondary and Higher Education, Ministry of HRD, Government of India	Member
3.	Principal Adviser (Education Planning Commission)	Member
4.	Secretary, Deptt. of Science & Technology, GOI	Member
5.	Director General, Council of Scientific & Industrial Research, Government of India	Member
6.	Secretary, Deptt. of Biotechnology, Government of India.	Member
7.	Secretary, Atomic Energy, Government of India	Member
8.	Secretary, Deptt. of Information Technology, GOI	Member
9.	Secretary, Deptt. of Space, Govt. of India.	Member
10.	Special Secretary/Addl. Secretary/ Educational Adviser(T), Department of Secondary & Higher Education, Ministry	Member
11.	Chairman, University Grants Commission	Member
12.	Chairman, All India Council of Technical Education	Member
13-14	Two Chairmen, Board of Governors of National Institute of Technology (by rotation)	Members
15-18	4 Directors of the National Institutes of technology (by rotation)	Members
19.	One Director of Indian Institute of Technology (by rotation)	Member
20.	One Director of Indian Institute of Management (by rotation)	Member
21-22	Two Secretaries of Higher/Technical Education from states where NITs are located (by rotation)	Members
23-24	Two persons from Industry nominated by the Central Government	Members
25.	Financial Adviser, MHRD, GOI	Member
26.	Joint Secretary, (Technical Education) Joint Educational Adviser (Technical Education), MHRD, GOI	Member-Secretary

11.2 BOARD OF GOVERNORS

Sr.No.	Composition	Members
1.	Chairperson	Sh. Jagdish Khattar Hon'ble Chairperson NIT Kurukshetra
2.	Director-ex officio	Dr. Satish Kumar Director NIT Kurukshetra
3 & 4.	Two Nominee of Central Govt. (persons dealing with Technical Education & Finance)	Additional Secretary (Technical Education) Ministry of Human Resource Development, Govt. of India, Shastri Bhawan, New Delhi Joint Secretary & Financial Advisor Integrated Finance Division Ministry of Human Resource Development, Govt. of India Shastri Bhawan, New Delhi
5 & 6	Two Nominee of State Govt. (Techno-logists or industrialists of repute)	Principal Secretary to the Government Technical Education Haryana Chandigarh Director General Technical Education Department Government of Haryana Chandigarh
7 & 8	Two persons having special knowledge in respect of education, engg. or science	Dr. Pawan Kumar Garga Director & Professor HP University Business School Summer Hill, Shimla (HP) Ms. Bhagyest Soneji 204-206, Kirtiman Opp. Kadvapatidr Hostel Off.C.G. Road, Ahmedabad Gujrat, India
9.	Director of the IIT in whose zone the NIT is	Director or his nominee Indian Institute of Technology

	located	Ropar (Punjab)
10.	One Professor of the Institute	Prof. S.K. Madan Professor, Civil Engg. Deptt. NIT Kurukshetra
11.	One Associate Prof. of the Institute	Sh. Karan Sharma Asstt. Prof., ECE Deptt. NIT Kurukshetra
12.	Secretary	Prof. Surinder Deswal Registrar I/C NIT Kurukshetra.

11.3 FINANCE, BUILDING AND WORKS AND OTHER COMMITTEES

FINANCE COMMITTEE

FINANCE COMMITTEE

Sr.No.	Composition	Members
1.	Chairperson, Board of Governors, Ex-officio	Sh. Jagdish Khattar Hon'ble Chairperson NIT Kurukshetra
2	Director-ex officio	Dr. Satish Kumar Director NIT Kurukshetra
3 & 4	Joint Secretary dealing with NIT and Financial Advisor (HRD)	Mr. S. P. Goyal, IAS Joint Secretary Technical Government of India, Ministry of Human Resource Development, Department of Higher Education, Shastri Bhawan, New Delhi. Mrs. Darshana M. Dabral Joint Secretary & Financial Advisor (IFD) Government of India Ministry of Human Resource Development, Department of Higher Education, Shastri Bhawan New Delhi
5.	Two persons nominated by the	Dr Pawan Kumar Garga Professor, Himachal Pradesh

	Board	University Bussiness School Summer Hill Shimla Dr. S.K. Madan Professor Civil Engineering Department, National Institute of Technology, Kurukshetra)
6.	Ex-Officio Member-Secretary	Prof. Surinder Deswal Registrar I/C NIT Kurukshetra.

BUILDING & WORKS COMMITTEE

Sr.No.	Composition	Members
1.	Chairman	Dr. Satish Kumar Director NIT Kurukshetra
2.	One person nominated by the Central Government not below the rank of Director or Deputy Secretary	Nominee of the Central Government On the B&WC of the Institute, (to be nominated by the MHRD) Through Director (NITs) Deptt. of Higher Education MHRD, Shastri Bhawan New Delhi-110001
3.	One person nominated by the Board of Governors	Shri A K Singhal Director General (Retired), P.W.D., Flat No. B-2012 Gaur Green City Vaibhav Khand, Indirapuram, Distt. Ghaziabad- 202020(UP)
4.	Dean, Planning & Development	Prof. A. Swarup Dean (Planning & Development), NIT Kurukshetra.
5.	One expert from Civil Engineering Wing of the Central or State Government or any autonomous body of repute	Er. C.J. Pasrija Executive Engineer (Civil), Karnal Central Division, CPWD NDRI Campus, Near SBI, Karnal (Haryana)-132001
6.	One expert from Electrical Engineering	Er. Rajeshwar Tyagi Executive Engineer (Electrical), Karnal Central Electrical Division, 208-D,

	Wing of the Central or State Government or any autonomous body of repute	HSIIDC, Sector-3, Karnal (Haryana)-132001
7.	Special Invitee	Dr S.M. Gupta Prof. in-charge (Estate & Construction), National Institute of Technology, Kurukshetra Dr. Aiedapu Mahesh Faculty- in- Charge (Elect. Mtc & Telephone) National Institute of Technology Er. S N Kaushik Assistant Engineer (Civil)
8.	Member-Secretary	Prof. Surinder Deswal Registrar I/C NIT Kurukshetra.

SENATE

Sr.No.	Composition	Members
1.	Ex-Officio Chairman	Dr. Satish Kumar Director NIT Kurukshetra
2,3 & 4	Three Educationists of repute	Prof. Konduri Raja Rajeswari Professor, Department of Electronics & Comm. Engg. & Principal Viswanadha Institute of Technology and Management, Mindivanipalem Village, Anandhapuram Mandal Visakhapatnam Prof. Yashwant Singh Distinguished Professor Department of Physics BanarasHinduUniversity Varanasi Prof. D.K. Nauriyal Department of Humanities & Social

		Science Indian Institute of Technology Roorkee Roorkee
5.	All Professors and such other members of the staff	<p>Dr. V.K. Arora Professor, Civil Engg. Department NIT Kurukshetra</p> <p>Dr. A. Swarup Professor & Dean (P&D) Electrical Engg. Deptt. NIT Kurukshetra</p> <p>Dr. Brahamjit Singh Professor & Dean (R&C) ECE Department NIT Kurukshetra</p> <p>Dr. (Ms.) Minati Baral, Professor Chemistry Department, NIT Kurukshetra.</p> <p>Dr. K.S. Sandhu Professor & Dean (Academic) Electrical Engg. Deptt., NIT Kurukshetra</p> <p>Dr. Baldev Setia Professor, Civil Engg. Deptt., NIT Kurukshetra</p> <p>Dr. Rajender Kumar Professor & Dean (SW) Department of Humanities & Social Sciences, NIT Kurukshetra</p> <p>Dr. S.K. Madan, Professor, Civil Engg. Deptt. NIT Kurukshetra</p> <p>Dr. H.K. Sharma, Professor,</p>

		<p>Civil Engg. Deptt. NIT Kurukshetra</p> <p>Dr. Lillie Dewan, Professor, Electrical Engg. Deptt. NIT Kurukshetra</p> <p>Dr. S.N. Sachdeva, Professor, Civil Engg. Deptt. NIT Kurukshetra</p> <p>Dr. Dixit Garg, Professor, Mechanical Engg. Deptt., NIT Kurukshetra</p> <p>Dr. Sathans, Professor Electrical Engg. Deptt. NIT Kurukshetra</p> <p>Dr. Surjit Angra Professor, Mechanical Engg. Deptt., NIT Kurukshetra</p> <p>Dr. R.S. Bhatia Professor, Electrical Engg. Deptt. NIT Kurukshetra</p> <p>Dr. G.L. Pahuja Professor, Electrical Engg. Deptt. NIT Kurukshetra</p> <p>Dr. K.K. Singh Professor, Civil Engg. Deptt. NIT Kurukshetra</p> <p>Dr. Subodh Ranjan Professor, Civil Engg. Deptt.</p>
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		<p>NIT Kurukshetra</p> <p>Dr. (Ms.) Ratna Dahiya Professor Electrical Engg. Deptt. NIT Kurukshetra</p> <p>Dr. Anupam Mittal Professor, Civil Engg. Deptt. NIT Kurukshetra</p> <p>Dr. Dinesh Khanduja Professor, Mech. Engg. Deptt. NIT Kurukshetra</p> <p>Dr. R.K. Sharma Professor, Electronics & Comm. Engg. Deptt. NIT Kurukshetra</p> <p>Dr. O.P. Sahu Professor Electronics & Comm. Engg. Deptt. NIT Kurukshetra</p> <p>Dr. S.M. Gupta Professor Civil Engg. Deptt. NIT Kurukshetra</p> <p>Dr. Arun Goel Professor & Dean (FW) Civil Engg. Deptt. NIT Kurukshetra</p> <p>Dr. Dinesh Kumar Professor, Chemistry Deptt. NIT Kurukshetra</p> <p>Dr. D.P. Singh Professor, Chemistry Deptt. NIT Kurukshetra</p>
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		<p>Professor Civil Engg. Deptt. NIT Kurukshetra</p> <p>Dr. (Ms.) Pratibha Aggarwal Professor Civil Engg. Deptt. NIT Kurukshetra</p> <p>Dr. (Ms.) Saraswati Setia Professor Civil Engg. Deptt. NIT Kurukshetra</p> <p>Dr. Parveen Aggarwal Professor Civil Engg. Deptt. NIT Kurukshetra</p> <p>Dr. A.K. Singh Professor Computer Engg. Deptt. NIT Kurukshetra</p> <p>Dr. Mayank Dave Professor Computer Engg. Deptt. NIT Kurukshetra</p> <p>Dr. S.K. Jain Professor Computer Engg. Deptt. NIT Kurukshetra</p> <p>Dr. R.K. Aggarwal Associate Professor & HOD Computer Engg. Deptt. NIT Kurukshetra</p> <p>Dr. Ashwani Kumar Professor Elect. Engg. Deptt. NIT Kurukshetra</p> <p>Dr. (Ms. Jyoti Ohri Professor Elect. Engg. Deptt.</p>
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		<p>NIT Kurukshetra</p> <p>Dr. J.S. Lather Professor Elect. Engg. Deptt. NIT Kurukshetra</p> <p>Dr. Yash Pal Professor Elect. Engg. Deptt. NIT Kurukshetra</p> <p>Dr. Rajoo Pandey Professor Electronics & Comm. Engg. Deptt. NIT Kurukshetra</p> <p>Dr. Umesh Ghanekar Professor Electronics & Comm. Engg. Deptt. NIT Kurukshetra</p> <p>Dr. Vikas Mittal Associate Professor & HOD Electronics & Comm. Engg. Deptt. NIT Kurukshetra</p> <p>Dr. Pankaj Chandna Professor Mech. Engg. Deptt. NIT Kurukshetra</p> <p>Dr. V.K. Bajpai Professor Mech. Engg. Deptt. NIT Kurukshetra</p> <p>Dr. Gian Bhushan Professor Mech. Engg. Deptt. NIT Kurukshetra</p> <p>Dr. Ajai Jain Professor Mech. Engg. Deptt. NIT Kurukshetra</p>
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		<p>Dr. Ashavani Kumar Professor Physics Department NIT Kurukshetra</p> <p>Dr. (Ms.) Neena Jaggi Professor Physics Department NIT Kurukshetra</p> <p>Dr. Ashutosh Kumar Singh Professor Computer Application Department NIT Kurukshetra</p> <p>Dr. ASV Ravi Kanth Associate Professor & HoD Mathematics Department NIT Kurukshetra</p> <p>Dr. Vikas Choudhary Professor Department of Humanities & Social Sciences, NIT Kurukshetra</p> <p>Dr. (Ms.) Kiran Mor Professor Department of Humanities & Social Sciences, NIT Kurukshetra</p> <p>Dr. Neeraj Kaushik Associate Professor & HOD Business Admn. Department NIT Kurukshetra</p> <p>Sh. Karan Sharma Assistant Professor Electronics & Comm. Engg. Deptt. NIT Kurukshetra</p>
6.	Member-Secretary	<p>Prof. Surinder Deswal Registrar I/C NIT Kurukshetra</p>

11.4 RESEARCH PROJECTS AND CONSULTATION JOBS

The Government of India has been releasing grant under the head Schemes i.e. MODROB, R&D, NBHM, SERB and thrust Area. A large number of schemes have been sanctioned to the Institute and as on 31.03.2019, following are the sanctioned schemes as per details given below:-

(Figures in Lacs)

Sr No.	Name & Scheme & Principal Investigator	Amount available upto 2018-19	Amount utilized upto 31.03.2019	Balance as on 31.03.2019
1	New magnetic materials applicable as colored pigments and catalysts by Dr. Avijit Kumar Paul	27.35	27.33	0.02
2	ISEA Project by Prof. A. Swarup and Prof. Mayank Dave	36.06	34.80	1.26
3	SMDP-C2SD Project by Prof. A.K. Gupta and Prof. R.K. Sharma, School of VLSI Design & Embedded system	33.20	31.78	1.42
4	Synthesis of Water Soluble Cobalt Complexes & Their Catalytic Activities in Aqueous & Biphasic Medium by Ms. Anita Bhatia	21.90	21.72	0.18
5	DST-FIST Program by Prof. Mahesh Pal, Civil Engineering Department	108.00	43.66	64.34
6	Development of Highly Sensitive Colorimetric and Fluorescent Moisture Sensors, based on small molecules, Chemically modified paper and electrospun nanofibrous materials by Dr. Amilan Jose Chemistry Department.	14.96	4.90	10.06
7	Photoinduced release of therapeutic Nitric Oxide (NO) from functionalized self assembled nanovesicles by Dr. Amilan Jose Chemistry Department.	27.45	22.17	5.28
8	Performance Enhancement of Vapor Compression Refrigeration System of Small Capacity using Ejector as an Expansion Device by Dr Gulshan Sachdeva Mechanical Engg. Department.	12.56	4.80	7.76

9	Development of Noval Electrodes Materials for Supercapacitor Applications by Dr. Parkash Chand Physics Department.	28.00	26.29	1.71
10	Design Synthesis and Optoelectronic properties of squaraine and croconine based functional organic materials. Dy Dr. Chetti Prabhakar Chemistry Department	9.75	6.22	3.53
11	Partition Recovery of Wireless Sensor Networks with the integration of Unmanned Aerial Vehicles (UAVs) by Dr. Virender Ranga Computer of Engg. Department.	4.55	3.14	1.41
12	Development of Ultrasonic Assisted Electrochemical Mechanical Finishing (UAECMF) Process with Modular Tooling System for Precision Finishing of Gears by Dr. J.P. Mishra Mechanical Engg. Department	13.25	2.09	11.16
13	Design & Development of a Hybrid Powered Liquid Desiccant System for Air Conditioning and fresh Water Production by Dr. Rajneesh Mechanical Engg. Department.	16.65	13.92	2.73
14	Design and Development of and Approach (non-cryptographic) for Secure Storage of Data on External Media and Lossless Retrieval by Dr. J.K. Chhabra – Computer Engineering Department	3.50	0.00	3.50
15	Investigations on Hexaferrites to search strong magnetoelectric compounds at room temperature – Dr. Anurag gaur-	11.87	7.90	3.97
16	Development of Insensitive High Energy Materials Containing Heterocyclic Backbone Substituted with Amino, Azido and Nitro Explosophores -. Dr. Ghule Vikas D – Chemistry Department	26.10	0.00	26.10
17	Nanomaterial for high efficiency stable inorganic-organic perovskite-perovskite tandem solar cells – Dr. Ashok Kumar, Physics Department	13.42	12.51	0.91

18	Soil Strength Mapping & Stabilisation – Dr. S.N. Sachdeva , Civil Engineering Department	2.70	0.00	2.70
19	Design & Development of Solar assisted solid desiccant air conditioning system for India – Dr. Avadesh Yadav, Mechanical Engineering Department	9.03	2.89	6.14
20	Development of spinel-type metal oxide/ Rgo novel composites for NOx sensor application – Dr. C.R. Mariappan, Physics Department	2.40	0.02	2.38
21	Detailed investigations on crystal and magnetic structures of frustrated double perovskites Ca_2BRuO_6 (B=Ga, In, Y,Sc) and their Lanthanum composites” (CRS-M-262) – Dr. Avijit Kumar Paul, Chemistry Department	3.75	3.75	0.00
22	Utilization of agricultural waste as an electrode material for energy storage devices – Dr. Anurag Gaur, Physics Department	26.89	0.00	26.89
23	Feasibility of Development of Spectrally Selective Absorbing Materials for Laser Absorbing Coatings – Dr. Y Dwivedi,	7.04	0.09	6.95
24	Data Fusion Algorithms for Vehicle Detection and Classification systems – Dr. Vikas Mittal, ECE Department	13.08	9.79	3.29
25	Fusion of Optical and Multi-frequency Multi-polarimetric SAR data for Enhanced Land cover Mapping – Dr. Mahesh pal, Civil Engineering Department	6.15	4.50	1.65
26	Implementation of Security features in Smart Cards – Dr. B.B. Gupta, Computer Engineering Department	6.24	0.00	6.24

27	Mathematical modeling for biofluid transport in arterial geometries for drug delivery applications – Dr. Paras Ram, Maths Department	17.83	14.79	3.04
28	Study of Degree of Approximation and Absolute Summability factors of infinite Series – Dr. Smita Sonker- Mathematics Department	6.20	-	6.20
29	Localized Surface Plasmon Resonance Effect of Metal Nanoparticles on the Optical Properties of Nanophosphors for Plasmon Enhanced Fluorescence Sensors by Dr. Neena Jaggi-Physics Department	10.18	8.13	2.05
30	Classification and feature selection of AVIRIS-NG airborne Hyperspectral data for crop cover mapping/urban mapping – Dr. Mahesh Pal, Civil Engineering Department	9.20	4.01	5.19
31	Dielectric Relaxation investigations in Swift Heavy Ion Irradiated Ferroelectric Ceramic/Polymer Nanocomposites – Dr. Anurag Gaur-Physics Department	1.95	1.95	0.00
32	Physics Based Accurate Analytical Modeling of AlGaIn/GaN High Electron Mobility Transistors – by Dr. Ashutosh Nandi- ECE Department	5.00	0.98	4.02
33	Computational design, synthesis and optoelectronic properties of functionalized compounds and their metal complexes by Ms Vidya V.M Department of Chemistry	13.08	9.62	3.46
34	Investigations on multiferrocity in BaFe ₂ O ₇ hexaferrite – by Dr. Anurag Gaur – Physics Department	0.90	0.90	0.00
35	Modifications in the Properties of II-VI Semiconducting Nanostructures by Ion Beam by Dr. R.P. Chauhan	1.05	0.80	0.25

36	Mitigation Climate Change Impacts on India Agriculture under Changing Water cycle – Dr. K.K. Gupta	1.75	0.00	1.75
37	Development of low cost scheffler solar concentrator for domestic indoor cooking and heating application for rural areas – Dr. Avadesh Yadav – Mechanical Engineering Department	0.85	0.85	0.00
38	Students Perception About Introductin of Human and Professional Ethics as Compulsory in Engineering Education : An Exploratory Study – by Dr. Manish Kumar Jha – Department of Business Administration	1.00	0.95	0.05
39	Modeling and Simulation of Explosive driven Helical Flux Compression Generator by Dr. Saurabh Chanana	5.58	3.12	2.46
40	Visvesvaraya Ph.D Scheme by Prof. Mayank Dave	139.85	125.72	14.13

Consultancy Services

The Institute is actively engaged in providing consultancy services to various Government, Semi-Government and Private Organizations. Efforts to diversify the areas pertaining to various disciplines are continuously being made so that more interaction could be ensured with the industries and various organizations. Number of faculty members taking up consultancy projects had considerably increased during the recent past.

During the period from 1.4.2018 to 31.3.2019, one thousand nine hundred five (1905) consultancy jobs involving consultancy fees around Rs. 706.60 lacs (app.) were sanctioned.

11.5 FACULTY POSITION AS ON 31.03.2019

Sr. No.	Name of the Post	Sanctioned	In position	Vacant	Pay Level
Civil Engineering Department					
1.	Professors	39	24	15	Level 14A
2.	Asso.Professors				Level 13A2

3.	Asstt.Professors				Level 10/11/12
Electrical Engineering Department					
1.	Professors	41	30	11	Level 14A
2.	Asso.Professors				Level 13A2
3.	Asstt.Professors				Level 10/11/12
Mechanical Engineering Department					
1.	Professors	42	27	15	Level 14A
2.	Asso.Professors				Level 13A2
3.	Asstt.Professors				Level 10/11/12
Industrial Engineering Discipline					
1.	Professors	14	03	11	Level 14A
2.	Asso.Professors				Level 13A2
3.	Asstt.Professors				Level 10/11/12
Electronics & Comm. Engineering Department					
1.	Professors	41	23	18	Level 14A
2.	Asso.Professors				Level 13A2
3.	Asstt.Professors				Level 10/11/12
Computer Engineering Department					
1.	Professors	25	11	14	Level 14A
2.	Asso.Professors				Level 13A2
3.	Asstt.Professors				Level 10/11/12
Information Technology Discipline					
1.	Professors	19	10	09	Level 14A
2.	Asso.Professors				Level 13A2
3.	Asstt.Professors				Level 10/11/12
Physics Department					
1.	Professors	14	09	05	Level 14A
2.	Asso.Professors				Level 13A2
3.	Asstt.Professors				Level 10/11/12
Chemistry Department					
1.	Professors	10	10	-	Level 14A
2.	Asso.Professors				Level 13A2
3.	Asstt.Professors				Level 10/11/12
Mathematics Department					
1.	Professors	10	06	04	Level 14A
2.	Asso.Professors				Level 13A2
3.	Asstt.Professors				Level 10/11/12
Humanities and Social Sciences Department					
1.	Professors	10	06	04	Level 14A
2.	Asso.Professors				Level 13A2
3.	Asstt.Professors				Level 10/11/12
Business Administration					
1.	Professors	14	04	10	Level 14A
2.	Asso.Professors				Level 13A2
3.	Asstt.Professors				Level 10/11/12

Computer Applications					
1.	Professors	19	03	16	Level 14A
2.	Asso.Professors				Level 13A2
3.	Asstt.Professors				Level 10/11/12
Summary (Faculty Staff)					
1.	Professors	298	166	132	Level 14A
2.	Asso.Professors				Level 13A2
3.	Asstt.Professors				Level 10/11/12
Total		298	166	132	

11.6 ADMINISTRATIVE AND OTHER STAFF

POSITION OF OFFICER CADRE STAFF AS ON 31.03.2019

Sr. No.	Name of the post	Sanctioned	In position	Vacant	Pay Level
Registrar Office					
1	Registrar	01	-	01	Level 14
General Administration Section					
1	Dy. Registrar	01	01	-	Level 12
Establishment Section					
1	Asstt. Registrar	01	01	-	Level 10
Accounts Section					
1	Dy. Registrar	01	01	-	Level 12
2	Asstt. Registrar	01	01	-	Level 10
Academic Section					
1	Dy. Registrar	01	01	-	Level 12
Exams Cell					
1	Asstt. Registrar	01 (P)	01	01	Level 10
Stores Section					
1	Asstt. Registrar	01	-	01	Level 10
Health Centre					
1	Sr. Medical Officer	01	01	-	Level 12
2	Medical Officer	03	02	01	Level 10
Library					
1	Librarian	01	-	01	Level 14
2	Assistant Librarian	01	01	-	Level 10
Sports					
1	Sr. SAS Officer	01	-	01	Level 12
2	SAS Officer	02	02	-	Level 10
Security					
1	Security Officer	01	01	-	Level 10

Estate					
1	Executive Engineer	01	-	01	Level 11
Workshop					
1	Principal Technical Officer	01	01	-	Level 12
2	Sr. Technical Officer	01	-	01	Level 11
Centre for Computing & Networking					
1	Sr. Technical Officer	01(P)	-	01	Level 11
2	Technical Officer	01(P)	-	01	Level 10
Computer Engineering Department					
1	Sr. Technical Officer	01	01	-	Level 11
2	Technical Officer	01	01	-	Level 10
Electronics and Comm. Engineering Department					
1	Sr. Tech. Officer	01	01	-	Level 11
2	Technical Officer	01	01	-	Level 10
Mechanical Engineering Department					
1	Technical Officer	01	01	-	Level 10
Physics/Chemistry Department					
1	Technical Officer	01	-	01	Level 10
Computer Applications					
1	Technical Officer	01	-	01	Level 11
Total		30	19	11	

POSITION OF TECHNICAL STAFF AS ON 31.03.2019

Sr. No.	Name of the post	Sanctioned	In position	Vacant	Pay Level
Civil Engineering Department					
Lower Cadre					
1	Technician	03	02	01	Level-3
2	Sr. Technician	02	02	-	Level-4
3	Technician SG-II	01	-	01	Level-5
4	Technician SG-I	01	-	01	Level-6
Higher Cadre					
1	Tech. Assistant	04	-	04	Level-6
2	Sr. Tech. Assistant	03	-	03	Level-7
3	Tech. Asstt. SG-II	01	-	01	Level-8
4	Tech. Asstt. SG-I	01	-	01	Level-9
Total		16	04	12	

Computer Engineering Department					
Lower Cadre					
1	Technician	02	-	02	Level-3
2	Sr. Technician	01	-	01	Level-4
3	Technician SG-II	01	-	01	Level-5
4	Technician SG-I	01	-	01	Level-6
Higher Cadre					
1	Tech. Assistant	02	-	02	Level-6
2	Sr. Tech. Assistant	01	-	01	Level-7
3	Tech. Asstt. SG-II	01	-	01	Level-8
4	Tech. Asstt. SG-I	01	-	01	Level-9
Total		10	-	10	
Electrical Engineering Department					
Lower Cadre					
1	Technician	03	03	-	Level-3
2	Sr. Technician	02	01	01	Level-4
3	Technician SG-II	01	-	01	Level-5
4	Technician SG-I	01	01	-	Level-6
Higher Cadre					
1	Tech. Assistant	04	-	04	Level-6
2	Sr. Tech. Assistant	03	04	(-)01	Level-7
3	Tech. Asstt. SG-II	01	02	(-)01	Level-8
4	Tech. Asstt. SG-I	01	-	01	Level-9
Total		16	11	05	
Electronics and Comm. Engineering Department					
Lower Cadre					
1	Technician	04	-	04	Level-3
2	Sr. Technician	03	01	02	Level-4
3	Technician SG-II	01	-	01	Level-5
4	Technician SG-I	01	01	-	Level-6
Higher Cadre					
1	Tech. Assistant	03	-	03	Level-6
2	Sr. Tech. Assistant	02	03	(-)01	Level-7
3	Tech. Asstt. SG-II	01	01	-	Level-8
4	Tech. Asstt. SG-I	01	-	01	Level-9
Total		16	06	10	
Mechanical Engineering Department					
Lower Cadre					
1	Technician	03	01	02	Level-3
2	Sr. Technician	02	01	01	Level-4
3	Technician SG-II	01	01	-	Level-5

4	Technician SG-I	01	02	(-)01	Level-6
Higher Cadre					
1	Tech. Assistant	04	-	04	Level-6
2	Sr. Tech. Assistant	03	02	01	Level-7
3	Tech. Asstt. SG-II	01	-	01	Level-8
4	Tech. Asstt. SG-I	01	01	-	Level-9
Total		16	08	08	
Workshop					
Lower Cadre					
1	Technician	03	01	02	Level-3
2	Driver	02	-	02	Level-3
3	Sr. Technician	02	01	01	Level-4
4	Sr. Driver	02	-	02	Level-4
5	Technician SG-II	01	-	01	Level-5
6	Driver SG-II	01	-	01	Level-5
7	Technician SG-I	-	05	(-)05	Level-6
8	Driver SG-I	01	-	01	Level-6
Higher Cadre					
1	Tech. Assistant	03	-	03	Level-6
2	Sr. Tech. Asstt.	02	-	02	Level-7
3	Tech. Asstt. SG-II	01	01	-	Level-8
4	Tech. Asstt. SG-I	-	01	(-)01	Level-9
Total		18	09	09	
Industrial Engineering & Management					
Lower Cadre					
1	Technician	01	-	01	Level-3
2	Sr. Technician	01	-	01	Level-4
3	Technician SG-II	01	-	01	Level-5
4	Technician SG-I	-	-	-	Level-6
Higher Cadre					
1	Tech. Assistant	01	-	01	Level-6
2	Sr. Tech. Asstt.	01	-	01	Level-7
3	Tech. Asstt. SG-II	01	-	01	Level-8
4	Tech. Asstt. SG-I	-	-	-	Level-9
Total		06	-	06	
Information Technology					
Lower Cadre					
1	Technician	01	-	01	Level-3
2	Sr. Technician	01	-	01	Level-4
3	Technician SG-II	01	-	01	Level-5
4	Technician SG-I	01	-	01	Level-6
Higher Cadre					
1	Tech. Assistant	01	-	01	Level-6

2	Sr. Tech. Asstt.	01	-	01	Level-7
3	Tech. Asstt. SG-II	01	-	01	Level-8
4	Tech. Asstt. SG-I	01	-	01	Level-9
Total		08	-	08	
Chemistry Department					
Lower Cadre					
1	Technician	02	01 (Lab. Asstt.)	01	Level-3
2	Sr. Technician	01	-	01	Level-4
3	Technician SG-II	-	-	-	Level-5
4	Technician SG-I	-	-	-	Level-6
Higher Cadre					
1	Tech. Assistant	01	-	01	Level-6
2	Sr. Tech. Asstt.	-	-	-	Level-7
3	Tech. Asstt. SG-II	-	-	-	Level-8
4	Tech. Asstt. SG-I	-	-	-	Level-9
Total		04	01	03	
Physics Department					
Lower Cadre					
1	Technician	01	01	-	Level-3
2	Sr. Technician	01	01	-	Level-4
3	Technician SG-II	01	-	01	Level-5
4	Technician SG-I	-	-		Level-6
Higher Cadre					
1	Tech. Assistant	01	-	01	Level-6
2	Sr. Tech. Asstt.	01	-	01	Level-7
3	Tech. Asstt. SG-II	01	-	01	Level-8
4	Tech. Asstt. SG-I	-	-	-	Level-9
Total		06	02	04	
Computer Applications					
Lower Cadre					
1	Technician	01	-	01	Level-3
2	Sr. Technician	01	-	01	Level-4
3	Technician SG-II	01	-	01	Level-5
4	Technician SG-I	-	01	(-)01	Level-6
Higher Cadre					
1	Tech. Assistant	01	-	01	Level-6
2	Sr. Tech. Asstt.	01	-	01	Level-7
3	Tech. Asstt. SG-II	01	-	01	Level-8
Total		06	01	05	
Humanities Department					
Lower Cadre					
1	Technician	01	-	01	Level-3
2	Sr. Technician	-	-	-	Level-4

3	Technician SG-II	-	-	-	Level-5
4	Technician SG-I	-	-	-	Level-6
Total		01	-	01	
Business Administration					
Lower Cadre					
1	Technician	01	01	-	Level-3
2	Sr. Technician	01	-	01	Level-4
3	Technician SG-II	01	-	01	Level-5
4	Technician SG-I	-	-	-	Level-6
Higher Cadre					
1	Tech. Assistant	01	-	01	Level-6
2	Sr. Tech. Asstt.	01	-	01	Level-7
3	Tech. Asstt. SG-II	01	-	01	Level-8
4	Tech. Asstt. SG-I	-	-	-	Level-9
Total		06	01	05	
Health Centre					
(A) Other Staff					
Lower Cadre					
1	Technician (Radiographer)	01	-	01	Level-3
2	Technician SG-II (Lab. Tech.)	01	-	01	Level-5
3	Technician SG-I (Lab. Tech.)	01	-	01	Level-6
Higher Cadre					
1	Tech. Assistant (02 Staff Nurse)	02	-	02	Level-6
2	Sr. Tech.Assistant(01 Staff Nurse)	01	01 (Lab.Tech.)	-	Level-7
3	Tech. Asstt. SG-II (01Staff Nurse)	01	01 (staff nurse)	-	Level-8
4	Tech. Asstt. SG-I (01Staff Nurse)	01	-	01	Level-9

(B) Pharmacist					
Lower Cadre					
1	Technician SG-II (01 Pharmacist)	01	-	01	Level-5
2	Technician SG-I (01 Pharmacist)	01	-	01	Level-6
Higher Cadre					
1	Sr. Tech. Assistant (01 Pharmacist)	01	-	01	Level-7
2	Tech. Asstt. SG-II (01 Pharmacist)	01	01 (Pharma.SG-II)	-	Level-8
3	Tech. Asstt. SG-I	-	01 (Pharma.SG-I)	(-)01	Level-9
Total		12	04	08	
Library					
Lower Cadre					
1	Library Assistant	03	02	01	Level-3
2	Sr. Lib. Asstt.	03	-	03	Level-4
3	Lib. Asstt. SG-II	02	01	01	Level-5
4	Lib. Asstt. SG-I	-	02	(-)02	Level-6
Higher Cadre					
1	Lib & Info. Assistant	02	-	02	Level-6
2	Sr. Lib & Info. Asstt.	02	-	02	Level-7
3	Lib & Info. Asstt. SGII	01	-	01	Level-8
4	Lib & Info. Asstt SGI	01	-	01	Level-9
Total		14	05	09	
Estate					
Higher Cadre					
1	Junior Engineer	04	02	02	Level-6
2	Asstt. Engineer	02	-	02	Level-7
3	Asstt. Engr. SG II (Civil)	01	01	-	Level-8
Total		07	03	04	
Maintenance Staff (Estate)					
Lower Cadre					
1	Work Asstt. SG II	-	06	(-)06	Level-5
Total		-	06	(-)06	

Sports					
Higher Cadre					
1	SAS Assistant	01	-	01	Level-6
2	Sr. SAS Assistant	01	-	01	Level-7
3	SAS Asstt. SG II	01	-	01	Level-8
4	SAS Asstt. SG I	01		01	Level-9
Total		04	-	04	
Centre for Computing & Networking					
Lower Cadre					
1	Technician	01	-	01	Level-3
2	Sr. Technician	01	-	01	Level-4
3	Technician SG-II	01	-	01	Level-5
Higher Cadre					
1	Tech. Assistant	01	-	01	Level-6
2	Sr. Tech. Asstt.	01	-	01	Level-7
3	Tech. Asstt. SG-II	01	-	01	Level-8
Total		06	-	06	
Internal Telephone Exchange					
Lower Cadre					
1	Technician	01	-	01	Level-3
1	Sr. Technician	01	-	01	Level-4
Total		02	-	02	
School of VLSI Design & Embedded System					
Lower Cadre					
1	Technician	01	-	01	Level-3
2	Sr. Technician	01	-	01	Level-4
Total		02	-	02	
School of Renewable Energy					
Lower Cadre					
1	Technician	01	-	01	Level-3
2	Sr. Technician	01	-	01	Level-4
Total		02	-	02	
Grand Total		178	61	117	

POSITION OF ADMINISTRATIVE & MINISTRIAL STAFF AS ON 31.03.2019

Sr. No.	Name of the post	Sanctioned	In position	Vacant	Pay Level
Civil Engineering Department					
Lower Cadre					
1	Junior Assistant	01	-	01	Level-3
2	Steno SG-II	01	01	-	Level-5
Total		02	01	01	
Electrical Engineering Department					

Lower Cadre					
1	Junior Assistant	01	-	01	Level-3
2	Sr. Steno	01	-	01	Level-4
Total		02	-	02	
Mechanical Engineering Department					
Lower Cadre					
1	Junior Assistant	01	-	01	Level-3
2	Steno SG-II	01	-	01	Level-5
Total		02	-	02	
Electronics & Communication Engineering Department					
Lower Cadre					
1	Junior Assistant	01	01	-	Level-3
2	Sr. Steno	01	-	01	Level-5
Total		02	01	01	
Computer Engineering Department					
Lower Cadre					
1	Junior Assistant	01	01 (Sr. Asstt.)	-	Level-3
2	Sr. Steno	01	-	01	Level-5
Total		02	01	01	
Physics Department					
Lower Cadre					
1	Junior Assistant	01	-	01	Level-3
Total		01	-	01	
Chemistry Department					
Lower Cadre					
1	Junior Assistant	01	-	01	Level-3
Total		01	-	01	
Business Administration Department					
Lower Cadre					
1	Junior Assistant	01	-	01	Level-3
Total		01	-	01	
Computer Applications Department					
Lower Cadre					
1	Junior Assistant	01	-	01	Level-3
Total		01	-	01	
Mathematics Department					
Lower Cadre					
1	Junior Assistant	01	01 (Sr. Asstt.)	-	Level-3
Total		01	01	-	
Humanities Department					

Lower Cadre					
1	Junior Assistant	01	-	01	Level-3
Total		01	-	01	
Workshop					
Lower Cadre					
1	Jr. Assistant	01	-	01	Level-3
Total		01	-	01	
TP&SW					
Lower Cadre					
1	Steno SG-I	01	01 (Asstt. SG-II)	-	Level-7
Higher Cadre					
1	Superintendent	01	-	01	Level-6
Total		02	01	01	
Deans Office					
Lower Cadre					
1	Stenographer	03	01 (Steno SG-II)	02	Level-4
Higher Cadre					
1	Secretary	02	01 (Asstt. SG-I)	01	Level-6
2	Sr. Secretary	01	02 (Sec. SG-II)	(-)01	Level-7
Total		06	04	02	
Director Office					
Higher Cadre					
1	Sr. Secretary	01	-	01	Level-7
2	Secretary SG-I	01	01 (Sec. SG-II)	-	Level-9
Total		02	01	01	
Registrar Office					
Higher Cadre					
1	Secretary	01	-	01	Level-6
1	Secretary SG-II	01	01	-	Level-8
Total		02	01	01	
Establishment Section					
Lower Cadre					
1	Sr. Assistant	02	02 (01 Jr. Asstt.)	-	Level-4

2	Assistant SG-I	02	01	01	Level-6
Higher Cadre					
1	Superintendent SG-II	01	-	01	Level-8
Total		05	03	02	
General Section					
Lower Cadre					
1	Jr. Assistant	02	02	-	Level-3
2	Assistant SG-I	02	02 (01 Asstt.SG-II)	-	Level-6
Higher Cadre					
1	Superintendent SG-II	01	-	01	Level-8
Total		05	04	01	
Academic Section					
Lower Cadre					
1	Sr. Assistant	01	01 (Jr. Asstt.)	-	Level-4
2	Assistant SG-II	02	-	02	Level-5
3	Assistant SG-I	01	-	01	Level-6
Higher Cadre					
1	Sr. Superintendent	01	02 (01 Supdt.S G-II)	(-)01	Level-7
Total		05	03	02	
Examination Cell					
Lower Cadre					
1	Sr. Assistant	01	-	01	Level-4
2	Assistant SG-II	02	01	01	Level-5
Higher Cadre					
1	Superintendent	01	01 (Sr. Supdt.)	-	Level-6
Total		04	02	02	
Stores Section					
Lower Cadre					
1	Sr. Assistant	01	-	01	Level-4
2	Assistant SG-II	02	-	02	Level-5
Higher Cadre					
1	Superintendent	01	02 (01 Sr. Supdt., 01	(-)01	Level-6

			Acnt. SG-II)		
Total		04	02	02	
Estate Section					
Lower Cadre					
1	Jr. Assistant	01	-	01	Level-3
2	Sr. Assistant	01	-	01	Level-4
3	Assistant SG-II	01	01 (Asstt.SG-I)	-	Level-5
Higher Cadre					
1	Accountant	01	-	01	Level-6
2	Sr. Supdt.	01	01 (Sr. Acnt.)	-	Level-7
Total		05	02	03	
Guest House					
Lower Cadre					
1	Jr. Assistant (Cook)	01	-	01	Level-3
2	Sr. Assistant	01	-	01	Level-4
Total		02	-	02	
Accounts Section					
Lower Cadre					
1	Sr. Assistant	02	02 (Jr. Asstt.)	-	Level-4
2	Assistant SG I	-	01	(-)01	Level-5
Higher Cadre					
1	Accountant	02	-	02	Level-6
2	Sr. Accountant	02	02 (Sr. Supdt.)	-	Level-7
3	Accountant SG-II	01	-	01	Level-8
4	Accountant SG-I	01	-	01	Level-9
5	Supdt. SG-I	01	-	01	Level-9
Total		09	05	04	
Finance Section					
Lower Cadre					
1	Sr. Assistant	02	-	02	Level-4
2	Assistant SG-II	01	02 (Asstt. SG-I)	(-)01	Level-5
Higher Cadre					
1	Accountant	01	-	01	Level-6

2	Sr. Supdt	01	-	01	Level-7
Total		05	02	03	
Reception & Diary/Dispatch					
Lower Cadre					
1	Jr. Assistant	01	-	01	Level-3
2	Sr. Assistant	01	-	01	Level-4
Total		02	-	02	
Grand Total		75	34	41	

Position of Non-Faculty (Supporting Staff) as on 31.03.2019

Sr. No.	Name of the post	Sanctioned	In Position	Vacant	Pay Level
1	Attendant/ Security Guard/ Mali/ Caretaker	18	21	(-)03	Level-1
2	Sr. Attendant/ Security Guard/ Mali/ Caretaker	14	15	(-)01	Level-2
3	Attendant/ Security Guard/ Mali/ Caretaker SG-II	09	08	01	Level-3
4	Attendant/ Security Guard/ Mali/ Caretaker SG-I	04	02	02	Level-4
Total		45	46	(-)01	

Grand Summary of Faculty & Non-Faculty Position as on 31.03.2019

Sr. No.	Cadre	Sanctioned	In Position	Vacant
1.	Professor	298	166	132
2.	Associate Professor			
3.	Assistant Professor			
Sub Total (A)		298	166	132
1	Registrar	01	-	01
2	Dy. Registrar	03	03	-
3	Asstt. Registrar	04	03	01
4	Librarian	01	-	01
5	Asstt. Librarian	01	01	-
6	Sr. SAS Officer	01	-	01

7	SAS Officer	02	02	-
8	Sr. Medical Officer	01	01	-
9	Medical Officer	03	02	01
10	Security Officer	01	01	-
11	Pr. Technical Officer	01	01	-
12	Sr. Technical Officer	04	02	02
13	Technical Officer	06	03	03
14	Executive Engineer	01	-	01
Sub Total (B)		30	19	11
1	Technician	33	10 (01 Lab. Asstt.)	23
2	Sr. Technician	24	07	17
3	Technician SG-II	15	01	14
4	Work Assistant SG II	-	06	(-)06
5	Technician SG-I	09	10	(-)01
6	Lib. Assistant	03	02	01
7	Sr. Lib. Assistant	03	-	03
8	Lib. Assistant SG II	02	01	01
9	Lib. Assistant SG I	-	02	(-)02
Total		89	39	50
1	Tech. Assistant	29	-	29
2	Sr. Tech. Asstt.	22	10 (01 Lab. Tech.)	12
3	Tech. Asstt. SG-II	14	06 (01 Pharmacist, 01 Staff Nurse)	08
4	Tech. Asstt. SG-I	07	03 (01 Pharmacist)	04
5	Lib & Info. Assistant	02	-	02
6	Sr. Lib & Info. Asstt.	02	-	02
7	Lib & Info. Asstt. SGII	01	-	01
8	Lib & Info. Asstt SGI	01	-	01
9	Junior Engineer	04	02	02
10	Asstt. Engineer	02	-	02
11	Asstt. Engr. SG II (Civil)	01	01	-
12	SAS Assistant	01	-	01
13	Sr. SAS Assistant	01	-	01
14	SAS Assistant SG II	01	-	01
15	SAS Assistant SG I	01	-	01
Total		89	22	67

Sub Total (C) (Lower + Higher)		178	61	117
1	Junior Assistant	16	07	09
2	Steno	04	-	04
3	Sr. Assistant	12	03	09
4	Sr. Steno	03	-	03
5	Assistant SG II	08	03	05
6	Steno SG II	02	02	-
7	Assistant SG I	05	07	(-)02
8	Steno SG I	01	-	01
Total		51	22	29
1	Superintendent	03	-	03
2	Accountant	04	-	04
3	Secretary	03	-	03
4	Sr. Superintendent	03	05	(-)02
5	Sr. Accountant	02	01	01
6	Sr. Secretary	02	01	01
7	Superintendent SG II	02	01	01
8	Accountant SG II	01	01	-
9	Secretary SG II	01	03	(-)02
10	Superintendent SG I	01	-	01
11	Accountant SG I	01	-	01
12	Secretary SG I	01	-	01
Total		24	12	12
Sub Total (D) (Lower + Higher)		75	34	41
1	Attendant/ Security Guard/Mali/Caretaker	18	21	(-)03
2	Sr. Attendant/ Security Guard/Mali/ Caretaker	14	15	(-)01
3	Attendant/ Security Guard/Mali/ Caretaker SG-II	09	08	01
4	Attendant/ Security Guard/Mali/ Caretaker SG-I	04	02	(-)02
Sub Total (E)		45	46	(-)01
Grand Total (A+B+C+D+E)		626	326	300

Brief Summary of Faculty & Non-Faculty Position as on 31.03.2019

Sr. No.	Cadre	Sanctioned	In Position	Vacant
1.	Professor	298	166	132
2.	Associate Professor			

3.	Assistant Professor			
Sub Total (A)		298	166	132
1.	Officer	30	19	11
2.	Technical Staff	178	61	117
3.	Administrative Staff	75	34	41
4.	Supporting Staff	45	46	(-)01
Sub Total (B)		328	160	168
Grand Total (A+B)		626	326	300

11.7 STAFF MEMBERS DEPUTED/SPONSORED FOR TRAINING, LEARNING

Sr. No	Name of the faculty & Designation Prof./Dr./Sh./Ms.	Area of Training	Venue	Duration of Training
1.	Sarasvati Yadav, Asstt. Prof., Maths	Security Issues for Sensor, IOT and Opportunistic Networks	NIT Kurukshetra	10.9.18 - 15.9.18
2.	Chandrashekara M Asstt. Prof., MED	Technical discussion on Combustion and Pratt & Whitney Chair for Gas Turbine Research	IISC Bangalore	14.9.18 - 16.9.18
3.	D P Singh Professor, Chemistry	National Conference on New Frontiers of Research & Education in Chemical Sciences	Regional Institute of Education, Ajmer (Rajasthan)	25.10.18 - 27.10.18
4.	Shashi Bhushan Singh Asstt. Prof., EED	Workshop on Smart Grid and Internet of Things	Central Power Research Institute, Bengaluru	29.11.18 - 30.11.18
5.	Gyanendra Kr. Verma Asstt. Prof., CoED	Workshop on Cognitive Computing & 10 th International Conference on Intelligent Human Computer Interaction	Indian Institute of Information Technology, Allahabad	6.12.18 - 9.12.18
6.	Avijit K. Paul Asstt. Prof., Chem.	3 rd International Conference on Soft Materials	MNIT Jaipur	9.12.18 - 14.12.18
7.	Shivam Asstt. Prof., EED	8 th IEEE Power India International Conference	NIT Kurukshetra	10.12.18 - 12.12.18
8.	Ashwani Kumar Professor, EED	8 th IEEE Power India International Conference	NIT Kurukshetra	10.12.18 - 12.12.18
9.	Dharam Pal Singh Professor, Chemistry	XXXVII Annual Conference of Indian Council of Chemists	National Institute of Technology Karnataka Surathkal	12.12.18 - 14.12.18
10.	Rajender Kumar Professor, DBA	22 nd Annual Conference of Indian Political Economy Association	University of Jammu, Jammu	14.12.18 - 15.12.18

11.	Vikas Choudhary Professor, HSS	22 nd Annual Conference of Indian Political Economy Association	University of Jammu, Jammu	14.12.18 - 15.12.18
12.	Shivam Asstt. Prof., EED	20 th National Power Systems Conference	NIT, Tiruchirappalli (Tamil Nadu)	14.12.18 - 16.12.18
13.	Chandrashekara M Asstt. Prof., MED	Aero India 2019 International Seminar and Visiting R&D Lab for Research Interactions	Royal Orchid Resort & Convention Centre, Yelahanka, Bengaluru	18.2.19 - 21.2.19
14.	Parveen Kr. Saini Asso. Prof., MED	2 nd International Conference on New Frontiers in Engineering, Science & Technology	NIT Kurukshetra	18.2.19 - 22.2.19
15.	Satnam Singh Asstt. Prof., MED	2 nd International Conference on New Frontiers in Engineering, Science & Technology	NIT Kurukshetra	18.2.19 - 22.2.19
16.	Baldev Setia Professor, CED	Indian Conference on Geotechnical and Geo- Environmental Engineering	Motilal Nehru National Institute of Technology, Allahabad	1.3.19 - 2.3.19
17.	Priyanka Ahlawat Asstt. Prof., CoED	1 st International Conference on Machine Learning, Image Processing, Network Security and Data Sciences (MIND- 2019)	NIT Kurukshetra	3.3.19 - 4.3.19
18.	Rajneesh Asstt. Prof., MED	International Workshop on Energy, Power and Environment	NIT Kurukshetra	17.3.19 - 19.3.19
19.	Ratna Dahiya Professor, EED	International Workshop on Energy, Power and Environment	NIT Kurukshetra	17.3.19 - 19.3.19
20.	Bhanu Pratap Asstt. Prof., EED	International Workshop on Energy, Power and Environment	NIT Kurukshetra	17.3.19 - 19.3.19
21.	Ashwani Kumar Professor, EED	International Workshop on Energy, Power and Environment	NIT Kurukshetra	17.3.19 - 19.3.19
22.	V K Bajpai Professor, MED	International Workshop on Energy, Power and Environment	NIT Kurukshetra	17.3.19 - 19.3.19
23.	M P R Prasad Asstt. Prof., EED	2 nd International Conference on Innovations in Power & Advanced Computing Technologies	VIT University, Vellore (Tamil Nadu)	22.3.19 - 23.3.19

International Conference(Abroad)

Sr.No	Name of the faculty & Designation Prof./Dr./Sh./Ms.	Area of Training	Venue	Duration of Training
1.	Sathans Professor, EED	6th International on Control, Mechatronics and Automation	Tokyo, Japan	12.10.18 - 14.10.18

11.8 COURSES AND ADMISSIONS

COURSES OFFERED

UNDERGRADUATE COURSES – B.TECH. DEGREE COURSES

Courses of study are offered in following disciplines:

<u>Discipline</u>	<u>No. of seats</u>
Civil Engineering	140
Electrical Engineering	140
Mechanical Engineering	138
Electronics & Communication Engineering	138
Computer Engineering	92
Industrial Engg. & Management	92
Information Technology	92
Total	832

Note: Dasa/NRI students can be admitted upto 15% over and above of the sanction strength of B.Tech. (i.e. 15% of 832)

The duration of each course is four academic years. Teaching in each academic year (1st July to 30th June) is divided into two semesters of about sixteen weeks each.

The courses include study at Institute, visits to work-sites and practical training in Institute workshops and in approved engineering works.

POSTGRADUATE COURSES – M.TECH. DEGREE COURSES

Courses of study are offered in following disciplines and specializations:

The seats available for admission though CCMT-2018 are given below:

Deptt./ School	M.Tech. Programme	OP	OBC	SC	ST	OP PWD	OBC PWD	SC PWD	ST PWD	Total
Civil Engineering	Soil Mechanics & Foundation Engg.	9	5	3	1	-	-	-	-	18
	Structural Engg.	9	5	4	1	-	-	-	-	19
	Water Resources Engg.	9	4	3	1	-	-	-	-	17
	Transportation Engg.	9	4	4	1	-	-	-	-	18
	Environmental Engg.	9	6	2	1	1	1	1	-	21
Electrical Engineering	Power System	10	5	3	2	-	-	-	-	20
	Control System	10	5	4	1	-	-	-	-	20
	Power Electronics & Drives	10	5	3	1	1	-	-	-	20
Electronics	Electronics & Comm.	12	6	4	2	-	-	-	-	24

& Comm. Engg.	Engg.									
Physics	Instrumentation	10	5	3	2	-	-	-	-	20
	Nanotechnology	9	6	2	2	1	-	-	-	20
Mechanical Engg.	Industrial & Production Engg.	10	5	4	1	-	-	-	-	20
	Machine Design	10	5	4	1	-	-	-	-	20
	Thermal Engineering	11	6	2	3	-	1	-	1	24
Computer Engg.	Computer Engg.	13	7	3	1	-	1	-	-	25
	Cyber Security	9	5	3	2	1	-	-	-	20
Chemistry	Molecular Engg. & Advanced Chemical Analysis	9	5	3	2	1	-	-	-	20
School of VLSI Design & Embedded System	VLSI Design	14	8	3	4	2	1	-	-	32
	Embedded System Design	9	5	3	2	-	-	1	-	20
School of Renewable Energy & Efficiency	Renewable Energy Systems	9	5	3	2	1	-	-	-	20
School of Biomedical Engg.	Biomedical Engg.	9	5	3	2	1	-	-	-	20
School of Material Science & technology	Material Science & technology	9	5	3	2	1	-	-	-	20
	GRAND TOTAL	218	117	69	37	10	4	2	1	458

The Institute made admissions directly through Institute level counseling in the academic session 2018-18 on sponsored seats for all branches and specializations. The number of seats available in each category for admission through this mode are given below:

(iii) Sponsored seats:

Deptt./ School	M.Tech. Programme	OP	OBC	SC	ST	OP PWD	OBC PWD	SC PWD	ST PWD	Total
Civil Engineering	Soil Mechanics & Foundation Engg.	3	1	1	-	-	-	-	-	5
	Structural Engg.	3	1	1	-	-	-	-	-	5
	Water Resources Engg.	2	2	-	1	-	-	-	-	5
	Transportation Engg.	2	1	1	-	-	1	-	-	5
	Environmental Engg.	2	1	1	1	-	-	-	-	5
Electrical Engineering	Power System	2	2	0	1	-	-	-	-	5
	Control System	2	2	1	-	-	-	-	-	5
	Power Electronics & Drives	3	1	1	-	-	-	-	-	5
Electronics & Comm.	Electronics & Comm. Engg.	3	1	1	-	-	-	-	-	5

Engg.										
Physics	Instrumentation	2	2	1	-	-	-	-	-	5
	Nanotechnology	2	2	-	-	1	-	-	-	5
Mechanical Engg.	Industrial & Production Engg.	2	2	0	1	-	-	-	-	5
	Machine Design	2	1	1	-	1	-	-	-	5
	Thermal Engineering	3	1	1	-	-	-	-	-	5
Computer Engg.	Computer Engg.	3	1	1	-	-	-	-	-	5
	Cyber Security	2	1	1	1	-	-	-	-	5
Chemistry	Molecular Engg. & Advanced Chemical Analysis	2	1	1	1	-	-	-	-	5
School of VLSI Design & Embedded System	VLSI Design	3	1	1	-	-	-	-	-	5
	Embedded System Design	3	1	1	-	-	-	-	-	5
School of Renewable Energy & Efficiency School of Biomedical Engg.	Renewable Energy Systems	2	1	1	1	-	-	-	-	5
	Biomedical Engg.	2	1	1	1	-	-	-	-	5
School of Material Science & technology	Material Science & technology	2	2	1	-	-	-	-	-	5
	GRAND TOTAL	52	29	17	9	2	1	-	-	110

ADMISSIONS**UNDERGRADUATE COURSE**

Details of candidates admitted to B.Tech. courses in 2018-2019:-

B.Tech	Female											Total	Male											Male Total	Grand Total
Category	DASA	ICCR	MEA	OP	PH	OBC	PH	SC	PH	ST	PH		DASA	ICCR	MEA	OP	PH	OBC	PH	SC	PH	ST	PH		
Civil Engg.	0	0	0	8	1	5	0	3	0	2	0	19	0	4	0	54	1	34	2	19	1	9	0	124	143
Computer Engg.	0	0	0	7	0	4	2	2	0	1	0	16	5	0	1	37	2	20	0	12	0	6	0	83	99
Electrical Engg.	0	0	0	12	1	6	1	3	0	2	0	25	1	0	0	55	0	30	2	18	0	9	0	115	140
Electronics & Comm. Engg.	0	0	0	8	1	5	0	3	0	2	0	19	2	0	1	54	3	30	1	18	0	9	0	118	137
Information Technology	0	0	0	5	1	4	0	2	0	1	0	13	3	0	1	39	2	21	1	12	0	6	0	85	98
Mechanical Engg.	1	0	0	11	0	6	0	3	0	2	0	23	2	0	0	55	3	39	1	20	0	10	0	130	153
Production & Industrial Engg.	0	0	0	6	0	3	0	2	0	1	0	12	0	0	0	39	0	23	0	12	0	6	0	80	92
Grand Total	1	0	0	57	4	33	3	18	0	11	0	127	13	4	3	333	11	197	7	111	1	55	0	735	862

POSTGRADUATE COURSES

Details of sanctioned intake and candidates admitted to M.Tech. courses in 2018-2019:-

M.Tech 2018-19 Admitted Branch wise Category wise & Male/Female Chart																		
Deptt.	Specialization	Female							Female Total	MALE							Male Total	Grand Total
		Gen	Gen PH	OBC	SC	Sponsored	ST	ICCR		Gen	Gen PH	OBC	SC	Sponsored	ST	ICCR		
Chemistry	Molecular Engg. & Advanced Chemical Analysis	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	1	2
Civil	Environmental	1	0	0	1	0	0	0	2	6	0	10	2	0	1	0	19	21
	Soil Mech. & Foundation	3	0	0	0	0	0	0	3	5	0	6	3	1	1	0	16	19
	Structural	0	0	0	0	0	0	0	0	10	0	5	3	1	1	0	20	20
	Water Resources	1	0	1	0	0	0	0	2	5	0	5	4	0	0	0	14	16
	Transportation	1	0	0	0	0	0	0	1	8	0	5	3	0	1	0	17	18
Computer	Computer	3	0	0	0	0	0	0	3	7	0	8	4	0	1	0	20	23
	Cyber Security	3	0	1	1	0	0	0	5	4	0	3	2	0	0	0	9	14
ECE	ECE	4	0	2	2	0	0	0	8	1	0	3	1	0	0	0	5	13
Electrical	Control System	3	0	1	0	0	0	0	4	7	0	4	3	0	1	0	15	19
	Power Electronics & Drives	3	0	1	0	0	0	0	4	5	1	5	3	0	2	0	16	20
	Power System	1	0	0	0	0	0	0	1	10	0	4	4	0	0	0	18	19
Mechanical	Industrial & Production	1	0	0	0	0	0	0	1	7	0	7	2	1	0	0	17	18
	Machine Design	1	0	0	0	0	0	0	1	7	0	7	3	0	1	0	18	19
	Thermal	0	0	0	0	0	0	0	0	7	0	12	4	0	0	0	23	23
Physics	Instrumentation	3	0	0	1	0	0	0	4	4	0	6	0	0	0	0	10	14
	Nanotechnology	1	0	1	1	0	0	0	3	6	0	1	1	0	0	0	8	11
School of VLSI Design & Embedded System	Embedded System Design	1	0	2	0	0	0	0	3	8	0	3	3	0	0	0	14	17
	VLSI Design	4	0	2	0	0	0	0	6	11	0	9	2	0	0	0	22	28
School of Renewable Energy & Systems	Renewable Energy & Efficiency	0	0	1	0	0	0	0	1	6	0	3	4	0	2	0	15	16
School of Biomedical Engg.	Biomedical Engg.	2	0	0	1	0	0	0	3	1	0	0	0	0	0	0	1	4
School of Materials Sc. & Tech.	Materials Sc. & Technology	1	0	0	1	0	0	0	2	4	0	2	0	0	0	0	6	8
Total (M.Tech.)		37	0	12	9	0	0	0	58	130	1	108	51	3	11	0	304	362
MBA		17	0	4	1	0	0	0	22	24	0	1	0	0	0	0	25	47
MCA		14	0	7	2	0	0	0	23	29	1	18	8	-	2	0	58	81
Grand Total (PG)		68	0	11	3	0	0	0	103	183	2	127	59	3	13	0	387	490

11.9 SCHOLARSHIPS AND AWARDS

Undergraduate

Scholarships/stipends and Academic Prizes were awarded to the students of undergraduate courses as per details given in the table below:

B.Tech.

Scholarships	Number awarded					Value (Rs.)
Year	1 st	2 nd	3 rd	Final		
Batches	2018	2017	2016	2015	Total	
Merit Scholarship	84	84	84	84	336	Rs 1000/- per annum and a merit certificate with exemption from payment of tuition fee. From 2007 onward only 21 nos. scholarship amounting to Rs.3000/- & a merit certificate is given. Tuition is not exempted.
Postmatric Scholarship	59	51	65	89	264	Rs. 740/- p.m. for Boarders &Rs.330/- p.m. for day scholars
<u>Others states</u>	158	141	125	92	516	Students with full exemption from tuition fee.
Others Univ., Railways, P&T, Air-Force, Jindal Trust, Guru Harikishan Society and NCERT, DTE, DHE, Kalpana Chawla & Dhingra etc. ONGC	70	65	57	44	236	As sanctioned by the various departments and concerned agencies.
Academic Prizes B.Tech	44	44	44	44	176	Rs. 250/- by way of Technical books and in cash to the passed out students.

Central Scholarship	292	260	203	88	843	Rs.1,23,140/- per student
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Institute has started an award of excellence named as 'Manohar Award of Excellence' from the academic session 2009-10 which is given to the topper of B.Tech. Ist year with a cheque of Rs. 51,000 and a certificate. 1981-86 (Batch) Electrical students have instituted a Medal alongwith Cash prize of Rs. 5000/- to be given to overall topper of the batch, in memory of late Sh. Shyam Sunder Dhingra.

Postgraduate

A scholarship of Rs. 12400/- p.m. per student is awarded to all eligible students pursuing a regular course of study of M.Tech. Only those candidates who have qualified GATE are eligible for the award of the scholarships.

Doctoral Programme

A scholarship of Rs. 25,000/- p.m. to Junior Research Fellow and after two years through an appropriate Review Committee, Rs. 28,000/- to Senior Research Fellow is provided to regular research scholars.

11.10 TRAINING AND PLACEMENT STATISTICS

During academic year 2018-19, various reputed organizations including Microsoft, Goldman Sachs, Amazon, fidelity Investments, Adobe, Royal Bank of Scotland, IOCL, GAIL, EIL, C-Dot, IRCON, SAP Labs, Lowes and many more visited NIT Kurukshetra for the placement drive. A total number of 271 companies have expressed their interest for conducting placement drive in NIT Kurukshetra. Out of the 610 eligible UG students, 649 got offers in various organisations with an average compensation of Rs. 8.24 LPA. Pertinent to mention that the highest CTC offered was Rs. 40.62 LPA in this academic year. Out of the 327 eligible PG students, 144 got offers in various organisations with an average compensation of Rs. 4.75 LPA. The highest CTC offered to our PG students was Rs. 15 LPA in this academic year. The status of recruitment/campus placement for the year in considerations is as under:

Discipline	No. of Offers	No. of students who got jobs
UG		
Computer Engg.	112	91
Information Technology	103	81
Electronics & Comm. Engg.	132	100
Mechanical Engg.	111	89

Electrical Engg.	91	85
Civil Engg.	57	55
Production & Industrial Engg.	43	31
PG		
M.Tech.	86	81
MCA	47	47
MBA	11	11

11.11 FINANCE AND ACCOUNTS DETAILS

Since the inception of Institute, Government of India has been providing Plan Grant for development of Institute. The Plan Grant is mainly released for construction of residences in the campus, hostel buildings construction/renovation of instructional building and other buildings, purchase of new equipments as well as for purchase of furniture for the Institute as well as hostels. On a perusal of the grant released by the Government of India for the last 10 years, Plan Grant to the tune of ₹ 3944.00 lacs for 2009-10, ₹ 2200.00 lacs for 2010-11, ₹ 4100.00 lacs for 2011-12, ₹ 3300.00 lacs for 2012-13, ₹ 1500.00 lacs for 2013-14 and ₹ 3800.00 Lacs for the year 2014-15, ₹ 5300.00 lacs for the year 2015-16, ₹ 4400.00 lacs for the financial year 2016-17, ₹ 7564.00 lacs for the year 2017-18 and ₹ 1542.00 lacs are released for the year 2018-19.

12. RESEARCH WORK

12.1 On going

Sr No	Name & Coordinator of the Project	Amount sanctioned (₹ in lacs)	Sponsoring Agency	Duration
1.	New magnetic materials applicable as colored pigments and catalysts Dr. Avijit Kumar Paul, Asstt. Prof. in Chemistry Deptt.	35.00	DST Project	3 Years
2.	ISEA Project by Prof. A. Swarup and Prof. Mayank Dave	36.06	Department of Electronics & Information Technology	3 Years
3.	SMDP-C2SD Project by Prof. A.K. Gupta and Prof. R.K. Sharma, School of VLSI Design & Embedded system	33.20	Deity, GOI	5 Years
4.	Visvesvaraya Ph.D Scheme by Prof. Mayank Dave	230.85	Digital India (Media Lab Asia)	5 Years
5.	Synthesis of Water Soluble Cobalt Complexes & Their Catalytic Activities in Aqueous & Biphasic Medium by Ms. Anita Bhatia	23.20	DST Project	3 Years
6.	DST-FIST Program by Prof. Mahesh Pal, Civil Engineering Department	108.00	DST Project	5 Years
7.	Development of Highly Sensitive Colorimetric and Fluorescent Moisture Sensors, based on small molecules, Chemically modified paper and electrospun nanofibrous materials by Dr. Amilan Jose Chemistry Department.	31.08	SERB Project	3 Years

8.	Photoinduced release of therapeutic Nitric Oxide (NO) form functionalized self assembled nanovesicles by Dr. Amilan Jose Chemistry Department.	44.45	Department of Biotechnology	3 Years
9.	Performance Enhancement of Vapor Compression Refrigeration System of Small Capacity using Ejector as an Expansion Device by Dr Gulshan Sachdeva Mechanical Engg. Department.	14.32	DST	3 Years
10.	Development of Noval Electrodes Materials for Supercapacitor Applications by Dr. Parkash Chand Physics Department.	41.32	SERB Project	3 Years
11.	Design Synthesis and Optoelectronic properties of squaraine and croconine based functional organic materials. Dy Dr. Chetti Prabhakar Chemistry Department	15.67	CSIR Project	3 Years
12.	Partition Recovery of Wireless Sensor Networks with the integration of Unmanned Aerial Vehicles (UAVs) by Dr. Virender Ranga Computer of Engg. Department.	13.68	SERB Project	3 Years
13.	Development of Ultrasonic Assisted Electrochemical Mechanical Finishing (UAECMF) Process with Modular Tooling System for Precision Finishing of Gears by Dr. J.P.Mishra Mechanical Engg. Department	16.50	SERB Project	3 Years
14.	Design & Development of a Hybrid Powered Liquid Desiccant System for Air Conditioning and fresh Water Production by Dr. Rajneesh Mechanical Engg. Department.	20.30	SERB Project	3 Years
15.	Design and Development of and	6.20	DRDO	10 months

	Approach (non-cryptographic) for Secure Storage of Data on External Media and Lossless Retrieval by Dr. J.K. Chhabra – Computer Engineering Department			
16.	Investigations on Hexaferrites to search strong magnetoelectric compounds at room temperature – Dr. Anurag gaur-	12.32	CSIR	3 Years
17.	Development of Insensitive High Energy Materials Containing Heterocyclic Backbone Substituted with Amino, Azido and Nitro Explosophores -. Dr. Ghule Vikas D – Chemistry Department	36.36	DRDO	3 Years
18.	Nanomaterial for high efficiency stable inorganic-organic perovskite-perovskite tandem solar cells – Dr. Ashok Kumar, Physics Department	19.32	CSIR	3 Years
19.	Soil Strength Mapping & Stabilisation – Dr. S.N. Sachdeva , Civil Engineering Department	3.00	Haryana PWD (B&R)	3 Years
20.	Design & Development of Solar assisted solid desiccant air conditioning system for India – Dr. Avadesh Yadav, Mechanical Engineering Department	22.67	SERB	3 Years
21.	Development of spinel-type metal oxide/ Rgo novel composites for NOx sensor application – Dr. C.R. Mariappan, Physics Department	5.60	UGC	2 Years
22.	Detailed investigations on crystal and magnetic structures of frustrated double perovskites Ca ₂ BRuO ₆ (B=Ga, In, Y,Sc) and their Lanthanum composites” (CRS-M-262) – Dr. Avijit Kumar Paul, Chemistry Department	3.75	UGC	3 Years
23.	Utilization of agricultural waste as an electrode material for energy storage devices – Dr.	41.49	SERB	3 Years

	Anurag Gaur, Physics Department			
24.	Feasibility of Development of Spectrally Selective Absorbing Materials for Laser Absorbing Coatings – Dr. Y Dwivedi,	9.13	DRDO	1.5 Years
25.	Data Fusion Algorithms for Vehicle Detection and Classification systems – Dr. Vikas Mittal, ECE Department	21.39	DRDO	2 Years
26.	Fusion of Optical and Multi-frequency Multi-polarimetric SAR data for Enhanced Land cover Mapping – Dr. Mahesh pal, Civil Engineering Department	17.23	Department of Space	3 Years
27.	Implementation of Security features in Smart Cards – Dr. B.B. Gupta, Computer Engineering Department	9.372	DRDO	17 months
28.	Mathematical modeling for biofluid transport in arterial geometries for drug delivery applications – Dr. Paras Ram, Maths Department	19.20	SERB	2 Years
29.	Study of Degree of Approximation and Absolute Summability factors of infinite Series – Dr. Smita Sonker-Mathematics Department	6.20	SERB	3 Years
30.	Localized Surface Plasmon Resonance Effect of Metal Nanoparticles on the Optical Properties of Nanophosphors for Plasmon Enhanced Fluorescence Sensors by Dr. Neena Jaggi-Physics Department	14.12	CSIR	3 Years
31.	Classification and feature selection of AVIRIS-NG airborne Hyperspectral data for crop cover mapping/urban mapping – Dr. Mahesh Pal, Civil Engineering Department	20.20	Space Applications Centre	3 Years

32.	Dielectric Relaxation investigations in Swift Heavy Ion Irradiated Ferroelectric Ceramic/Polymer Nanocomposites – Dr. Anurag Gaur-Physics Department	3.64	IUAC	3 Years
33.	Physics Based Accurate Analytical Modeling of AlGaIn/GaN High Electron Mobility Transistors – by Dr. Ashutosh Nandi-ECE Department	9.27	DRDO	1.5 Years
34.	Modeling and Simulation of Explosive driven Helical Flux Compression Generator by Dr. Saurabh Chanana	9.80	DRDO	2 Years
35.	Computational design, synthesis and optoelectronic properties of functionalized compounds and their metal complexes	21.74	DST	3 Years
36.	Students Perception About Introduction of Human and Professional Ethics as Compulsory in Engineering Education : An Exploratory Study – by Dr. Manish Kumar Jha – Department of Business Administration	1.00	ICPR	1 Year
37.	Investigations on multiferrocity in BaFeI2O19 hexaferrite – by Dr. Anurag Gaur – Physics Department	0.90	UGC	3 Years
38.	Modifications in the Properties of II-VI Semiconducting Nanostructures by Ion Beam - Dr. R.P. Chauhan	1.05	IUAC	1 Year
39.	Mitigation Climate Change Impacts on India Agriculture under Changing Water cycle – Dr. K.K. Gupta	1.75	Ministry of Earth Sciences	1 Year
40.	Development of low cost scheffler solar concentrator for domestic indoor cooking and heating application for rural areas – Dr. Avadesh Yadav –	1	ONGC	1 Year

	Mechanical Engineering Dept.			
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12.2 ACHIEVEMENTS DURING THE YEAR

Mechanical Engineering Department

Seminar /conference/workshop/short term courses organized/attended:

1. Dr. P.C. Tewari, Professor, Mechanical Engineering Department chaired a Technical Session at 1st International Conference on 'Future Learning Aspects of Mechanical Engineering' (FLAME-2018) held on 3rd to 5th October, 2018, at AMITY University, Uttar Pradesh.
2. Dr. P.C. Tewari, Professor, Mechanical Engineering Department chaired a Technical Session at 2nd International Conference on "New Frontiers in Engineering Science & Technology" (NFEST-2019) held from 18th to 22nd February, 2019.
3. Prof. Punit Kumar attended "International Workshop on Energy, Power & Environment (IWEPE-2019)" held at NIT Kurukshetra during March 17-19, 2019
4. Dr. Dinesh Khanduja, Professor, Mechanical Engineering Department delivered a keynote Address on 05-10-18 in the National Conference on "Trends and Innovations in Mechanical Engineering" (TIME-2018) at Quantum University, Roorkee.
5. Dr. Dinesh Khanduja, Professor, Mechanical Engineering Department delivered a Session Chair Address on 03-10-2018 in International Conference on "Future Learning Aspects of Mechanical Engineering" (FLAME-2018) at Amity University, Uttar Pradesh.
6. Dr. Dixit Garg, Professor, Mechanical Engineering Department participated in National Conference on "Emerging Trends in Engineering, Science and Technology" at SSCET Bhadravti (MS) (Feb. 22-23, 2019).
7. Dr. Gian Bhushan, Professor, Mechanical Engineering Department co-chaired the 2nd International Conference on New Frontiers in Science & Technology at NIT Kurukshetra during Feb. 18-22, 2019.
8. Dr. Hari Singh, Professor, Mechanical Engineering Department delivered a Keynote Lecture on the topic entitled "Design of Experiments using the Taguchi's Parameter Design Approach" in Second International Conference on Materials, manufacturing and Modeling held at VIT Vellore during March 29-31, 2019
9. Dr. V.K. Bajpai, Professor, Mechanical Engineering Department attended a Course title: Refresher Training course NO. REF/SD/PT-II-126 from 05 October 2019 to 03 November 2019 at NCC Officers Training Academy (OTA), Kamptee, Nagpur.
10. Dr. V.K. Bajpai, Professor, Mechanical Engineering Department attended an international workshop on energy, power & environment during March 17 - 19, 2019 at National Institute of Technology, Kurukshetra.

11. Dr. P.K.Saini, Professor, Mechanical Engineering Department attended 2nd International Conference on New Frontiers in Engineering Science & Technology (NFEST-19) during February 18-22, 2019 at NIT, Kurukshetra.
12. Dr. Satnam Singh, Assistant Professor, Mechanical Engineering Department chaired a technical session in International Conference on Computational Modelling, Simulation and Optimization (ICCMSO-2019) at National University of Singapore, Singapore, during June 27-29, 2019.
13. Dr. Satnam Singh, Assistant Professor, Mechanical Engineering Department attended 2nd International Conference on New Frontiers in Engineering Science & Technology (NFEST-19) during February 18-22, 2019 at NIT, Kurukshetra.
14. Dr. Rajneesh, Assistant Professor, Mechanical Engineering Department Organized one International Conference on Computational Modelling, Simulation and Optimization (ICCMSO-2019) at National University of Singapore, Singapore, during June 27-29, 2019 as Organizing Secretary.
15. Dr. Lalit Thakur, Assistant Professor, Mechanical Engineering Department organized five-days International Conference on “New Frontiers in Engineering, Science & Technology: NFEST-2019” as Secretary, during 18th-22nd Feb 2019 at NIT Kurukshetra.

Guest Lectures/Talks Delivered/Invited:

1. Dr. Sandeep Singhal, Associate Professor, Mechanical Engineering Department delivered a Guest Lecture at Sanskar Educational Group Ghaziabad on Engineers Day.
2. Dr. Sandeep Singhal, Associate Professor, Mechanical Engineering Department delivered a Guest Lecture at SGIT School of Management, Ghaziabad on Entrepreneurship.
3. Dr. Sandeep Singhal, Associate Professor, Mechanical Engineering Department delivered a Guest Lecture at Gujarat Technological University, Ahmadabad on Entrepreneurship.
4. Dr. Sandeep Singhal, Associate Professor, Mechanical Engineering Department delivered a Guest Lecture at SGIT School of Management, Ghaziabad on Financial Markets.
5. Dr. P.C. Tewari, Professor, Mechanical Engineering Department delivered an Expert Lecture on the "Implementation of TQM in Automotive Industry" at Himalayan Group of Institutions, Kala Amb (H.P.) on 28th April 2018.
6. Dr. P.C. Tewari, Professor, Mechanical Engineering Department delivered an Expert Lecture on Entrepreneurship & its Concepts at J.C Bose University, YMCA Faridabad, (Haryana) on 16th Jan 2019.
7. Dr. Dixit Garg, Professor, Mechanical Engineering Department delivered an Expert (Key note) Lecture on “Some Advances in Industrial Engineering” as Guest of Honour in National Conference on “Emerging Trends in Engineering, Science and Technology ” at SSCET Bhadravti (MS) (Feb. 22-23, 2019).
8. Dr. Dixit Garg, Professor, Mechanical Engineering Department delivered an Expert Lecture on “Some Advances in Industrial Engineering and Management

” on Nov.. 21, 2018 in One Week QIP Sponsored Short Term Course at GNEC Ludhiana.

9. Dr. Gian Bhushan, Professor, Mechanical Engineering Department delivered an Expert Lecture on Computer Aided Engineering (CAE) in a Short Term Course on Advances in Computer Aided Manufacturing at UIET, Kurukshetra University, Kurukshetra on 05 April, 2019.
10. Dr. Rajneesh, Assistant Professor, Mechanical Engineering Department delivered an Expert Lecture Delivered on ‘Writing a Research Proposal’ in TEQIP-III sponsored Two Days "Collaborative Research Workshop" at NIT Kurukshetra held during 8th May 2019 to 9th May 2019.
11. Dr. Rajneesh, Assistant Professor, Mechanical Engineering Department delivered an Expert Lecture Delivered on ‘Sustainable Development through Computer Aided Engineering’ in TEQIP-III sponsored STC on "Advances in Computer Aided Manufacturing" at UIET Kurukshetra University, Kurukshetra held during 1st April 2019 to 5th April 2019.
12. Dr. Rajneesh, Assistant Professor, Mechanical Engineering Department delivered an Expert Lecture Delivered on ‘Solar Thermal Engineering’ in STC on "Scope and Application in Mechanical Engineering" at JMIETI Radaur, Yamunanagar, held during 20th April 2018 to 21st April 2018.
13. Dr. Rajneesh, Assistant Professor, Mechanical Engineering Department delivered an Expert Lecture Delivered on ‘Energy from Bio-waste’ in STC on "Sustainable Renewable Energy: Science, Technology and Development" at UIET Kurukshetra University, Kurukshetra held during 19th March 2018 to 25th March 2018.
14. Dr. Rajneesh, Assistant Professor, Mechanical Engineering Department delivered an Expert Lecture Delivered on ‘Introduction to Bio-Energy’ in STC on Sustainable Rural Development using Science and Technology Organized by National Institute of Technology Kurukshetra Under Unnat Bharat Abhiyan during January 15-19, 2018.

Other Achievements

1. One Ph.D. student of Dr. Sandeep Singhal got selected for PMRFS (Prime Minister's Research Fellowship Scheme) in Aug-2019.
2. Dr. Dixit Garg, Professor, Mechanical Engineering Department invited as Guest of Honour in National Conference on “Emerging Trends in Engineering, Science and Technology ” at SSCET Bhadravti (MS) (Feb. 22-23, 2019).

Physics Department

Seminar /conference/workshop/short term courses organized/attended:

1. A Science conclave during February 28-March 01, 2019 at NIT Kurukshetra in association with DST Haryana.
2. A two days conference titled 7th National conference on Nanoscience and Instrumentation Technology during March 09-10, 2019.

3. International Conference: International meeting on Energy storage (IMSED) 2018 at IIT Roorkee on 10.12.2018.
4. A two days "Symposium on Wide Bandgap Semiconductors" were jointly organized by National Institute of Technology Kurukshetra, Semiconductor Society (India) and Society for Semiconductor Devices during March 15-16, 2019 in the senate hall of NIT, Kurukshetra. Dr. Anurag Guar and Dr R.P. Chauhan organized the symposium as a convener.
5. Dr. Prakash Chand participated in a two days "Symposium on Wide Bandgap Semiconductors" held in National Institute of Technology Kurukshetra during March 15-16, 2019.
6. Dr. Prakash Chand participated in STC on Material Characterization Technique held in NIT Srinagar during June 24-28, 2019.

Guest Lectures/Talks Delivered/Invited:

1. An expert lecture entitled 'Spectroscopic techniques for explosives detection' delivered by eminent academician and Scientist Prof. Jagdish Prasad Singh from Mississippi State University, USA.
2. Gender Disparity in STEM: Measures and Policies, Feb.21, 2019, National Seminar in Science and Technology for Sustainable Development, Feb 21,2019.
3. Life and Work of Sir C. V. Raman, National Science Day, 25 Feb, 2019, Gita Girls Senior Secondary school, Kurukshetra, Haryana.
4. Nanotechnology: Approach and Impact, March27, 2019, Extension Lecture, Markanda National College, Shahabad, Haryana.
5. Title of Talk: Fabrication of NiCo2O4 based supercapacitor for energy storage applications
6. Title of Talk: Organic Semiconductors: Electrically generated energy states and their characterization" Delivered by Dr. Awadesh Kumar
7. One week Short term course on advances in photonics and hybrid materials
8. Title of Talk: Application of Nano-technology for Green Wireless Communication, delivered by Dr. Ashok Kumar, Andhra Univ., Deptt. of Computer Science & Systems Engg., Visakhapatnam, Nov. 18, 2018.

Electrical Engineering Department

Seminar /conference/workshop/short term courses organized/attended:

1. Short Term Course on High Voltage Engineering: Generation, Measurement and its applications, during July 16-22, 2018 by Dr. Saurabh Chanana, Dr. Atma Ram Gupta & Dr. Pradeep Kumar.
2. One day workshop on "DRDO Academia meet: Research Opportunities in Defense Sector" organized by Armament Research Board at NIT Kurukshetra on 30 November, 2018 locally organized by Dr. Saurabh Chanana, Dr. Chagan Charan & Dr. Atma Ram Gupta.

3. Two day workshop on "Ladder of Research", by Dr. Shelly Vadhera & Dr. Atma Ram Gupta.
4. Attended an International Workshop on Energy, Power & Environment during March 17 – 19, 2019 at NIT Kurukshetra by Dr. Bhanu Pratap.
5. One day national seminar on Scientific and technical terminology at KIET group of Institutions, Ghaziabad organized by commission of Scientific and technical terminology, Dept. of higher education, MHRD, GOI on 02nd November, 2018 by Dr. Atma Ram Gupta.

Guest Lectures/Talks Delivered/Invited:

1. Delivered a Guest Lecture in the Two week Short Term Course on “Tools & Techniques for Modelling & Simulation (TTMS-2018)” during Dec. 17-29, 2018 in Instrumentation & Control Engineering Division, NSIT Delhi, New Delhi delivered by Dr. Bhanu Pratap.
2. Delivered a Guest Lecture in the TEQIP-III sponsored three day workshop on "Smart Grid Technology and Recent Advances in Power Engineering" during May 29-31, 2019 in Electrical Engineering Department B.T.K.I.T. Dwarahat, Almora, Uttarakhand delivered by Dr. Bhanu Pratap.
3. Invited & delivered one week expert lecture in the workshop on "MATLAB SIMULINK TOOLS" at Dept. of Electrical Engg. Central University of Haryana during 8-12th March, 2019, delivered by Dr. Atma Ram Gupta
4. Delivered an expert lecture on "High Voltage and its applications" in the STC on HVEGMA-2018 at Dept. of Electrical Engg., NIT Kurukshetra during 16-20th July, 2018, delivered by Dr. Atma Ram Gupta
5. Expert Lecture on Microgrid: the next opportunity has been delivered by Prof. Vijay Kumar Sood from university of Ontario Institute of Technology, Ontario, Canada, dated 4th Jan. 2018.

Civil Engineering Department

Seminar /conference/workshop/short term courses organized/attended:

1. Workshop on “New Developments in Pre-fab Structures and Concrete Technology” on 13th Nov. 2018
2. Short Term Course on Advances in Structural Engineering from 14th May to 19th May 2018.
3. One Week Short Term Course on Strengthening Capacities for Hazardous and Disaster Risk Management (SCHDRM-2018) in May 2018.

Guest Lectures/Talks Delivered/Invited:

1. Expert Lecture on the topic “Fluoride Removal from Water” was organized by Dr. Devendra Mohan, Professor, Department of Civil Engineering, Indian Institute of Technology, (BHU), Varanasi on 16.10.2018.

2. Expert Lecture in the area of Geotechnical Engineering by Prof. G.R.Dodagoudar, Professor, Deptt. Of Civil Engineering, IIT, Madras, Chennai on 5th Feb., 2019.
3. Expert Lecture on the topic “Sustainable Water Management: Challenges in India and Possible Solutions” by Dr. K.P. Sudheer, Professor, Civil Engineering Department, IIT, Madras, Chennai on the topic on March 15th, 2019.
4. Interactive session / Expert talk on “Research Methodology” by Dr. D.N. Singh, Professor, Civil Engineering Department, IIT, Bombay.
5. Expert Lecture on the topic “Evaluation of liquefaction potential of soils” by Prof. Ashwani Jain, Professor, Civil Engg. in short term course on “Advances in Structural Engineering”(14-19 May 2018)

Electronics & Communication Engineering Department

Seminar /conference/workshop/short term courses organized/attended:

1. Dr. Chhagan & Dr. Vikas Mittal, Wireless and Mobile Communication, NIT Kurukshetra, 3rd-7th December, 2018
2. Dr. Chhagan & Dr. Vikas Mittal, Artificial Intelligence and Machine, NIT Kurukshetra, 17th-21st December 2018
3. Dr. Gaurav Saini & Dr. Sudhanshu Choudhary, 5-Day workshop on MATLAB and Simulink, NIT Kurukshetra, July 30 to August 3, 2018
4. Dr. J. K. Chhabra, Dr. Gaurav Saini, Dr. Sudhanshu Choudhary, Faculty Development Program in VLSI Design using Xilinx & Mentor Graphics Tools, NIT Kurukshetra, September 10-14, 2018
5. Dr. Gaurav Saini, 5-Day Training Programme / Workshop was organized on Visual TCAD, NIT Kurukshetra Feb. 25 to March 1, 2019.
6. Dr. Sudakar Singh Chauhan & Dr. Gaurav Verma, Emerging Trends in Wireless Communication and Signal Processing (ETWCSP-2019, NIT Kurukshetra, Jan. 7-12, 2019

Guest Lectures/Talks Delivered/Invited:

1. Arvind Kumar, MIMO – OFDM Systems, MIMO – OFDM Systems, UIET, Kurukshetra University Kurukshetra, Sept. 17 – 21, 2018
2. Arvind Kumar, OFDM Systems, PSIT Kanpur, Jun. 4 – 9, 2018
3. Rajoo Pandey, Efficient Modulation Techniques for 5G Wireless Networks, SLIET, Longowal, 27th Sept., 2018
4. Chhagan Charan, One Week Workshop on Machine Learning and Internet of Things (MLIoT-2019), Government Engineering College, Bharatpur, 26-02-2019 to 02-03-2019.
5. Pankaj Verma, One Week Workshop on Machine Learning and Internet of Things (MLIoT-2019), Government Engineering College, Bharatpur
6. Sudakar Singh Chauhan, Signals & Systems, SATI Vidhisa Sept.17, 2018
7. Gaurav Verma, Recent Trends in Electrical, Electronics & Communication Engineering (RTEECE-19), BIET Jhansi, Feb. 23-24, 2019

Humanities & Social Sciences Department

Seminar /conference/workshop/short term courses organized/attended:

1. Vikas Choudhary, Chairperson, National Seminar on Gandhian Values in the 21st Century: Contemporary Trends and Challenges (GVCTC-2018) on September 29, 2018 at NIT Kurukshetra.
2. Dr. Shahida conducted a Workshop on Communication Skills for Employability at GEC Bikaner (TEQIP-III Sponsored) 1-2 March 2019.
3. Dr. Shahida, Convener, National Seminar on Gandhian Values in the 21st Century: Contemporary Trends and Challenges (GVCTC-2018) on September 29, 2018.
4. Dr. Vikas Choudhary, Education Transform Lives, Department of Management & Humanities, SLIET, Longowal, 05 September, 2018
5. Dr. Vikas Choudhary, 22nd Indian Political Economy Association (IPEA) Conference, University of Jammu, Jammu, 14-15 December, 2018.
6. Dr. Vikas Choudhary, International Conference on Economics and Development: New Challenges and Opportunities, 31st Annual Conference of Haryana Economic Association, Department of Economics, MDU, Rohtak, 11-12 March, 2019.
7. Dr. Vikas Choudhary, International Academy of Business and Economics (IABE), 2019 Los Angeles-Summer Conference, Los Angeles, USA, 14-16 June, 2019

Guest Lectures/Talks Delivered/Invited:

1. Invited as External Expert, Faculty Recruitment, SVNIT, Surat on August 03, 2018.
2. Invited as Session Chair, National Conference on Education Transform Lives, Department of Management & Humanities, SLIET, Longowal on September 05, 2018
3. Invited as External Expert, BOS Meeting in the Department of Financial Administration, Central University of Punjab, Bathinda on February 12, 2019.
4. Invited as Session Chair, National Seminar on Sponsored Seminars and Conferences - Goals and Gains, MM (PG) College, Fatehabad on March 06, 2019.
5. Invited as Session Chair, International Conference on Economics and Development: New Challenges and Opportunities, 31st Annual Conference of Haryana Economic Association, Department of Economics, MDU, Rohtak on March 12, 2019.
6. Invited to deliver Inaugural Address at National Seminar on Impact of Population on Indian Socio-Political Structure, Hindu Girls College, Jagadhri on March 27, 2019.
7. Invited as Session Chair, International Conference on Business and Management, Delhi School of Management, Delhi Technological University, New Delhi on March 29, 2019.

8. Invited as External Expert to conduct Research Plan Presentation in the Department of Management and Humanities, SLIET, Longowal on April 29, 2019.
9. Invited as External Expert to conduct GD & PI, MBA Admissions, Delhi School of Management, Delhi Technological University, New Delhi on May 06, 2019.
10. Invited as Session Chair, International Conference on Paradigm Shift in Banking, University Business School, Panjab University, Regional Centre, Ludhiana on June 27, 2019.
11. Invited as External Expert to conduct GD & PI, MBA Admissions, Delhi School of Management, Delhi Technological University, New Delhi on June 29, 2019.

Chemistry Department

Events Organized:

GIAN Course on Electrochemical Energy Conversion and Storage, organized by Department of Chemistry, NIT Kurukshetra, Kurukshetra held on 26-30 Nov. 2018.

Mathematics Department

Short Term Courses/ Conferences/ Workshops Attended/organized:

1. Dr. Naveen Kumar organized Short Term Course on Research and Professional Skills, NIT Kurukshetra, May 27-31, 2019
2. Dr. Smita Sonker, National Science Conclave, sponsored by DST-Haryana, NIT Kurukshetra, Feb.28-March1, 2019
3. Dr. A.S.V. Ravi Kanth, attended 11th conference on National Conference on Mathematical Techniques and Applications at Department of Mathematics, SRM Institute of Science & Technology, Kattankulathur, 11 Jan 2019 12 Jan 2019
4. Dr.Smita Sonker, attended Sixteenth International Conference on Approximation Theory at Department of Mathematics,Vanderbilt University, May 19, 2019 May 22

Department of Business Administration

Short Term Courses/ Conferences/ Workshops Attended/organized

1. Two Days Workshop on “Personality Development” by Ms. Madhu Sharma, CEO, Success Strategies for life on August 20-21, 2018
2. Organized a One-Day workshop on “Searching Drafting and Filing process of the Patent” on 29th September, 2018 by the IPR Cell at National Institute of Technology, Kurukshetra

3. Organized a One-Day workshop on “Innovation and Technological Entrepreneurship” on 25th January, 2019 by the IPR Cell and Department of Business Administration at National Institute of Technology, Kurukshetra
4. Dr. Neeraj Kaushik attended CEP Course on IT Enabled Learning in STEM, Indian Institute of Technology, Bombay during Sept 10-12, 2018
5. Dr. Rajender Kumar attended 22nd Annual Conference of Indian Political Economy Association (I.P.E.A.) organized by Jammu University, Jammu and chaired a Technical session on “Political Economy of Emerging Political, Development and Ecological Challenges at the National and Global Levels” December 14, 2018.
6. Dr. Neeraj Kaushik conducted Five-day Workshop on R and R-Studio in Rukmani Devi Institute of Advanced Studies, Delhi from Feb 18-22, 2019
7. Dr. Neeraj Kaushik conducted Three-day Workshop on R and R-Studio in the Gurukul Kangri Vishwavidyalaya, Haridwar from Nov 23-25, 2018
8. Dr. Neeraj Kaushik conducted Three-day Workshop on R and R-Studio in the Motilal Nehru National Institute of Technology (MNNIT) Allahabad from Oct 11-13, 2018
9. Dr. Neeraj Kaushik conducted Three-day Workshop on R and R-Studio in the Faculty of Management Studies, Banaras Hindu University, Varanasi from Oct 08-10, 2018
10. Dr. Neeraj Kaushik conducted Three-day FREE Workshop on R and R-Studio in Rukmani Devi Institute of Advanced Studies, Delhi from Sept 01-03, 2018
11. Dr. Neeraj Kaushik conducted Two-day sessions in Five-day Workshop Selection of Appropriate Research Methods & Data Analytics Using R in New Delhi Institute of Management, Delhi from July 17-18, 2018
12. Dr. Neeraj Kaushik conducted Three-day sessions in Six-days FREE Workshop on Basics of Research Methodology in CDAR, GNDU Amritsar from July 10-12, 2018
13. Dr. Neeraj Kaushik conducted Five-day workshop on Advance Data Analysis Technique and Research Paper writing skills in Chitkara University Punjab from July 2-5, 2018
14. Dr. Neeraj Kaushik conducted Five-day workshop on Structural Equation Modeling in JIMS, Sector-5 Rohini, from June 26-30, 2018
15. Dr. Neeraj Kaushik conducted Five-day sessions on Microsoft Office Excel Training in Management Development Institute (MDI), Murshidabad from June 20-24, 2018
16. Dr. Neeraj Kaushik conducted Two-day workshop on In-Depth Learning of Appropriate Tools and Techniques for Quality Research Papers in JIMS, Sector-3 Rohini, on June 15-16, 2018
17. Dr. Neeraj Kaushik conducted Three-day workshop on Data Analysis using SEM & Panel Data in Maharaja Agrasen Institute of Management Studies (MAIMS), Rohini Delhi from June 11-17, 2018.
18. Dr. Neeraj Kaushik conducted Six-day workshop on Structural Equation Modeling using AMOS in Rukmini Devi Institute of Advanced Studies, Rohini, Delhi from May 28-June 2, 2018

19. Dr. Neeraj Kaushik conducted Three-day Workshop on R and R-Studio in the Centre for Data Analytics and Research (CDAR), Guru Nanak Dev University, Amritsar on April 20-22, 2018

Management Fest

Two-Day Management Fest 'VIHAAN'18' on April 12-13, 2018 by the Department of Business Administration.

Guest Lectures/Talks Delivered/Invited:

1. Expert Lecture on Motivation by Mr. Sandeep Singh, Social Scientist on September 19, 2018
2. Expert Lecture on Banking and Related Terms by Mr. Ankur Yadav, Regional Sales Managers Indusland Bank, Kurukshetra on September 19, 2018
3. Expert Lecture on Motivation by Prof. A.G. Iyer, President & Promoter Director, REPA, Chairperson-SEFI & NCEE Editor-in-Chief & Funder Publisher ENERTIA, Falcon Media on September 26, 2018
4. Expert Lecture on Global Human Resource Management by Prof. T.J. Kamalanabhan, IIT Madras on October 25, 2018
5. Expert Lecture on Entrepreneurship Development by Mr. Karthik K.S, Founder and Chief Executive Officer of AEON on October 31, 2018
6. Expert Lectures on Career opportunities Abroad by Prof. Chinmoy Ghosh, Professor of Finance, University of Connecticut USA on January 4-7, 2019
7. Expert Lecture on Behavioural Finance by Dr. Satish Kumar, Associate Professor, MNIT, Jaipur on January 24, 2019
8. Expert Lectures on Entrepreneurship Development by Mr. Tirthankar Goyal CEO Galilee Management Institute Israel on January 25, 2019
9. Expert Lectures on KASH Model by Dr. Santosh Rangnekar Professor at Department of Management Studies, IIT Roorkee on March 1, 2019

Computer Engineering Department

1. Dr. B.B. Gupta (Assistant Professor) received Young Faculty Research Fellowship Award (37 Lakhs), by MeitY, Govt. of India, 2017. It provides fellowship @ Rs. 20,000 per month in addition to the regular income and annual grant of Rs. 5,00,000 for research expenses and presenting research work, to be granted for a period of upto 5 years.
2. Two faculty members (Dr.B.B.Gupta and Dr. Mantosh Biswas) got five PhD seats under visvesveraya PhD scheme of Deity, Govt. of India. This scheme offers a fellowship @31,500 p.m. (I & II year); 35,000 (III to V year). It also supports for attending international conferences up to Rs. 50,000 per conference.
3. Sh. Vikram Singh was awarded with Best Student Paper award at MIKE-2018 Conference, IDBRT Hyderabad.

4. Rs. 25.0 Lakhs have been approved under TEQIP-III to setup Speech and Image Processing Laboratory at Department of Computer Engineering, NIT Kurukshetra.

Short Term Courses/ Conferences/ Workshops Attended/organized

1. Dr. G.K.Verma, Sh. Vikram Singh and Sh. Anoop Kumar Patel have organized 1st International Conference on Machine Learning, Image Processing, Network Security and Data Sciences (MIND-2019), 3rd - 4th March 2019 at Department of Computer Engineering, NIT Kurukshetra.
2. Dr. Virender Ranga has organized One-Day Seminar-cum-Awareness Program on Data Analytics during 1 November, 2018.
3. Dr. Virender Ranga has organized One Week Faculty Development Program on Data Analytics during 28 February - 04 March 2019.
4. Dr. Virender Ranga has organized One Week Start-up Week under the aegis of TEQIP-III during 21-27 January 2019.
5. Dr. Mayank Dave and Dr. Priyanka Ahlawat have organized One Week Short Term Course on Security Issues for Sensor, IoT and Opportunistic Networks (SISION) under ISEA Project Phase II during September 10-15, 2018.
6. Dr. Mantosh Biswas has organized five days workshop with installation on "High Performance Computing" during September 19-23, 2018.
7. Dr. J.K.Chhabra has organized five days Training Programme/Workshop on Visual T-CAD, School of VLSI and Embedded Systems, 25-2-19 to 1-3-19.
8. Dr. R.K.Aggarwal has attended one Week Faculty Development Program on "Data Analytics" during 28 February - 04 March 2019.
9. Dr. G.K.Verma has attended 10th International Conference on "Intelligent Human Computer Interaction" (IHCI-2018) on 7th to 9th December 2018 at Indian Institute of Information Technology Allahabad, Uttar Pradesh, India.
10. Dr. G.K.Verma has attended workshop on "Cognitive Computing" on 6th to 7th December 2018 at Indian Institute of Information Technology Allahabad, Uttar Pradesh, India.
11. Sh. Vikram Singh has attended International Conference on Computational Intelligence: Theories, Applications and Future Directions during December 6th - 8th, 2018 at Indian Institute of Technology, Kanpur, India.
12. Dr. Priyanka Ahlawat attended 1st International Conference on Machine Learning, Image Processing, Network Security and Data Science held in NIT, Kurukshetra on 3-4 March 2019.

Guest Lectures/Talks Delivered/Invited:

1. Dr. J.K.Chhabra has delivered expert lectures on "Soft Computing and Machine Learning for CSE" in TEQIP's FDP, Delhi Technological University, New Delhi, April 2018.
2. Dr. J.K.Chhabra has delivered expert lectures on "Concept and Implementational Issues of Data Structures" in FDP on Data Structures and Algorithms organized by IIITDM Jabalpur, at JUET Guna, July 2018.

3. Dr. J.K.Chhabra has delivered expert lecture on "Machine Learning and Intelligence" FDP, SLIET Longowal, Sep 2018.
4. Dr. J.K.Chhabra has delivered expert lectures on "Algorithms Design and Analysis", IIITM Gwalior, Feb 2019.
5. Dr. J.K.Chhabra has delivered lecture as a Keynote Speaker, in 5th IEEE International Conference on Parallel, Distributed and Grid Computing (PDGC 2018), 20-22 December, 2018, JUIT Solan, HP.
6. Dr. J.K.Chhabra has delivered lecture in Session Chair, International Conference on Secure Cyber Computing and Communications ICSCCC 2018, December 15-17, 2018, NIT Jalandhar.
7. Dr. R.K. Aggarwal has delivered an expert talk on "Professional Excellence" for the faculty of Matoshri Engineering College Nanded on 11.10.2018.
8. Dr. G.K. Verma has delivered expert lecture on "Outcome Base Accreditation for Undergraduate Engineering Programs" at TEQIP-III Sponsored 16th - 17th March 2018 in Government Engineering College, Bikaner, India.
9. Dr. B.B.Gupta has delivered expert lecture on "Security Issues and Challenges and Cloud and Web Computing" in Deakin University, Australia, July 2018.

Department of Computer Applications

Prof. Ashutosh Kumar Singh, NIT Kurukshetra received the prestigious "JSPS fellowship" from the Government of Japan, Prof. Ashutosh Kumar Singh received the prestigious "JSPS fellowship" from the government of Japan to gear up Indo-Japan research. The Japan Society for the Promotion of Science (JSPS), is an independent administrative institution, established by way of a national law for the purpose of contributing to the advancement of science in all fields of the natural and social sciences and the humanities. JSPS plays a pivotal role in the administration of a wide spectrum of Japan's scientific and academic programs. It is an emerging and promising area in the field of computers. During his stay in Japan he will be visiting in premier universities like Tokyo University and others for research work and its dissemination. His Japanese fellow researcher is Mashahiro Fujita, Director, VLSI Design and Education Center, University of Tokyo.

DAAD Internship: Dr. Sarika Jain supervised a DAAD Rise Worldwide intern from Germany for the project titled "Rule based Intelligence on the Web". For this internship, 603 German students applied for over projects of 50 countries and in all 252 scholarships were awarded out of which 5 were for India.

12.3 PUBLICATIONS, PATENTS etc.

MECHANICAL ENGINEERING DEPARTMENT

Papers in International/National Journals

1. Narinder kaushik And Dr. Sandeep Singhal 2018 Optimization of Wear Properties in Aluminum Metal Matrix Composites using Hybrid Taguchi-GRA-PCA International Journal of Performability vol. 14, no. 5, May 2018, pp. 857-870 DOI: 10.23940/ijpe.18.05.p4.857870.
2. Prakash R., Singhal S., and Agarwal 2018 An Integrated Fuzzy- based multi criteria decision making for Selection of effective manufacturing system, Benchmarking: an International Journal (Emerald), vol. 2, no.1,pp 1-17. ISSN: 1463-5771.
3. Narinder kaushik and Dr. Sandeep Singhal 2019 "Experimental Investigations on Microstructural and Mechanical Behavior of Friction Stir Welded Aluminum Matrix Composite" (OMS-18-589.R2) International Journal of Engineering Vol. 32, No. 1, (January 2019) 162-170.
4. Narinder kaushik and Dr. Sandeep Singhal 2018 A case study of mechanical and metallurgical properties of friction stir welded AA6063 AMC, International Journal of Microstructure and Materials Properties.(Inderscience) Vol. 13, Nos. 3/4, 2018.
5. Narinder kaushik and Dr. Sandeep Singhal 2018 Hybrid combination of Taguchi-GRA-PCA for optimization of wear behavior in AA6063/SiCp matrix composite, Production & Manufacturing Research (Taylor & Francis Publications) 6:1, 171-189, DOI: 10.1080/21693277.2018.1479666.
6. Narinder kaushik and Dr. Sandeep Singhal 2018 Wear conduct of aluminum matrix composites: A parametric strategy using Taguchi based GRA integrated with weight method, Cogent Engineering, <https://doi.org/10.1080/23311916.2018.1467196>.
7. Vinit Booraa and Sandeep Singhal 2018 Productivity enhancement: implementing and analyzing clustering method in manufacturing of gearbox housing, International Journal of Current Engineering and Technology, E-ISSN 2277- 4106 P-ISSN 2347- 5161.
8. Narinder kaushik and Dr. Sandeep Singhal 2018 Dry-Sliding Wear Analysis of SiC Reinforced AA6063 As-Cast Aluminum Metal Matrix Composites, Since Direct, Materials Today Elsevier, IConAMMA 2017.
9. Narinder kaushik and Dr. Sandeep Singhal 2018 Experimental investigations of friction stir welded AA6063 aluminum matrix composite, Journal of Mechanical Engineering and Sciences, ISSN (Print): 2289-4659; e-ISSN: 2231-8380 Volume 12, Issue 4, pp. 4127-4140, December 2018 © Universiti Malaysia Pahang, Malaysia.
10. P.C.Tewari "Parameters optimization of fabric finishing system of a textile industry using teaching-learning-based optimization algorithm" International journal of industrial engineering computations 9, no. 2 (2018): 221-234.
11. P.C.Tewari "Influence of sintering temperature and cooling rate on microstructure and mechanical properties of pre-alloyed fe-cr-mo powder metallurgy steel" Trans indian inst met (2018) 71(1):219-224.
12. P.C.Tewari "Performance modeling and maintenance priorities decision for the water flow system of a coal-based thermal power plant" International journal of quality & reliability management vol. 35 no. 4, 2018 pp. 996-1010.

13. P.C.Tewari "On the fuzzy evaluation of measurement system analysis in manufacturing and process industry environment: a comparative study" *Management science letters* 8 (4), 201-216.
14. P.C.Tewari "Performance modeling and assessment of maintenance priorities for steam generation unit of a sugar plant" *International journal of quality & reliability management* vol. 36 no. 2, 2019 pp. 286-296.
15. Kumar, P. (2018). Influence of piezo-viscous behavior and load on the effectiveness of inlet zone bump in unidirectional pure sliding EHL line contacts. *Industrial Lubrication and Tribology*, 70(9), 1766-1773.
16. Priyank Srivastava, Dinesh Khanduja and Vishnu P Agrawal, "Integrating agile thinking into maintenance strategy performance analysis", *International Journal of Process Management and Benchmarking*, Vol. 8 (2), 2018, pp. 228-256.
17. Rajiv Kumar, P.C. Tewari and Dinesh Khanduja, "Parameters Optimization of Fabric Finishing System of a Textile Industry using Teaching-Learning based Optimization Algorithm", *International Journal of Industrial Engineering Computations*, Vol. 9, 2018, pp. 1-14.
18. Kapil Mittal, Puran Chand Tewari and Dinesh Khanduja, "On the Fuzzy Evaluation of Measurement System Analysis in a Manufacturing and Process Industry Environment: A Comparative Study", *Management Science Letters*, Vol. 8, 2018, pp. 201-216.
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23. Kumar, M., Garg, D., Agarwal, A. (2019) Cause and effect analysis of inventory management in leagile supply chain. *Journal of Management Information and Decision science*. Vol.22 No.2 pp.67-100.
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25. Nain,S.S., Garg,D. and Kumar,S. (2019) Modelling and Analysis for the Machinability Evaluation of Udimet-1605 in Wire Cut Electric Discharge Machining. *International Journal of Process Management and Benchmarking (Inderscience)*.

26. Chaurasia,B., Garg,D. and Agarwal,A. (2019) Lean Six Sigma Approach: A Strategy to Enhance Performance of First Through Time and Scrap Reduction in an Automotive Industry. *International Journal of Business Excellence*. Vol. 17 No. 1 (Inderscience).
27. Kumar,A., Garg,R.K. and Garg,D. (2019) An Empirical Study to Identify and Develop Constructive Model of e-Supply Chain Risks based on Indian Mechanical Manufacturing Industries. *Management Science Letters: An International Journal*.
28. Kumar, S., Luthra, S.,Haleem, A. and Garg D. (2019). Qualitative analysis of drivers of poka yoke in small and medium enterprises of Indian automobile sector. Forthcoming in *International Journal of Process Management and Benchmarking*, DOI: 10.1504/IJPMB.2019.10020747.
29. Nain,S.S., Garg,D. and Kumar,S. (2018) Performance Evaluation of the WEDM Process of Aeronautics Super Alloy. *Materials and Manufacturing Processes*.
30. Nain,S.S., Garg,D. and Kumar,S. (2018) Evaluation and Analysis of Cutting Speed Wire Wear Ratio and Dimensional Deviations of WEDM of Superalloy Udimet-1605 using Support Vector Machine and Grey Relational Analysis. *Advances in Manufacturing*.
31. Misra,O.P., Kumar,V. and Garg,D. (2018). Performance Evaluation of JIT Enabled SCM using ANP Method. *International Journal of Systems Assurance Engineering and Management*.
32. Nain,S.S., Garg,D. and Kumar,S. (2018). Investigation for obtaining the optimal solution for improving the performance of EDM of super alloy Udimet L 605 using particle swarm optimization. *Engineering science and technology, an International Journal*. Vol.21 No.2 pp.261-273.
33. Gupta,V., Garg, D. and Kumar,R. (2018) Performance evaluation of TQM attainment in Indian manufacturing sector. *International Journal of Service and Operation management*. Vol.29 No.2 pp.214-235.
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36. Gupta, S., Garg, D. and Luthra, S.* (2019). An analysis of sustainable production and consumption challenges: using PEST-AHP approach. *International Journal of Logistics Systems and Management*.
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41. Vikas Kumar and Hari Singh "Optimization of Rotary Ultrasonic Drilling of optical glass using Taguchi method and utility approach", *Engineering Science and Technology, an International Journal (Elsevier, Scopus)*, 2019, Vol. 22, pp. 956-965.
42. Vikas Kumar and Hari Singh, "Investigation of hole quality in rotary ultrasonic drilling of borosilicate glass using RSM", *Journal of the Brazilian Society of Mechanical Sciences and Engineering (SCIE; IF 1.627)*, 2019, Vol 41, Issue 2; DOI:10.1007/s40430-018-1524-7.
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78. Sushma Rani, Ajai Jain and Surjit Angra. "effect of sequencing rules on order release policies in a stochastic and dynamic job shop with sequence-dependent setup times – a simulation study" *Journal of Physics: Conference Series*, Volume 1240.

79. Mohit Sharma and Surjit Angra "Experimental modelling of powder metallurgical processed copper foams using acrawax as a space holder material" Journal of Physics: Conference Series, Volume 1240.
80. Sunny Bhatia, Surjit Angra and Sabah Khan "Mechanical and wear properties of epoxy matrix composite reinforced with varying ratios of solid glass microspheres" Journal of Physics: Conference Series, Volume 1240.
81. Navin Kumar, Dr Surjit Angra and Dr Rs Walia "Development and comparison of tensile and compressive strength and percentage shrinkage of Glass- Jute Hybrid Fibre reinforced polymer composites"
82. Jasbir Singh, Lalit Thakur and Surjit Angra "Effect of argon flow rate and standoff distance on the microstructure and wear behaviour of WC-CoCr TIG cladding" Journal of Physics: Conference Series, Volume 1240.
83. Jivesh Malik, Vinod Mittal and Surjit Angra "Review on mechanical and wear properties of aluminium alloy composite by stir casting process" Journal of Physics: Conference Series, Volume 1240.
84. Deepak Kumar, Surjit Angra and Vinod Kumar Mittal "effect of reinforcement addition in the aluminium metal matrix composite on the mechanical properties - a review" Journal of Physics: Conference Series, Volume 1240.
85. Abhinav Khajuria, Surjit Angra and Vinod Kumar Mittal "study on aluminium metal matrix composite- a review" Journal of Physics: Conference Series, Volume 1240.
86. Himanshu, Vinod Mittal and Surjit Angra "effects of various types of reinforcements on the mechanical properties of aluminium alloy al6061 metal matrix composite-a review" Journal of Physics: Conference Series, Volume 1240.

Papers in International /National Conferences

1. Goyal, R. and S. Singhal, Just In Time Manufacturing System: A Literature Review, in 2nd International Conference New Frontiers In Engineering Science & Technology 2019: National Institute of Technology Kurukshetra, Haryana.
2. Goyal, R. and S. Singhal, Evaluating Ranking of Performance Indicators Help In Execution of Jit Philosophy In Indian MSMEs USING WASPAS MCDM Model, in 6th International Conference on Production And Industrial Engineering (CPIE-2019)2019: NIT Jalandhar-144011, India.
3. Akash , Sandeep Singhal, Evaluating of Performance Parameters of Supply Chain Management In Indian Dairy Industry in 6th International Conference on Production And Industrial Engineering (CPIE-2019)2019: NIT Jalandhar-144011, India.
4. Akash , Sandeep Singhal, Supply Chain Management: a Critical Review in 2nd International Conference New Frontiers In Engineering Science & Technology 2019: National Institute of Technology Kurukshetra, Haryana.
5. P.C.Tewari, Ranking of performance indicators in jit based manufacturing industries using saw technique, 2nd International Conference on Frontiers in Engineering Applied Sciences & Technology, 28th Apr., 2018.
6. P.C.Tewari, Maintenance priority determination based on performance analysis of a repairable unit, New frontiers in engineering science and technology (NFEST-2019) February 18-22, 2019.

7. Dinesh Khanduja, Pardeep Sharma and Vishal Dabra, "Corrosion Behaviour of Thermal Spray Coated AISI 316L Stainless Steel using Ni-80Cr Alloy", 2nd International Conference on New Frontiers in Engineering Science and Technology (NFEST 2019), National Institute of Technology, Kurukshetra, February 18-22, 2019.
8. Shivam Singh and Dinesh Khanduja, "Improvement in Manufacturing System by Rearrangement in Layout Design- A Case Study", 2nd International Conference on New Frontiers in Engineering Science and Technology (NFEST 2019), National Institute of Technology, Kurukshetra, February, 18-22, 2019.
9. Rajeev Rathi, Ankush Kumar and Dinesh Khanduja, "Identification and Prioritization Lean Six Sigma Barriers in MSMEs", 2nd International Conference on New Frontiers in Engineering Science and Technology (NFEST 2019), National Institute of Technology, Kurukshetra, February 18-22, 2019.
10. Rahul Dahiya and Dinesh Khanduja, "An Analysis of Drivers Affecting the Implementation of Green Supply Chain Management", 7th National Conference on Nanoscience and Instrumentation Technology, National Institute of Technology Kurukshetra, 9-10 March, 2019.
11. Rahul Dahiya and Dinesh Khanduja, "Green Supply Chain Management: A Review", 6th International Conference on Production and Industrial Engineering (CPIE 2019), National Institute of Technology, Jalandhar, 8-10 June, 2019.
12. Anoop Kasaundhan and Dinesh Khanduja, "Design for Six Sigma for Improving Fuel Efficiency Band Performance on Production Vehicle", 6th International Conference on Production and Industrial Engineering (CPIE 2019), National Institute of Technology, Jalandhar, June 8-10 (2019).
13. Anoop Kasaundhan, Dr. Dinesh Khanduja, "Improving Fuel Efficiency Band Performance by Controlling Axle Skewness on Vehicle Using Design for Six Sigma", 6th International Conference on Production and Industrial Engineering (CPIE 2019), National Institute of Technology, Jalandhar, June 8-10 (2019).
14. Jitnder and Hari Singh "Effects of process parameters on hardness and tensile strength of AA5083 and AA6061" 6th International Conference on Production and Industrial Engineering (CPIE 2019), NIT Jalandhar, June 8-10, 2019.
15. Jitnder and Hari Singh "Friction Stir Welding: A Review" 7th National Conference on Nanoscience and Instrumentation Technology, NIT Kurukshetra, March 9-10, 2019.
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34. Anshuman, Satnam Singh, "Recent developments of hybrid fibre reinforced composites in the field of Mechanical Engineering: A Review", EAH 2019, NIT Srinagar, June 22-23, 2019.
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1. A Text Book entitled “Work Study And Ergonomics” authored by Dr. P. C. Tewari was published by CRC Press on 20 April, 2018.
2. Dr. Dinesh Khanduja published a book chapter on “Total Fuzzy Agility Evaluation Using Fuzzy Methodology: A Case Study” e-book Harmony Search and Nature Inspired Optimization Algorithms , published by Advances in Intelligent Systems and Computing Series of Springer, Singapore (2018), Vol. 741.
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9. Dr. Nirmal Kant Singh published a book chapter on 'Introduction to Computational Fluid Dynamics' in Numerical Simulation of Flow and Heat Transfer, ISBN: 978-613-9-86368-6 by Lambert Academic Publishing, Omniscryptum AG in 2018.
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Patents Approved/ Applied

1. Patent Application No. 201711046139A filed on 21.12.2017 has been published in The Patent Office Journal No. 25/2019 dated 21.06.2019. The Title of the Invention is “Fixture for holding a material to be welded” and the Inventors are Jitender Kundu and Hari Singh.
2. Filed and published one Indian Patent Application No. 201711042859 dated November 29, 2017 for the invention entitled “Solar Heat Collector” in the name of Rajneesh and National Institute of Technology, Kurukshetra.
3. Filed one Indian Patent Application No. 201811000419 dated January 4, 2018 for the invention entitled “Dehumidifier/Regenerator Apparatus” in the name of National Institute of Technology, Kurukshetra and Rajneesh.

CIVIL ENGINEERING DEPARTMENT

Papers in International/National Journals

1. Tanvi Gupta, S.N. Sachdeva, ‘Investigations on Jarosite Mixed Cement Concrete Pavements’, Arabian Journal for Science and Engineering, <https://doi.org/10.1007/s13369-019-03801-1>, Mar 2019, Springer Berlin Heidelberg, SCIE & SCOPUS indexed.
2. Tanvi Gupta, S.N. Sachdeva, ‘Laboratory Investigation and Modeling of Concrete Pavements containing AOD Steel Slag’, Cement and Concrete Research, <https://doi.org/10.1016/j.cemconres.2019.105808>, SCI & SCOPUS indexed, Elsevier Publication, July 2019, Impact Factor: 5.618, ISSN: 0008-8846.
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4. Sudhashru Mishra, S.N. Sachdeva and Rakesh Manocha (2019), Subgrade Soil Stabilization using Stone Dust and Coarse Aggregate: A Cost Effective Approach, International Journal of Geosynthetics and Ground Engineering (SCOPUS Indexed, Springer Nature, Switzerland), ISSN: 2199-9260, July 2019, <https://doi.org/10.1007/s40891-019-0171-0>.
5. Gourav Goel, S.N. Sachdeva, 'Performance of Bituminous Concrete Mixes with Modified Binder and Anti-Stripping Agent', accepted for publication in any of the IRC Periodicals / Journals, Aug 2019.
6. Manish Kumar, S.N. Sachdeva and Rakesh Manocha (2019), “A Study on Stabilization of Soil with Lime and Cement”, International Journal of Technical Innovation in Modern Engineering & Science (IJTIMES), e-ISSN: 2455-2585, Volume 05, Issue 06, June-2019.
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9. Nida Nasir, S.N.Sachdeva (2019), "A study on Design Aspects of Reinforced Earth wall" proceedings of International Journal of Technical Innovation in Modern Engineering & Science, Volume 05 Issue 04, April-2019, ISSN (Online): 2455-2585.
10. Harpreet Singh, S.N. Sachdeva and Rakesh Manocha (2019), Laboratory Investigations on Stabilization of Soil with Fly-Ash, International Journal of Technical Innovation in Modern Engineering & Science, Impact Factor: 5.22 (SJIF-2017), e-ISSN: 2455-2585 Volume 5, Issue 6, June-2019.
11. Lokit Bansal and S.N. Sachdeva (2019), "Design and Economy Aspects of Continuously Reinforced Concrete Pavement", International Journal of Technical Innovation in Modern Engineering & Science, Volume 05, Issue 06, June-2019.
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13. Ezatullah Rahimi, S.N. Sachdeva (2019), "Effect of Higher Axle Load Frequency on Cement Concrete Pavement Thickness", International Journal of Technical Innovation in Modern Engineering & Science (IJTIMES), e-ISSN: 2455-2585 Volume 5, Issue 03, March-2019 UGC Approved.
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 23. Lokit Bansal and S.N. Sachdeva (2018), "Cost Analysis of Continuously Reinforced and Conventional Concrete Pavement", National Conference on Advanced Structures, Materials and Methodology in Civil Engineering (ASMMCE-2018), Department of Civil Engineering, B R Ambedkar National institute of Technology, Jalandhar, Punjab, India, November 03-04, 2018.
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 25. Ezatullah Rahimi, S.N. Sachdeva (2018), "Effect of Axle Load Spectrum on Design of Rigid Pavement" Proc. "National Conference on Advanced Structures, Materials and Methodology in Civil Engineering (ASMMCE-2018), NTT Jalandhar-Punjab, 3-4th Nov. 2018.

CHEMISTRY DEPARTMENT**Papers in International/National Journals**

1. Rohini, Minati Baral and B.K. Kanungo, Experimental and Theoretical Studies on Structure, Bonding and Luminescence Properties of Eu(III) and Tb(III) Complexes of a New Macrocyclic Based 8HQ Ligand, *Journal of Coordination Chemistry*, Volume 72, 9, Pages 1497-1523. 2019.
2. Rohini, Minati Baral and B.K. Kanungo, Structural effect on the central cavity of a pendent 12N3 macrocycle on bonding and photophysical properties of Eu³⁺ and Tb³⁺ complexes: Experimental and theoretical study, *Journal of Molecular Structure* 1184, 324-338, 2019.
3. Vijay Dangi, Minati Baral and B K Kanungo, Study for the Development of a Cyclohexane Based Tripodal Molecular Device as "OFF-ON-OFF" pH Sensor and Fluorescent Iron Sensor, *Current Analytical Chemistry*, DOI : 10.2174/1573411015666190314154126, 2019.
4. Minati Baral, B K Kanungo and Kirandeep Kaur, Studies of a tripodal biomimetic siderophore analog: an efficient encapsulation for Fe(III) ion, *Iranian Journal of Chemistry & Chemical Engineering*, Available Online from 23 February 2019.
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COMPUTER APPLICATIONS DEPARTMENT**Papers in International/National Journals**

1. Ishu Gupta, Ashutosh Kumar Singh, "Dynamic Threshold based Information Leaker Identification Scheme", Information Processing Letters, vol. 147, pp. 69-73, July 2019. (ISI Indexed)
2. Ashutosh Kumar Singh, Jitendra Kumar, "Secure and Energy Aware Load Balancing Framework for Cloud Datacenter Networks", IET Electronic Letters, vol. 55, no. 9, pp. 540-541, May 2019 (ISI Indexed)
3. Hari Mohan Gaur, Ashutosh Kumar Singh, Anand Mohan, D K Pradhan, "Computational Analysis and Comparison of Reversible Gates for Design and Test of Logic Circuits," International J. of Electronics, Taylor & Francis, Online, April 2019. (ISI Indexed)
4. Niharika Singh, Ashutosh Kumar Singh, "SQL-Injection Vulnerabilities Resolving using Valid Security Tool in Cloud", Pertanika J. Sci. & Technol., vol. 27, no. 1, pp. 159-174, April, 2019. (Scopus Indexed)
5. Ishu Gupta, Niharika Singh, Ashutosh Kumar Singh, "Layer-based Privacy and Security Architecture for Cloud Data Sharing", Journal of Communications Software and Systems, vol. 15, no. 2, pp. 1-13, March, 2019 (Scopus Indexed).
6. Hari Mohan Gaur, Ashutosh Kumar Singh, Umesh Ghanekar, "Fault Detection in Multiple Controlled Fredkin Circuits" IET Circuits, Devices & Systems., Online, pp. 1-7, March 2019. (ISI Indexed)
7. Jitendra Kumar, Ashutosh Kumar Singh, An Efficient Machine Learning Approach For Virtual Machine Resource Demand Prediction", International Journal of Advanced Science and Technology, vol. 123, pp. 21-30, Feb, 2019 (Scopus Indexed).
8. Sakshi Chhabara, Ashutosh Kumar Singh, "Dynamic Hierarchical Load Balancing Model for Cloud Data Center Networks", IET Electronic Letters, vol. 55, no. 2, pp. 94-96, Jan 2019. (ISI Indexed)
9. Trailokya Nath Sasamal, Ashutosh Kumar Singh, Anand Mohan, "Design of Cost-efficient QCA reversible circuits via Clock-Zone-Based Crossover", International Journal of Theoretical Physics, pp 3127–3140 Oct 2018. (ISI Indexed)

10. Trailokya Nath Sasamal, Ashutosh Kumar Singh, Umesh Ghanekar, "Design and implementation of QCA D-Flip-flop and RAM cell using majority gate", *Journal of Circuits, Systems and Computers*, pp. 233-247, July 2018. (ISI Indexed)
11. Trailokya Nath Sasamal, Ashutosh Kumar Singh, Anand Mohan, "An efficient design of Quantum-dot Cellular Automata based 5-input majority gate with power analysis", *Microprocessors and Microsystems*, vol. 59, pp. 103- 117 2018. (ISI Indexed)
12. Trailokya Nath Sasamal, Ashutosh Kumar Singh, Umesh Ghanekar, "An Efficient Design of Coplanar Ripple Carry Adder in QCA", *IET Circuits, Devices & Systems*, vol. 12, no. 5, pp. 594-605, 2018. (ISI Indexed)
13. D. Yang, A. Alsadoon, P.W.C. Prasad, A.K. Singh, A. Elchouemi, "An emotion recognition model based on facial recognition in virtual learning environment", *Procedia Computer Science*, vol. 125, pp. 2-10, 2018. (Scopus Indexed)
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15. B. Devkotaa, Abeer Alsadoona, P.W.C. Prasad, A. K. Singh, A. Elchouemi, "Image Segmentation for Early Stage Brain Tumor Detection using Mathematical Morphological Reconstruction", *Procedia Computer Science*, vol. 125, pp. 115-123, 2018. (Scopus Indexed)
16. Y. Jin, Abeer Alsadoon, P.W.C. Prasad, A. K. Singh, A. Elchouemi, "A Weight Joint Based Clustering (WJC) Method for Secure Monitoring System", *Procedia Computer Science*, vol. 125, pp. 640-646, 2018. (Scopus Indexed)
17. Ishu Gupta, Ashutosh Kumar Singh, "A Probabilistic Approach for Guilty Agent Detection using Bigraph after Distribution of Sample Data", *Procedia Computer Science*, vol. 125, pp. 662-668, 2018. (Scopus Indexed)
18. Jitendra Kumar, Rimsha Goomer, Ashutosh Kumar Singh, "Long Short Term Memory Recurrent Neural Network (LSTM-RNN) Based Workload Forecasting Model For Cloud Datacenters", *Procedia Computer Science*, vol. 125, pp. 676-682, 2018. (Scopus Indexed)
19. Sakshi Chhabara, Ashutosh Kumar Singh, "A Probabilistic Model for Finding an Optimal Host Framework and Load Distribution in Cloud Environment", *Procedia Computer Science*, vol. 125, pp. 683-690, 2018. (Scopus Indexed)
20. Surender Singh, Ashutosh Kumar Singh, "Web Spam features selection using CFS-PSO", *Procedia Computer Science*, vol. 125, pp. 568-575, 2018. (Scopus Indexed)
21. Dikshit Kumar, Agam Kumar, Man Singh, Archana Patel, Sarika Jain (2019), "An Online Dictionary and Thesaurus", *Journal of Artificial Intelligence Research & Advances*, STM Journals, e-ISSN: 2395-6720. In Print.
22. Sonika Malik, Sarika Jain (2019), "Sup_Ont: An Upper Ontology", *International Journal of Web-Based Learning and Teaching Technologies*, IGI Global, ISSN: 1548-1093, EISSN: 1548-1107. In Print.
23. Sanju Mishra, Sarika Jain (June 2019), "An Intelligent Knowledge Treasure for Military Decision Support", *International Journal of Web-Based Learning and*

- Teaching Technologies, IGI Global, vol. 14:3. Pp. 55-75. ISSN: 1548-1093, E-ISSN:1548-1107.doi:10.4018/IJWLTT.2019070105.
24. Sonia Mehla, Sarika Jain (Jan 2019), "Development and Evaluation of Knowledge Treasure for Emergency Situation Awareness", International Journal of Computers and Applications, Taylor and Francis, ISSN: 1206-212X (Print), 1925-7074 (Online). doi: 10.1080/1206212X.2019.1574950.
 25. Archana Patel, Sarika Jain (Jan 2019), "Present and Future of Semantic Web Technologies: A Research Statement", International Journal of Computers and Applications, Taylor and Francis, ISSN: 1206-212X (Print), 1925-7074 (Online). doi: 10.1080/1206212X.2019.1570666.
 26. Archana Patel, Sarika Jain, Shishir K Shandilya (Dec 2018), "Data of Semantic Web as Unit of Knowledge", Journal of Web Engineering, River Publishers, vol. 17:8, pp. 647- 674. ISSN: 1540-9589, E-ISSN: 1544-5976. doi:10.13052/jwe1540-9589.1783.
 27. Sanju Mishra, Sarika Jain, Ajith Abraham, Smita Shandilya (Dec 2018), "Secure Semantic Smart HealthCare (S3HC)", Journal of Web Engineering, River Publishers, vol. 17:8, pp. 617-646. ISSN: 1540-9589, E-ISSN: 1544-5976. doi:10.13052/jwe1540- 9589.1782.
 28. Yashvi Jain, Namrata Tiwari, Shripriya Dubey, Sarika Jain (March 2019), "A Comparative Analysis of Various Credit Card Fraud Detection Techniques", International Journal of Recent Technology and Engineering, vol. 7:5S2, pp. 402-407, ISSN: 2277-3878.
 29. Sarika Jain, Valerie Meyer (Oct 2018), "Evaluation and Refinement of Emergency Situation Ontology", International Journal of Information and Education Technology, vol. 8:10, pp. 713-719, ISSN: 2010-3689.
 30. Sanju Mishra, Sarika Jain (Aug 2018), "Ontologies as a Semantic Model in IoT", International Journal of Computers and Applications, Taylor and Francis, ISSN: 1206-212X (Print), 1925-7074 (Online). doi: 10.1080/1206212X.2018.1504461.
 31. Siddharth Prasad, Akhilesh Kumar Lodhi, Sarika Jain (July 2018), "Semantic Annotation of Images with Text and Sound for Visually Impaired", Journal of Open Source Developments, STM Journals, vol 5:1, pp. 20-27, ISSN: 2395-6704.
 32. Neha Goyal, Kapil, & Nitin Kumar (2019). Multiclass Twin Support Vector Machine for plant species identification. Multimedia Tools and Applications, 1-24.(SCI)
 33. Priti Maratha, & Kapil. (2019). Analysis of Route Reconstruction Approach for Energy Consumed Areas in Wireless Sensor Networks. Journal of Advanced Research in Dynamical and Control Systems, Institute of Advanced Scientific Research Publishers (Scopus)
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Papers in International/National Conferences

1. Vartika Sharma, Sizman Kaur, Jitendra Kumar, Ashutosh Kumar Singh, "A Fast Parkinson's Disease Prediction Method with Reduced Feature Subset", International Conference on Intelligent Computing and Control Systems (ICICCS), Madurai, India, 2019 (Accepted).
2. Sukhman Singh, Tarun Kumar Madan, Jitendra Kumar, Ashutosh Kumar Singh, "Stock Market Forecasting using Machine Learning: Today and Tomorrow", Second International Conference on Intelligence Computing, Instrumentation and Control Technologies (ICICT-2019), Kannur, Kerala, India, 2019 (Accepted).
3. Pooja Tiwari, Simran Mehta, Nishtha Sakhuja, Jitendra Kumar, Ashutosh Kumar Singh, "Study on Credit Card Fraud Detection using Machine Learning Methods", International Conference on Intelligent Computing and Control Systems (ICICCS), Madurai, India, 2019 (Accepted).
4. Harsh Mittal, Deepak Rikhari, Jitendra Kumar, Ashutosh Kumar Singh, "Machine Learning Approaches to Predict Player Performance and Match Results in Cricket: A Review", International Conference on Intelligent Computing and Control Systems (ICICCS), Madurai, India, 2019 (Accepted).
5. Preetesh K. Yadav, Sourav Pareek, Shaif Shakeel, Jitendra Kumar, Ashutosh Kumar Singh, "Advancements and Security Issues of IoT & Cyber Physical Systems", International Conference on Intelligent Computing and Control Systems (ICICCS), Madurai, India, 2019 (Accepted).
6. Ishu Gupta, Ashutosh Kumar Singh, "Malicious Agent Detection in Cloud Environment" Int. Conf. on Knowledge Discovery in Science and Technology, Feb. 2019, India (Accepted)
7. Sahil Jalwa, Vardaan Sharma, Abdur Rehman Siddiqi, Ishu Gupta, and Ashutosh Kumar Singh "Comprehensive and Comparative Analysis of Different Files using CP-ABE" 2nd Springer Int. Conf. on Computer Networks and Inventive Communication Technologies, May 2019, India. (Accepted)
8. Preshi Godha, Swati Jadon, Anshi Patle, Ishu Gupta, Ashutosh Kumar Singh "Architecture, an Efficient Routing, Applications, and Challenges in Delay Tolerant Network" 2nd Springer Int. Conf. on Computer Networks and Inventive Communication Technologies, May 2019, India. (Accepted)
9. Priya Agarwal, Sloni Mittal, Ankit Tiwari, Ishu Gupta, Ashutosh Kumar Singh, "Authenticating Cryptography over Network in Data" IEEE International Conference on Intelligent Computing and Control Systems, May 2019, India. (Accepted)
10. Ishu Gupta, Ashutosh Kumar Singh using Differential, "A Confidentiality Preserving Data Leaker Detection Model for Secure Sharing of Cloud Data using Integrated Techniques" IEEE International Conference on Smart Computing & Communications (ICSCC 2019), June 2019, Malaysia (Accepted)
11. Kamal Nayan Kaur, Ishu Gupta, and Ashutosh Kumar Singh, "Digital Image Watermarking Using (2, 2) Visual Cryptography with DWT-SVD Based Watermarking" In Computational Intelligence in Data Mining, pp. 77-86, 2019.

12. Animesh Nag, Anand Kesharwani, Abhishek Tiwari, Ishu Gupta, Bharti Sharma, Ashutosh Kumar Singh, "Potential and Extension of Internet of Things" IEEE International Conference on Intelligent Computing and Control Systems, May 2019, India. (Accepted)
13. Jitendra Kumar, Ashutosh Kumar Singh using Differential "Cloud Resource Demand Prediction" IEEE International Conference on Smart Computing & Communications (ICSCC 2019), June 2019, Malaysia (Accepted)
14. Salim Mudassir, Abeer Alsadoon, Chandana Withana, Amr Elchouemi and Ashutosh Kumar Singh, "RFID Technology for Vehicle Tracking Using Hybrid Kinematic Integration and Positioning Algorithm", Proc. of IEEE International Conference on Machine Learning, Big Data, Cloud and Parallel Computing (COMITCON 2019), India.
15. Pratibhushan Neupane, Abeer Alsadoon, P.W.C. Prasad, Mustafa S. Kadhm, Dr. Ashutosh Singh and Amr Elchouemi, "Sound Detection Technology and Heron's Law for Secure Monitoring System", Proc. of IEEE International Conference on Machine Learning, Big Data, Cloud and Parallel Computing (COMITCON 2019), India.
16. Niroj Sapkota, Abeer Alsadoon, Chandana Withana, Amr Elchouemi and Dr. Ashutosh Singh, "Data Summarization Using Clustering and Classification: Spectral Clustering Combined with k-Means Using NFPH", Proc. of IEEE International Conference on Machine Learning, Big Data, Cloud and Parallel Computing (COMITCON 2019), India.
17. Dikshit Kumar, Agam Kumar, Man Singh, Archana Patel, Sarika Jain (2019), "Modern WordNet: An Affective Extension of WordNet", In: Barth, T.J., Griebel, M., Keyes, D.E., Nieminen, R.M., Roose, D., Schlick, T., Computational Vision and Bio Inspired Computing. Lecture Notes in Computational Science and Engineering, Springer, ISSN: 1439-7358. In Print.
18. Siddharth Prasad, Sarika Jain (2019), "HELPI VIZ: A Semantic image Annotation and Visualization Platform for Visually Impaired", In: Barth, T.J., Griebel, M., Keyes, D.E., Nieminen, R.M., Roose, D., Schlick, T., Computational Vision and Bio Inspired Computing. Lecture Notes in Computational Science and Engineering, Springer, ISSN: 1439-7358. In Print.
19. Shama Sharma, Sarika Jain (2019), "Conceptualization of Indian Biodiversity by using Semantic Web technologies", In: Barth, T.J., Griebel, M., Keyes, D.E., Nieminen, R.M., Roose, D., Schlick, T., Computational Vision and Bio Inspired Computing. Lecture Notes in Computational Science and Engineering, Springer, ISSN: 1439-7358. In Print.
20. Sonika Malik, Sarika Jain (2019), "A Review on Methods to handle Uncertainty", In: Barth, T.J., Griebel, M., Keyes, D.E., Nieminen, R.M., Roose, D., Schlick, T., Computational Vision and Bio Inspired Computing. Lecture Notes in Computational Science and Engineering, Springer, ISSN: 1439-7358. In Print.
21. Sarika Jain, Archana Patel (2019), "Situation-Aware Decision-Support during Man-Made Emergencies", Emerging Trends in Information Technology. Lecture Notes in Electrical Engineering (LNEE), Springer, ISSN: 1876-1100. In Print.

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23. Sanju Mishra, Sarika Jain, Chhiteesh Rai and Niketa Gandhi (May 2019) "Security Challenges in Semantic Web of Things", In: Abraham A., Gandhi N., Pant M. (eds) Innovations in Bio-Inspired Computing and Applications. Advances in Intelligent Systems and Computing, vol 939, pp. 162-169, Springer, Cham. Print ISBN: 978-3-030- Sarika Jain - Research Activities 2018-19 16680-9. Online ISBN: 978-3-030-16681-6.
24. Ekansh Tiwari, Prasanjit Sardar, Sarika Jain (2019), "Football match result prediction using machine learning techniques: A study", International Conference on Intelligent Computing and Control Systems [ICICCS 2019], 15-17 May 2019, Madurai, India, IEEE Xplore. ISBN: 978-1-5386-8113-8.
25. Raushan Kumar Sharma, Vaibhav Aggarwal, Chandan Kumar, Sarika Jain (2019), "A Survey of Machine Learning Approaches To Detect Human Disease", International Conference on Intelligent Computing and Control Systems [ICICCS 2019], 15-17 May 2019, Madurai, India, IEEE Xplore. ISBN: 978-1-5386-8113-8.
26. Archana Patel, Sarika Jain (Feb 2019), "A Partition Based Framework for Large Scale Ontology Matching", Recent Patents on Engineering, vol. 13:0, pp. 1-14, Bentham Science, ISSN: 2212-4047 (Online), ISSN: 1872-2121 (Print). doi: 10.2174/1872212113666190211141415.
27. Archana Patel, Abhisek Sharma, Sarika Jain (Jan 2019), "An Intelligent Resource Manager over Terrorism Knowledge Base", Recent Patents on Computer Science, vol. 12:0, pp. 1-12, Bentham Science, ISSN: 1874-4796 (Online), ISSN: 2213-2759 (Print). doi: 10.2174/2213275912666190111152321.
28. Sanju Mishra, Sarika Jain (Dec 2018), "Towards a Semantic Knowledge Treasure for Military Intelligence", In: Abraham A., Dutta P., Mandal J., Bhattacharya A., Dutta S. (eds) Emerging Technologies in Data Mining and Information Security. Advances in Intelligent Systems and Computing (AISC), vol. 755, pp. 835-845, Springer, Singapore. Print ISBN: 978-981-13-1950-1. Online ISBN: 978-981-13-1951-8.
29. Sonia Mehla, Sarika Jain (Dec 2018), "Rule Languages for the Semantic Web", In: Abraham A., Dutta P., Mandal J., Bhattacharya A., Dutta S. (eds) Emerging Technologies in Data Mining and Information Security. Advances in Intelligent Systems and Computing (AISC), vol. 755, pp. 825-834, Springer, Singapore. Print ISBN: 978-981-13-1950-1. Online ISBN: 978-981-13-1951-8.
30. Sarika Jain, Sonia Mehla, Apoorv Gaurav Agarwal (Dec 2018), "An Ontology based
31. Earthquake Recommendation System", In: Luhach A., Singh D., Hsiung PA., Hawari K., Lingras P., Singh P. (eds) Advanced Informatics for Computing Research. Communications in Computer and Information Science (CCIS), vol.

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32. Anjali Hora, Sarika Jain (Dec 2018), "Integrating Ontology Learning and R for providing Services Efficiently in Cities", In: Luhach A., Singh D., Hsiung PA., Hawari K., Lingras P., Singh P. (eds) Advanced Informatics for Computing Research. Communications in Computer and Information Science (CCIS), vol. 955, pp. 3-12, Springer Singapore. Print ISBN: 978-981-13-3139-8, Online ISBN: 978-981-13-3140-4.
 33. Vishal Lama, Sarika Jain (Aug 2018), "Digitization of Disaster Management: A Multimedia Ontological Approach", In: Fong S., Akashe S., Mahalla P. (eds) Information and Communication Technology for Competitive Strategies. Lecture Notes in Networks and Systems (LNNS), vol. 40, pp. 197-203, Springer Singapore. Print ISBN: 978-981-13-0585-6, Online ISBN: 978-981-13-0586-3.
 34. Sarika Jain (Jan 2018), "Intelligent Decision Support for Unconventional Emergencies", In: Rafael Valencia-García, Mario Andrés Paredes-Valverde, María del Pilar Salas- Zárte, GinerAlor-Hernández (eds) Exploring Intelligent Decision Support Systems. Studies in Computational Intelligence, vol. 764, pp. 199-219, Springer, ISBN: 978-3-319- 74001-0.

Books/Chapters written (Title, publishers, etc)

1. "Design and Testing of Reversible Logic" Lecture Notes in Electrical Engineering Springer Publication, <https://www.springer.com/gp/book/9789811388200> , July 2019.
2. Hari Mohan Gaur, Trailokya Nath Sasamal, Ashutosh Kumar Singh, Anand Mohan, D. K. Pradhan, "Reversible Logic: An Introduction", Lecture Notes in Electrical Engineering, Springer, vol. 577, July 2019. (Scopus Indexed)
3. Trailokya Nath Sasamal, Hari Mohan Gaur, Ashutosh Kumar Singh, Anand Mohan, "Novel Approaches for Designing Reversible Counters", Lecture Notes in Electrical Engineering, Springer, vol. 577, July 2019. (Scopus Indexed)
4. Chua Shin Cheng, Ashutosh Kumar Singh, "Search-Based Reversible Logic Synthesis Using Mixed-Polarity Gates", Lecture Notes in Electrical Engineering, Springer, vol. 577, July 2019. (Scopus Indexed)
5. Trailokya Nath Sasamal, Ashutosh Kumar Singh, Anand Mohan, "Reversible Circuit Synthesis Using Evolutionary Algorithms", Lecture Notes in Electrical Engineering, Springer, vol. 577, July 2019. (Scopus Indexed)
6. Hari Mohan Gaur, Trailokya Nath Sasamal, Ashutosh Kumar Singh, Anand Mohan, "Fault Models and Test Approaches in Reversible Logic Circuits, Lecture Notes in Electrical Engineering, Springer, vol. 577, July 2019. (Scopus Indexed)
7. Trailokya Nath Sasamal, Ashutosh Kumar Singh, Umesh Ghanekar, "Design of QCA based D-Flip flop and memory cell using rotated majority gate," Advances in Intelligent Systems and Computing, Springer, vol. 670, pp. 233-247, July 2018. https://link.springer.com/chapter/10.1007/978-981-10-8971-8_22. (Scopus Indexed)

HUMANITIES DEPARTMENT

Papers in International/National Journals

1. Neha, Pardeep Jain and Vikas Choudhary, "Pursuing Research in India: A Good Idea?", in Edited Book on Education Transform Lives, Department of Management & Humanities, SLIET, Longowal, published by SLM Publishers, Patiala, ISBN: 978-81-937643-1-2, 2018
2. Mor Kiran, Sethia Savneet, "Changing Consumption Basket in Rural and Urban Areas-A Journey from Conventional Food to Convenience Food", Pacific Business Review - A referred monthly International Journal of Management, ISSN: 0974-438X, Volume 10, Issue 10, 2018, page 29-39.
3. Shabnam (2018). Spiritual Intelligence at Workplace. In Sanjit Mishra and Rajeev Tamhankar (Ed.) Science. Spirituality and Civilization II (pp. 178-183) pothi.com publication (ISBN: 9789386876096)
4. Sachdeva, G., Narwal, M. and Kant, R. (2018). Factors Affecting Usage of E-Commerce: A Study of Haryana Region. ANWESH: International Journal of Management & Information Technology, Vol. 3, Issue 2, Sep, 2018, ISSN: 2455-9245.
5. Geeta Sachdeva, Demonetization: An Assessment of the Achievement of the objectives published in book entitled "Demonetization in India: A Researcher Perspective, September 2018, ISBN- 978-93-88237-02-4, pp: 14-21, published by Excel India Publishers.
6. Ashwani and Ved Pal Sheera (January 2019). Financial Deepening in South Asian Countries: Major Determinants, Pacific Business Review International, 11(7), pg. 121-134. Indexed in Emerging Sources Citation Index, Thomson Reuters, ISSN- 0974-438X
7. Ashwani and Ved Pal Sheera (July 2018). Indian Stock Market Volatility and Economic Fundamentals: MIDAS Approach, Indian Journal of Finance, 12(8), pp. 7-12. Scopus Indexed, ISSN: 0973-8711
8. Geethanjali Nataraj and Ashwani (July 2018). Banking Sector Regulation in India: Overview Challenges and Way Forward, Indian Journal of Public Administration 64(3), 1-14, ISSN: 00195561, Sage Publication, DOI: 10.1177/0019556118783065
9. Ashwani and Ved Pal Sheera (May 2018). Financial Deepening and Economic Growth in Hong Kong: An ARDL Approach, Pacific Business Review International, 10(11), pg. 35-44, ISSN-0974-438X, indexed in Emerging Sources Citation Index, Thomson Reuters.
10. Geethanjali Nataraj and Ashwani Bishnoi (2018), Role of Credible Data in Economic Decision Making, In Ed. U. M. Munishi and N. Verma (eds.), Data Science Landscape: Towards Research Standards and Protocols, 978-981-10-7514-8, Springer.

11. Shahida (2019) "Modern Asia-Recreation and Social Customs: Storytellers." The Greenwood Encyclopedia of the Daily Life of Women. ABC-CLIO Publishing. (In Press)
12. Shahida (2019) "Turks in America." Race and Ethnicity in America: From Pre-Contact to the Present. ABC-CLIO Publishing. (In Press)

Papers in International/ National Conferences

1. Choudhary, Vikas presented a paper entitled, "Role of Teacher in Shaping the Mind of Future Generations" during Conference on Education Transform Lives, Department of Management & Humanities, SLIET, Longowal on September 05, 2018.
2. Choudhary, Vikas presented a paper entitled, "Climate Change and The Society" during 22nd Indian Political Economy Association (IPEA) Conference, University of Jammu, Jammu, on December 14-15, 2018.
3. Choudhary, Vikas presented a paper entitled, "Impact of Corporate Social Responsibility on Firm Performance: A Study of Selected Banks in India" during International Academy of Business and Economics (IABE), 2019 Los Angeles-Summer Conference, Los Angeles, USA on June 14-16, 2019.
4. Shahida. Paper entitled "Remembering Bahadur Shah 'Zafar' as a Nationalist?" at the Hindu Girls' College, Jagadhri, DHE sponsored International Seminar on Poets of the Freedom Movement (PFM-2018) in Collaboration with the Shakespeare Association, India 14-15 December 2018.

DEPARTMENT OF BUSINESS ADMINISTRATION

Papers in International/National Journals

1. Budhiraja, S., Malhotra, M., Kaushik, N., (2019) "Employees' Risk Taking Capabilities and Learning Organization: Moderating role of Organizational Size", International Journal of Knowledge and Learning, Vol. 13, No. 1, pp.66–79 (ISSN: 1741-1009), Scopus Indexed
2. Kumar, P., Firoz, M. (2018). "Impact of Climate Change Disclosure on Financial Performance: An Analysis of Indian Firms", Journal of Environmental Accounting and Management, 6(3), 285-297.
3. Kumar, R., Kumar, P., Firoz, M., (2019). "How Do Indian Stock Market React to Repurchase of Shares Announcement? An Event Study Methodology", Journal - Wealth-International Journal of Money Banking and Finance, WEALTH- Vol 8 Iss 1 January-June 2019. ISSN-2277-9388

Papers in International/National Conferences

1. Kumar Rajender, “Factor Influencing Climate Change in India”, 22nd Annual Conference of Indian Political Economy Association (I.P.E.A.) organized by Jammu University, Jammu & Kashmir December 14-15th, 2018.
2. Singh, A., Kaushik, N., (2018), DRDO leading India to Self-Reliance in Defense Sector, First PAN IIT, International Management Conference, Department of Management Studies, IIT Roorkee during Nov 30-Dec 02, 2018.

Keynote & Valedictory Address delivered

1. Dr. Rajender Kumar Delivered valedictory address on “Relevance of Gandhian Economic Model in the Present Scenario”, organized by department of Humanities & Social Science, NIT Kurukshetra on 29th September, 2018.
2. Dr. Rajender Kumar Acted as a Resource Person and delivered special lecture on “Concept and Relevance of IPR’ in One day workshop on “IPR Awareness” organized by TIT & S Bhiwani on 28th August, 2018.
3. Dr. Rajender Kumar Acted as a Resource Person and delivered special lectures on “IPR Concept and Relevance” and “Ethical issues in IPR” on One Week workshop “Intellectual Property Rights & Technological Development” on 21-25th January 2019 organized by Department of Management studies, NIT Silchar.

12.4 R & D INCOME & EXPENDITURE

(Figures in Lacs)

Sr No.	Name & Scheme & Principal Investigator	Amount available upto 2018-19	Amount utilized upto 31.03.2019	Balance as on 31.03.2019
1	New magnetic materials applicable as colored pigments and catalysts by Dr. Avijit Kumar Paul	27.35	27.33	0.02
2	ISEA Project by Prof. A. Swarup and Prof. Mayank Dave	36.06	34.80	1.26
3	SMDP-C2SD Project by Prof. A.K. Gupta and Prof. R.K. Sharma, School of VLSI Design & Embedded system	33.20	31.78	1.42
4	Synthesis of Water Soluble Cobalt Complexes & Their Catalytic Activities in Aqueous & Biphasic Medium by Ms. Anita Bhatia	21.90	21.72	0.18

5	DST-FIST Program by Prof. Mahesh Pal, Civil Engineering Department	108.00	43.66	64.34
6	Development of Highly Sensitive Colorimetric and Fluorescent Moisture Sensors, based on small molecules, Chemically modified paper and electrospun nanofibrous materials by Dr. Amilan Jose Chemistry Department.	14.96	4.90	10.06
7	Photoinduced release of therapeutic Nitric Oxide (NO) from functionalized self assembled nanovesicles by Dr. Amilan Jose Chemistry Department.	27.45	22.17	5.28
8	Performance Enhancement of Vapor Compression Refrigeration System of Small Capacity using Ejector as an Expansion Device by Dr Gulshan Sachdeva Mechanical Engg. Department.	12.56	4.80	7.76
9	Development of Noval Electrodes Materials for Supercapacitor Applications by Dr. Parkash Chand Physics Department.	28.00	26.29	1.71
10	Design Synthesis and Optoelectronic properties of squaraine and croconine based functional organic materials. By Dr. Chetti Prabhakar Chemistry Department	9.75	6.22	3.53
11	Partition Recovery of Wireless Sensor Networks with the integration of Unmanned Aerial Vehicles (UAVs) by Dr. Virender Ranga Computer of Engg. Department.	4.55	3.14	1.41
12	Development of Ultrasonic Assisted Electrochemical Mechanical Finishing (UAECMF) Process with Modular Tooling System for Precision Finishing of Gears by Dr. J.P. Mishra Mechanical Engg. Department	13.25	2.09	11.16

13	Design & Development of a Hybrid Powered Liquid Desiccant System for Air Conditioning and fresh Water Production by Dr. Rajneesh Mechanical Engg. Department.	16.65	13.92	2.73
14	Design and Development of and Approach (non-cryptographic) for Secure Storage of Data on External Media and Lossless Retrieval by Dr. J.K. Chhabra – Computer Engineering Department	3.50	0.00	3.50
15	Investigations on Hexaferrites to search strong magnetoelectric compounds at room temperature – Dr. Anurag gaur-	11.87	7.90	3.97
16	Development of Insensitive High Energy Materials Containing Heterocyclic Backbone Substituted with Amino, Azido and Nitro Explosophores -. Dr. Ghule Vikas D – Chemistry Department	26.10	0.00	26.10
17	Nanomaterial for high efficiency stable inorganic-organic perovskite-perovskite tandem solar cells – Dr. Ashok Kumar, Physics Department	13.42	12.51	0.91
18	Soil Strength Mapping & Stabilisation – Dr. S.N. Sachdeva , Civil Engineering Department	2.70	0.00	2.70
19	Design & Development of Solar assisted solid desiccant air conditioning system for India – Dr. Avadesh Yadav, Mechanical Engineering Department	9.03	2.89	6.14
20	Development of spinel-type metal oxide/ Rgo novel composites for NOx sensor application – Dr. C.R. Mariappan, Physics Department	2.40	0.02	2.38
21	Detailed investigations on crystal and magnetic structures of frustrated double perovskites Ca ₂ BRuO ₆ (B=Ga, In, Y,Sc) and their Lanthanum composites”	3.75	3.75	0.00

	(CRS-M-262) – Dr. Avijit Kumar Paul, Chemistry Department			
22	Utilization of agricultural waste as an electrode material for energy storage devices – Dr. Anurag Gaur, Physics Department	26.89	0.00	26.89
23	Feasibility of Development of Spectrally Selective Absorbing Materials for Laser Absorbing Coatings – Dr. Y Dwivedi,	7.04	0.09	6.95
24	Data Fusion Algorithms for Vehicle Detection and Classification systems – Dr. Vikas Mittal, ECE Department	13.08	9.79	3.29
25	Fusion of Optical and Multi-frequency Multi-polarimetric SAR data for Enhanced Land cover Mapping – Dr. Mahesh pal, Civil Engineering Department	6.15	4.50	1.65
26	Implementation of Security features in Smart Cards – Dr. B.B. Gupta, Computer Engineering Department	6.24	0.00	6.24
27	Mathematical modeling for biofluid transport in arterial geometries for drug delivery applications – Dr. Paras Ram, Maths Department	17.83	14.79	3.04
28	Study of Degree of Approximation and Absolute Summability factors of infinite Series – Dr. Smita Sonker- Mathematics Department	6.20	-	6.20
29	Localized Surface Plasmon Resonance Effect of Metal Nanoparticles on the Optical Properties of Nanophosphors for Plasmon Enhanced Fluorescence Sensors by Dr. Neena Jaggi- Physics Department	10.18	8.13	2.05
30	Classification and feature selection of AVIRIS-NG airborne Hyperspectral data for crop cover mapping/urban mapping – Dr.	9.20	4.01	5.19

	Mahesh Pal, Civil Engineering Department			
31	Dielectric Relaxation investigations in Swift Heavy Ion Irradiated Ferroelectric Ceramic/Polymer Nanocomposites – Dr. Anurag Gaur-Physics Department	1.95	1.95	0.00
32	Physics Based Accurate Analytical Modeling of AlGa _N /Ga _N High Electron Mobility Transistors – by Dr. Ashutosh Nandi- ECE Department	5.00	0.98	4.02
33	Computational design, synthesis and optoelectronic properties of functionalized compounds and their metal complexes by Ms Vidya V.M Department of Chemistry	13.08	9.62	3.46
34	Investigations on multiferrocity in BaFe ₂ O ₇ hexaferrite – by Dr. Anurag Gaur – Physics Department	0.90	0.90	0.00
35	Modifications in the Properties of II-VI Semiconducting Nanostructures by Ion Beam by Dr. R.P. Chauhan	1.05	0.80	0.25
36	Mitigation Climate Change Impacts on India Agriculture under Changing Water cycle – Dr. K.K. Gupta	1.75	0.00	1.75
37	Development of low cost scheffler solar concentrator for domestic indoor cooking and heating application for rural areas – Dr. Avadesh Yadav – Mechanical Engineering Department	0.85	0.85	0.00
38	Students Perception About Introduction of Human and Professional Ethics as Compulsory in Engineering Education : An Exploratory Study – by Dr. Manish Kumar Jha – Department of Business Administration	1.00	0.95	0.05

39	Modeling and Simulation of Explosive driven Helical Flux Compression Generator by Dr. Saurabh Chanana	5.58	3.12	2.46
40	Visvesvaraya Ph.D Scheme by Prof. Mayank Dave	139.85	125.72	14.13